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Clearing the Smoke: Understanding Organizational Change Communication and Misalignment in High-Risk Contexts

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CLEARING THE SMOKE:
UNDERSTANDING ORGANIZATIONAL CHANGE COMMUNICATION AND
MISALIGNMENT IN HIGH-RISK CONTEXTS

DISSERTATION

A dissertation submitted in partial fulfillment of the
requirements for the degree of Doctor of Philosophy in the
College of Communication and Information
at the University of Kentucky

By
Laura Elizabeth Young

Lexington, Kentucky

Director: Dr. Shari R. Veil, Associate Professor of Communication

Lexington, Kentucky

2014

ABSTRACT OF DISSERTATION

CLEARING THE SMOKE: UNDERSTANDING ORGANIZATIONAL CHANGE COMMUNICATION AND MISALIGNMENT IN HIGH-RISK CONTEXTS

Recent economic turbulence in the United States has resulted in budget cuts for many city-funded organizations, including high-risk organizations such as local fire departments. Budget cuts trigger organizational change and create uncertainty among employees, which is a major concern for high-risk organizations. This dissertation examined internal communication practices used during organizational change in an urban fire department and the influence of organizational structure and culture on communication satisfaction. This robust case study used a multi-method approach including interviews with middle managers (i.e., district majors), and focus groups and channel preference surveys with full-time firefighters from lower level ranks (i.e., firefighters, lieutenants, and captains). Together, the data points provided a robust understanding of how organizational structure and culture influences communication satisfaction during change in a high-risk organization.

As this dissertation was most concerned with information dissemination throughout the fire department during times of change, structuration theory provided direction for how to best explain the structure, dissemination, and preference of communication and Schein's Model of Organization Culture helped to explain organizational culture differences. The framework of communication satisfaction then offered a basis for further understanding of message dissemination and communication processes. Findings suggest the chain of command, use of internal media, rumors, and filtering of information were active influencers on communication satisfaction. Further, findings suggest that a misalignment in the organizational structure and culture resulted in the dissemination of misaligned messages. These misaligned messages frustrated organizational members and therefore influenced levels of communication satisfaction. When organizational members receive contradictory information, they are less likely to be satisfied with overall communication. Therefore, misaligned messages fostered by the communication climate are a structural and cultural barrier to communication satisfaction and can alter trust of leadership and increase the risk for organizational members. These findings are critical to high-risk organizations because misaligned messages increase risk for organizational employees as well as community members.

KEYWORDS: Communication Satisfaction, Fire Departments, Organizational Change, Organizational Culture, Structuration Theory

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CLEARING THE SMOKE:
UNDERSTANDING ORGANIZATIONAL CHANGE COMMUNICATION AND
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Dedication

To Beau, my husband. You have been my rock throughout my journey of graduate school and I am so blessed to have had you along for the ride. Words cannot express how appreciative I am to have you by my side. You cheered me on when I needed it most and continued to encourage me through all times of doubt. You always kept our lives light-hearted with your quick wit and contagious smile. Your ability to make me laugh is one I love most about you and I appreciate how many times you reminded me of the best in this experience. Thank you for all you've done for me!

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Chapter One: Introduction

In May 2012, the Lexington Fire Department (LFD) contacted the Risk Sciences Division of the College of Communication and Information at the University of Kentucky regarding communication concerns in the midst of organizational change. The organizational change stemmed from the removal of the fire chief due to no confidence, a federal investigation on alleged discriminatory hiring practices, staffing issues (e.g., LFD was 80 firefighters under staffed), and “browning out” fire stations due to budget cuts. “Browning out” fire stations refers to the tactic used to offset dropping numbers in staff. For instance, when staffing numbers fell below the number of people required to respond to emergency calls, LFD decided to close certain fire stations and combine staff to make more fully functioning crews. At the time the Risk Sciences Division was contacted, most organizational members were unaware of what was happening and why. Thus, leadership determined that the organizational change was a growing concern throughout the department. The myriad of challenges faced by LFD required further examination to protect the well-being of the Lexington community. A Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis conducted by LFD determined that communication was the primary challenge throughout these changes. LFD leadership therefore asked for assistance in understanding communication barriers in the fire department.

A fire department is defined here as a public organization that provides emergency response, rescue services, and fire prevention education for a specific jurisdiction (Scott & Myers, 2005). Fire departments are responsible for the protection of large numbers of people, many whom are often at physical risk. Fire departments keep

streets safe, help people to feel comfortable, and through active response to emergencies, help calm public worry. In a fire department, then, communication is central to the management of emergencies (Lindell & Perry, 2004; Reynolds & Seeger, 2005), and if practiced effectively, communication can enhance preparedness and limit or mitigate harm (Pechta, Brandenburg, & Seeger, 2010). If something were to go astray within a fire department, as a critical infrastructure, the consequences could be deadly. According to the Department of Homeland Security (DHS), “critical infrastructures are the assets, systems, and networks, whether physical or virtual, so vital... that their incapacitation or destruction would have a debilitating effect on security...public health or safety” (DHS, 2013). Without a doubt, the failure of a fire department would affect the safety of a given area and increase risk during an emergency.

Even though the United States economy has been improving in recent years, budgets are still tightening across state and local governments (Hoene, 2009). Specifically, cities across the nation are facing layoffs, cancelled contracts, reduced services, and large budget shortfalls (Employee Extra, 2011). City employees are also required to perform at the same level and within the same timeframe as before the budget cuts, but with fewer employees to do the required tasks. Fire departments have also faced budget cuts and decreased staffing numbers. As a city organization, fire department budgets are controlled by city government decisions (Hoene, 2009). Therefore, when the city budget is reduced, the fire department is drastically affected by decisions surrounding such cuts. These budget cuts are far more complex than simply cutting the amount of funds to the organization. The trickle effect of a budget cut can be astronomical when referring to the change an organization must endure to combat such

cuts. The need for change requires adaptability of organizations, where reconstruction of organizational processes and redesigning of organizational models are inevitable (Weick & Quinn, 1999).

Fire departments face a variety of communication challenges due to their high-risk, high-consequence nature and designation as a critical infrastructure. First, fire departments depend on a strict chain of command communication design during emergency operations (Bennett, 2011). Further, with the nature of the job, fire departments must be vigilant with their communication (LaPorte & Consolini, 1991). Communication within and throughout such service organizations is important to understand because incorrect information negatively influences performance. Furthermore, miscommunication causes serious errors. What is more, when change is occurring throughout such environments, correct, timely, and complete information dissemination becomes even more critical. Thus, there is a need for further research to understand information dissemination patterns and the overall communication culture within this type of environment.

High-risk, high-consequence organizations, such as fire departments, are complex organizations that deserve additional attention from communication scholars as these fast-paced environments have specific needs for communication. To explicate this problem, this introduction chapter begins with a brief history of fire departments, followed by a description of the organizational structure. Then, research on fire departments both from practical and theoretical perspectives is outlined. Finally, this section ends by describing the direct problem this dissertation addressed: understanding how high-risk organizations communicate with employees during organizational change.

History of Fire Departments

The earliest known fire department was developed in Ancient Rome, where slaves were used to provide free fire service to the people (Carp, 2001). The fire department was made up of 600 slaves who were told how to act, when to respond, and exactly what to do. Corporal punishment was inflicted on those who did not adhere. In 24 BC, Emperor Augustus established the first public fire department (Stott, 1999). At this time, fire departments were still simply groups of people assigned to the role of firefighting, rather than an organized work group. In the United States, Boston, Massachusetts, established America's first publicly funded, paid fire department in 1679 (Stott, 1999). Fire departments at this time were already realizing the need for better communication to keep firefighters out of dangerous situations (Carp, 2001).

By 2012, the United States Fire Administration (USFA), a division of the Federal Emergency Management Agency (FEMA), had 26,482 fire departments registered with the National Fire Department census (USFA, 2013). Because this is a voluntary program, this number does not include all fire departments in the United States. However, the National Fire Protection Association (NFPA) estimated there were 30,145 fire departments across the country, with 1,100,450 firefighters protecting the United States in 2011 (NFPA, 2013).

Of the number registered with the USFA census, 35% were in the southern region, 31% in the Midwest, 21% in the Northeast, and 13% in the West. Further, 13% were categorized as either "career" or "mostly career," and 87% were registered as "volunteer" or "mostly volunteer" (USFA, 2013). Fire departments within the state of Kentucky reflect these comparisons, with approximately 8% of fire departments as career

and 92% as volunteer (NFPA, 2013). LFD falls into the 8% of career fire departments, as all firefighters are paid, full-time employees.

By 2013, most urban cities had full-time, paid, fire departments funded by the city budget (NFPA, 2013). Interestingly, however, the organization remained similar to fire response teams of Ancient Rome: one leader is the central communicator and dictates job requirements to the members. Decisions are made through a central group for the entire team. To understand how decisions are disseminated, a typical fire department structure in an urban, publicly funded fire department is described next.

Structure of Urban Fire Departments

Although each urban fire department has a specific organizational structure, most urban fire departments are described as complex, para-military organizations that support a chain of command system. A fire department is typically comprised of platoons, districts, and firehouses where employees rotate a work schedule of 24-hours on-shift and 48-hours off-shift (USFA, 2013). Given this work schedule, members live, sleep, and eat together on each assigned shift. Further, multiple organizational members respond to emergency calls and must work together to assist the public. Thus, individuals within a fire department regularly interact with different individuals and groups from different ranks in informal settings at the firehouses and formal settings on an emergency run or at a public education event.

Fire departments are divided into specific unit levels (see Table 1.1).

Table 1.1: Description of Units in Fire Departments

Company	<ul style="list-style-type: none"> • “Basic Unit” • Individuals who are assigned to a single apparatus and make emergency calls together at all times
House	<ul style="list-style-type: none"> • All members who live within the same firehouse for their 24-hour shift • Assigned one officer each 24-hour shift
District/Battalion	<ul style="list-style-type: none"> • Comprised of firehouses all located within the same district of the jurisdiction
Platoon	<ul style="list-style-type: none"> • One third of the population of the organization on duty every third day

First, the company level is comprised of individuals who are assigned to a single apparatus and make emergency calls together at all times. This level is considered the “basic unit” (USFA, 2013). Companies are the “front-line operation” of the organization that actively responds to emergency calls. Second, the house level includes all members who live within the same firehouse for their 24-hour shift. Each house has an assigned officer (i.e., captain or lieutenant). Each workday, at least one captain or one lieutenant is on duty. Third, the battalion, sometimes referred to as the district level, is comprised of firehouses all located within the same district of the jurisdiction (approximately five houses and the companies quartered there). Each district is assigned a district major. A primary responsibility of the district major is to disseminate information from leadership to rank-and-file members. This leadership position is considered the “middle manager” of the organization. Fourth, the platoon level is comprised of one third of the population of the organization.

In many urban fire departments, as noted, members are assigned a 24-hour shift, meaning, each day of the week, one third of the fire department is scheduled for work (i.e., a platoon) (USFA, 2013). The hierarchy of the fire department is described Table 1.2.

Table 1.2: Hierarchy of Rank in Fire Department (top to bottom)

Administration:
Fire Chief
Assistant Chiefs/Specialty Chiefs
Battalion Chiefs
Middle Manager:
District Major
Rank-and-file:
Captain
Lieutenant
Firefighter

Each rank-and-file member (i.e., firefighter, lieutenant, captain) is part of a company, house, district, and platoon. Each major is part of a house, district, and platoon. Overseeing all levels within the organization are assistant chiefs and specialty chiefs (i.e., hazmat, diving), each assigned in leadership roles. Those in leadership do not live in firehouses and typically work an eight-to-five workday on weekdays. One Fire Chief is appointed by the city council and/or mayor to lead the entire organization.

Examining the process of information dissemination and the barriers to communication in such a complex organization can help improve the overall functioning of the organization. Prior research has attempted to outline such ideas in regards to culture and internal communication.

Previous Research on Fire Departments

Previous research has examined aspects of leadership, mission, and values in fire departments. Boyd (2010) conducted a 360 multi-rater assessment questionnaire at the New Bern Fire Rescue in New Bern, North Carolina. The survey included questions on the perceptions of communication and decision-making practices throughout the fire department. His research found that leadership played a central role in suppressing

dissenting organizational members' opinions. This suppression ultimately inhibited the overall internal organizational communication efforts by restricting the unifying nature of organizational goals and norms. Thus, this research suggested a managerial bias was present in all decision-making. Further, the findings implied that leadership within a fire department must be fully aware of the power held and need to frequently reflect on ways in which one can use such power for encouraging, rather than suppressing communication.

Second, McQueen (n.d.) conducted interviews and distributed an online survey to the members of the Sandy Fire District in Sandy, Oregon, to explore how inadequate communication within the fire department influenced morale issues. His goal was to evaluate the status of communication efforts and make recommendations for improvement. He found that multiple channels of communication were used to distribute messages (e.g., staff meetings, internal memos, rounds, face-to-face contact, and rumors), yet many members were still dissatisfied with the communication messages they were receiving. His findings implied that fire departments should work to ensure that all members understand the organizational "mission, vision, and values" (p. 3) established by leadership. Further, he also suggested that all levels within fire departments must participate in internal communication processes. He argued that all members have a level of responsibility to participate in communication; however, he noted that leadership generally established the organization's mission, vision, and values without input from rank-and-file members, which becomes problematic.

Third, previous research has examined administrative or management roles in goal setting and leadership training. Specifically, McQueen (2006) distributed an online

survey to members of the Sandy Fire District and found that some leadership training was offered to the Sandy Fire Department officers, but not enough has been done to maintain the training knowledge or to ensure that all members receive the leadership training. He outlined the need to train all levels within the fire department for leadership. He believed that in order for the mission, values, and vision to be carried out, all members of the fire department must receive adequate and regular leadership training. Thus, he suggested differentiating between short-term and long-term goals to ensure that the department stays on task with training efforts.

Key communication scholars (i.e., Myers, Scott, Tracey, McPhee) have also spent time researching various aspects of the life of a firefighter, such as emotion (Scott & Myers, 2005), group interaction and membership (Myers & McPhee, 2006), and the use of humor as a sense-making tool (Tracey, Myers, & Scott, 2006). First, Scott and Myers (2005) participated in ride-alongs with groups of firefighters from the Plateau City Fire Department (PCFD) and conducted interviews with the employees to examine the management of emotion during a work shift. Specifically, these researchers observed how the socialization of firefighters influenced emotion management. Researchers conducted ethnographic interviews (i.e., informal, spontaneous, and unstructured conversations with participants; Lindlof & Taylor, 2002) during the ride-alongs. Additionally, they conducted 18 semi-structured interviews with seven probationary firefighters and station captains. They concluded that firefighters recognized a need to manage both their own emotions as well as the emotions of the public to deliver a successful performance. Specifically, firefighters needed to keep bad moods to themselves, especially when on an emergency call. The authors found that “bullshit,” or

rather “nuisance,” (i.e., non-emergency 911) calls were harder for the firefighters to manage emotionally than the traumatic Emergency Medical Services (EMS) calls. Managing emotions during fire calls is learned through socialized labor techniques shared from veteran firefighters to newcomers. Veteran firefighters recognized a “common set of emotion management norms” (Scott & Myers, 2005, p. 77). Yet, little formal training focused on emotion management. Thus, the informal, internal communication helped to socialize new members into the emotional aspect of the job.

Second, Myers and McPhee (2006) examined the effects of group interaction and the influence on individual-level membership and crew performance with a fire department (nearly 1,400 firefighters working at 50 stations) located in a large city in the southwest United States. Specifically, first questionnaires were distributed to individual firefighters asking them to reflect on their own membership experiences. Following this, firefighters were asked to assess their crew-level performance. The goal of the research was to examine group assimilation and “how the group processes affect individual assimilation” (Myers & McPhee, 2006, p. 456). They collected 313 surveys from 62 crews of approximately three to seven members. The surveys included questions on assimilation outcomes such as involvement, trustworthiness, commitment, and acceptance between the crew-level and individual-level. They found that at the individual-level, acculturation predicted all four assimilation outcomes. Further, involvement also predicted commitment and acceptance. At the crew-level, they found that crew performance affected the influence of tenure, proactivity, involvement, and acculturation. Overall, Myers and McPhee demonstrated the importance of considering a work-group level process when conceptualizing assimilation. They found differences of

involvement from crew to crew, resulting in communication pattern differences between members who are committed and accepting of one another and those who are not. Thus, crews that trusted one another were more likely to have members with high levels of commitment.

Finally, Tracey, Myers, and Scott (2006) explored humor as a sense-making tool that also served employee identity needs through differentiation in the workplace. The authors conducted ethnographic field interviews and in-depth formal interviews. Specifically, they completed approximately 325 research hours, including both field hours and 40 interviews with correctional officers, 911 call-takers, and firefighters. The goal of the research was to see how humor enabled service workers to manage identity. They collected data from four organizations of these three different occupations, including a Women's Minimum Correctional Facility and Nouveau County Jail, Firefighter Central (a large, Southwestern metropolitan fire department), and the Citywest Emergency Communications Center in a large western city. Based on the 1000 pages of transcribed data, they found that humor was an "unfolding, collaborative, and interactional practice that can play a key part in socializing newcomers, building knowledge, and constituting the organizing process" (p. 283). Specifically, they found that employees used self-deprecating (i.e., raising their position by laughing at themselves) humor in ironic ways to help enhance their own identity. Further, the results suggested that employees also distanced themselves from the job by making fun of the public; many times focusing on the ignorance of those they serve. Finally, the participants reported that they used humor to highlight the chaotic, and many times threatening, aspect of their career. Thus, their study outlined how humor is used in

making sense of a dangerous job as well as the process of negotiating preferred identities in a high-risk environment. Interestingly, however, the amount of humor shared within and among organizational members deemed appropriate is determined through the internal, informal communication shared among co-workers. Thus, socialization of newcomers, as it relates to humor, is also an important part of this process.

Taken together, research on fire departments has predominately maintained a managerial bias with extensions on leadership training, assimilation, and coping strategies. Further, communication research in fire departments suggests that informal communication and socialization among members influences perceptions of adequate communication. The purpose of this dissertation is to expand the study of internal communication within fire departments. Specifically, this dissertation seeks to understand the ways in which an organization internally communicates with its members during change.

Internal Communication in Fire Departments

Every day, people receive countless messages in varying forms – phone calls, text messages, email memorandums, and face-to-face communication (Kincade, 2010). In organizations, understanding these different communication strategies is important since a breakdown in communication can cause an even longer series of unwanted events and additional communication messages. The high traffic of daily messages can potentially cause some organizational members to miss important information. Further, in the midst of organizational change, the increase in messages can cause additional confusion.

In a fire department, even non-emergency internal messages can affect the safety of firefighters and the public. Internal messages might include information on training,

work roles, location assignments, expectations for cleaning and inspecting fire trucks and hoses, equipment updates, new regulations, safety hazards, or how the city budget cuts will change the ability of the fire department to fulfill service expectations. Research has suggested that high levels of communication satisfaction lead to high levels of individual performance (Pincus, 2006). This study contends that fire departments are a worthy context to examine internal communication satisfaction during organizational change since individual performance can affect the safety of a community.

When sources of information change (i.e., change in leadership within an organization), other changes are likely to follow. Organizational structure is heavily dependent on leadership (Weber & Weber, 2001). Fire departments follow a hierarchical protocol (e.g., Incident Command System; ICS) when responding to emergencies, one by which each member is frequently tested (Hoene, 2009). When leadership changes in an organization, the leader may choose to alter structure and process for emergency response. Changing structure and process is problematic in an organization with such a globally accepted protocol. Thus, organizational change within high-risk environments causes uncertainty within the department as it changes structures that were once stable.

Many fire departments schedule on-duty time with a 24/48 schedule, which means individuals are scheduled to work for a 24-hour shift and then are off-duty for 48-hours (Hoene, 2009). Thus, unlike other organizations, leadership is challenged with ways to communicate organizational changes, when only one third of the workforce is present during each working day. Because of this unique working environment, email is a commonly used form of communication in fire departments (Boyd, 2010). However, fire department leadership often subscribes to the outdated “magic bullet” theory of

communication (Katz, 1957): the belief is that once a message is sent (regardless of channel), the organizational messages are communicated. A firefighter's primary job is to respond to the needs of the community, which requires firefighters to be away from the firehouse during most of the day, and members may or may not receive the email message. Thus, communication is hindered due to the nature of the job, in that fire departments rely on email to communicate, when members are frequently away from computer access.

Vague or sparse communication creates uncertainty, which leads to high turnover, disgruntled employees, low morale, employee mistakes, or dissatisfaction (DiFonzo & Bordia, 1999). A firefighter's job is to respond to emergencies and ultimately save lives. Given the uncertainty already surrounding change and the unique working environment of a fire department, there is a need to examine organizational change and the potential influences on organizational structures and communication satisfaction within high-risk environments during such change.

In summary, fire departments are complex organizations that rely on communication to connect the different platoons, districts, houses, and companies. Although research has briefly touched on communication within a fire department, there is a need take a step back and further understand what internal communication really looks like in this high-risk, high-consequence environment. First, outlining barriers to communication and opportunities for improvement, especially during organizational change, is beneficial to understanding the complexity of the organization. Second, there is a need to understand how internal communication is structured through various levels within the organization. As individuals are part of multiple levels, the flow of

information is vital to understand. Third, there is a need to determine how the structure and culture within the fire department influences communication satisfaction and the overall influence on receiving (or not receiving) messages.

This dissertation was designed as a multi-method, robust case study with multiple data points. Robust case studies allow the researcher to establish claims about a particular situation by using multiple sources of information (Sellnow, Ulmer, Seeger, & Littlefield, 2009). Multiple sources include “textual materials, online websites or resources, interviews, media accounts, and personal observations” (Sellnow et al., 2009, p. 56). This robust case study examined perceptions of communication satisfaction identified through interviews, focus groups, and channel preference surveys during the organizational changes. Together, this dissertation studied organizational structures, organizational culture, and the influence of structure and culture on communication satisfaction in the midst of organizational change (as outlined in Figure 1.1).

Figure 1.1: Factors of Influence on Communication Satisfaction during Organizational Change



Specifically, the primary research question for this dissertation was: *How is organizational change communicated in a high-risk, high-consequence organization, such as a fire department?* The following research questions were posed to assist in answering internal communication aspects of the primary research question:

RQ 1: What elements of communication satisfaction were evident in the discussion of fire department members during organizational change?

RQ 1a: How does *structure* (i.e., dialectic of control, duality of structure, agency) enhance or inhibit communication satisfaction during organizational change in fire departments?

RQ 1b: How does *culture* (i.e., artifacts, espoused values, basic assumptions) enhance or inhibit communication satisfaction during organizational change in fire departments?

The primary goal of a fire department is to effectively respond to emergencies. However, the internal communication, or rather the “behind the scenes” information dissemination influences the ability of firefighters to respond effectively and reduce risk when responding. This challenge is heightened when organizational change is occurring. Thus, this dissertation uncovers the communication practices that enhance or detract from internal communication processes within fire departments and outlined ways to improve overall communication. The following review of literature outlines the theoretical approaches this dissertation utilized to explore communication satisfaction, organizational structure, and organizational culture within fire departments.

Chapter Two: Literature Review

This dissertation examines organizational structures, including organizational culture, and the influence of these structures on communication satisfaction in the midst of organizational change. Recall that LFD faced a range of organizational changes including brownouts, a change in leadership, and a federal investigation. Communication theories and frameworks help to explain human behavior and this chapter discusses communication theories that help to explain behavior in fire departments during change. This dissertation is primarily concerned with communication satisfaction during organizational change, and thus the framework of communication satisfaction guided the development of research questions, data collection, data analysis, and explanation. In addition, organizational communication theories, including structuration theory (Giddens, 1984) and organizational culture theory (Schein, 1992) contributed to understanding the influence of structure and culture on communication satisfaction.

This chapter explores various components of organizational literature that explain how communication is structured, disseminated, and preferred. First, literature on organizational change, both universally and within fire departments, is outlined. Then, the framework of communication satisfaction is explained. Communication satisfaction offers a basis for understanding message dissemination and communication processes. Finally, based on Giddens' (1984) structuration theory, an examination of organizational structures is described. This includes formal and informal communication structures. This theory is offered to explain ways structures are created, or emerge, from the interactions between individuals. One example of emerging organizational structure is organizational culture; therefore, literature on organizational culture is also covered.

Organizational Change

Organizational change is notoriously a difficult process that affects the daily life of organizational members (Donahue & Tuohy, 2006). Although failure to adapt to outside sources *can* prompt a need for change, it has been suggested that change never starts, because within organizations, change never stops (Weick & Quinn, 1999). To understand this further, organizational change is conceptualized in terms of the process occurring throughout the change, as well as the content that is included in the change (Barnett & Carroll, 1995). First, process refers to how the organizational change occurs and what steps are taken to communicate the change to employees. Second, content describes what actually changes within the organization. For example, in fire departments, the content of organizational change stems from a reduction of funds from the city to the fire department and the process involves the response fire departments have to the reduction of funds. During this process, leaders within fire departments decide how to best respond to such external factors by changing organizational structures (i.e., placement of each firefighter to each firehouse, restructuring of assigned workday, etc.). Doing so allows fire departments to keep up with the constant change by applying an altered process.

Researchers have examined organizational change in fire departments such as promotion procedures (Muchinsky, 2004), inter-organizational coordination during extreme situations (i.e., 9-11 attacks and the response from firefighters) (Comfort & Kapucu, 2006), and response to organizational burnout (Halbesleben, Osburn, & Mumford, 2006). Weber and Weber (2001) examined feedback, autonomy, employee participation, and goal clarity during a planned organizational change (i.e., change in fire

chief), and the effect on trust in management, perceptions of supervisory support for improvement, and perceptions of organizational readiness for change. The authors found perceptions of supervisory support for improvement and perceptions of organizational readiness for change increased significantly six months after the change in leadership was initiated. Further, trust in management also increased during this time. Thus, as firefighters become more familiar with the change, the source of the change, and how the change influenced them and their co-workers, the support for management and the change effort also increased. These findings were consistent with previous research on phases of acceptance during a change effort in other industries (Isabella, 1990; Kets de Vries & Miller, 1984).

Weber and Weber (2001) further found that during a change, clearly defined goals had a positive impact on employee attitudes, and employee participation throughout change had positive impacts on trust in management. These clearly stated goals are developed through patterns of communication, or rather, sending messages regarding such change to the affected organizational members. Since budget cuts inevitably result in organizational change in fire departments, communication within the organization becomes a critical point of understanding for employees. Recall also that the Fire Chief of LFD was involuntarily and abruptly replaced, an additional component of the organizational change. The current chief began as Interim Fire Chief in March 2011 when the former chief was removed. He was officially appointed Fire Chief in June 2012. This change offered additional challenges to the working environment of LFD. Effective communication during organizational change can help avoid low morale, high turnover, low performance, and dissatisfaction (Weber & Weber, 2001). The way an

organization introduces and maintains change either encourages or deters information sharing between organizational members (Weber & Weber, 2001). However, little research has examined specific ways messages of organizational change are shared with members of the organization (i.e., fire department). Therefore, the following question serves as the primary research question of this dissertation:

How is organizational change communicated in a high-risk, high-consequence organization, such as a fire department?

This dissertation was primarily concerned with understanding perceptions of satisfaction with messages surrounding the organizational change in the fire department. The framework of communication satisfaction offers a basis for understanding message dissemination and communication processes. Specifically, the framework of communication satisfaction outlines various ways of disseminating messages and levels of satisfaction among organizational members (i.e., firefighters). Research shows significant relationships between communication satisfaction and job satisfaction (Pincus, 2006) and job performance (Karatape, & Tekinkus, 2006; Carmeli & Freund, 2004). Thus, the framework of communication satisfaction is appropriate for this dissertation.

Communication Satisfaction

Satisfaction has been commonly examined in the organizational communication literature (e.g., Carriere & Bourque, 2009; Downs & Hazen, 1977; Goris, 2007; Pettit, Goris, & Vaught, 1997; Pincus, 2006). Job satisfaction, workplace satisfaction, work-life balance satisfaction, and communication satisfaction have all been active areas of inquiry in organizational communication research (Mueller & Lee, 2002; Pincus, 2006; Ramierez, 2012). Further, satisfaction has been examined in regards to specific outcomes, such as

job performance, healthy lifestyles, and workplace retention (Pettit et al., 1997; Pincus, 2006). Job satisfaction has even been an outcome explored when examining other types of satisfaction (i.e., communication satisfaction) (Pincus, 2006).

Communication satisfaction is particularly important because, even though it is not always acknowledged as communication throughout the literature, it is the interactions (i.e., communication) with others that influence other types of satisfaction within the workplace (i.e., job satisfaction or lack of job satisfaction) (Mueller & Lee, 2002). Downs and Hazen (1977) first conceptualized communication satisfaction by developing a survey to understand the levels of satisfaction with communication across an organization. Communication satisfaction was originally defined in 1977 as the generalized feeling that an employee has toward his/her total communication *environment* when at work (Downs & Hazen, 1977).

Communication satisfaction research thus far has explored a particular organizational type: the corporate industry organization. Within this realm, many different organizations have been explored; however, all still are corporate, for-profit organizations. One organizational type missing from this literature is high-risk, high-consequence organizations, such as fire departments. The communication needs and challenges of fire departments are distinctly different from other organizations; therefore, it is important to explore additional organizational types to gain a true understanding of communication satisfaction.

Communication satisfaction has more recently been defined as “an individual’s satisfaction with various aspects of *communication* in an organization” (Crino & White, 1981, p. 832). This definition is slightly different from the original suggested by Downs

and Hazen (1977) in that it was concerned specifically with communication, not just feelings about the work environment. The framework of communication satisfaction is related to but not synonymous with communication practices. Rather, the communication practices chosen by the organization lead to or detract from levels of communication satisfaction. Thus, communication satisfaction has been most recently (and specifically) defined as “an employee’s affective appraisal of the organization’s communication practices” (Carriere & Bourque, 2009. p. 31). This most recent definition of communication satisfaction was used for this dissertation. The framework of communication satisfaction is typically identified in eight dimensions: 1) communication climate, 2) communication with supervisors, 3) organizational integration, 4) media quality, 5) horizontal and informal communication, 6) organizational perspective, 7) communication with subordinates, and 8) personal feedback (Carriere & Bourque, 2009; Downs & Hazen, 1977).

First, the *communication climate* within an organization is the most important aspect when examining satisfaction levels of employees. Communication climate is characterized as the extent to which communication in the organization motivates workers to meet organizational goals (Downs & Hazen, 1977). This also includes the attitudes toward communication and the perception of whether or not these attitudes are healthy. Further, communication climate explores the extent to which subordinates seek understanding about problems faced with co-workers (Carriere & Bourque, 2009). Within a fire department, the communication climate includes both the perceptions of expectations from leadership and the understanding of such expectations from the rank-and-file employees (Hoene, 2009). Communication climate can also include the

understanding of good performance and benefits that come with such performance. Contrarily, but equally important, communication climate can include an understanding of what will occur if poor performance is presented, or rather, what would cause someone to be fired. Together, these expectations feed into the overall morale within the organization as it pertains to the levels of satisfaction with communication that surrounds such expectations.

Second, *satisfaction with superiors* also affects one's satisfaction with organizational communication strategies. This dimension examines both upward and downward communication with superiors. Specifically, this examines the extent to which each superior listens and pays attention when a subordinate asks questions, as well as the extent to which the superior offers guidance for solving issues within the organization (Downs & Hazen, 1977). Most fire departments are categorized as paramilitary organizations that adhere to a strong organizational hierarchy and primarily utilize direct, top-down communication (Boyd, 2010).

Third, *organizational integration* includes an individual's satisfaction with the amount of information received each day (Downs & Hazen, 1977). This also relates to the satisfaction with the amount of communication/messages received. This dimension includes receiving information about departmental policies, changes in leadership, changes in process or structure or requirements for successful job performance. Fire departments are also grouped into a number of platoons, or shifts, that work 24-hour workdays (Kincade, 2010). Thus, if there are three shifts, each shift only works every third calendar day and organizational integration is influenced by such structures.

Essentially, each workday, firefighters must catch up on messages sent during the previous two days when not on shift.

Fourth, satisfaction with the *media quality* refers to the extent to which employees perceive the media as effective to the goals of the organization (Carriere & Bourque, 2009). This also includes the extent to which meetings are organized, documentation is effectively shared, information is organized, and the overall quality of both internal and external media (Downs & Hazen, 1977). Because the firehouses are located across the community, very little information is disseminated in paper form. Therefore, internal media primarily includes the computer systems, intranet, email, and other electronic modes of communication. External media includes the relationships developed and sustained with media outlets in the community. The unique organizational structure and working model within a fire department creates a strong need to rely on internal media for message sharing. Further, fire departments also regularly work with media outlets to report runs, update the public, and educate the public about the organization.

Fifth, horizontal or *informal communication* patterns are also of concern when examining how organizational members are receiving messages from their peers (Downs & Hazen, 1977). Grapevine communication is part of this dimension, including the extent to which the rumor mill is active. This dimension is also concerned with accurate information and whether or not this information is free-flowing. In addition, this dimension includes the affect rumor communication has on the overall atmosphere of the organization. Rumors are prevalent in firehouses (Kincade, 2010), and because firefighters do not see superiors every workday, reliance on informal communication becomes integral in knowing organizational information. Information is typically

communicated first among organizational members informally before an official communication statement can be made (Boyd, 2010).

Sixth, satisfaction with *general organizational perspective* refers to the level of satisfaction with the overall functioning of the organization (Carriere & Bourque, 2009). Specifically, this dimension is concerned with information shared regarding government action, which affects the entire organization. This component also includes communication around financial standings and organizational goals and policies (Downs & Hazen, 1977). The general organizational perspective refers to the perception employees hold about the overall communication or message received. Since city governments govern fire departments, understanding this dynamic is crucial to understanding satisfaction levels within the organization.

Seventh, communication satisfaction also explores *communication with subordinates*. Much like the second dimension (e.g., communication with superiors), this dimension is also concerned with both upward and downward communication. However, this dimension is mostly concerned with the responsiveness of subordinates and the extent to which they feel responsible for initiating upward communication (Downs & Hazen, 1977). Fire departments uphold a rigid hierarchical structure. Understanding the upward mobility of communication messages from subordinates is a key component to understanding how communication is viewed within the organization. This dimension helps to understand how comfortable (e.g., satisfied) subordinates are with sending information up the chain of command (Weber & Weber, 2001).

Eighth, the dimension of *personal feedback* includes the amount of feedback given to an individual member in response to goals and achievements within the

organization. Personal feedback can include any information gained from coworkers, managers, or leadership (Downs & Hazen, 1977). This feedback can be based on personal performance on the job or group performance as a team. As hierarchy is important to the atmosphere within the fire department, climbing the ranks within the organization is also important. Therefore, the component of personal feedback can be critical to encourage firefighters to test and apply for higher rank. Further, personal feedback in a fire department also includes discussion with post-mortems following an emergency call. Post-mortems are meetings in which companies, houses, districts, or platoons share information regarding calls and use incidents as learning opportunities for future emergencies.

These eight dimensions offer a framework for understanding the levels of satisfaction among organizational members with internal communication processes and structures. Research shows that there are significant relationships between communication satisfaction and job satisfaction (Pincus, 2006) as well as communication satisfaction and job performance (Karatape, & Tekinkus, 2006; Carmeli & Freund, 2004). Specifically, communication satisfaction is positively related with job performance (Karatape, & Tekinkus, 2006; Carmeli & Freund, 2004). A lack of communication or lack of *satisfaction* with communication messages influences job satisfaction, job performance, and the decision of whether the individual stays with the organization. In a fire department, job performance consists of the ability to save another person's life, thus, communication satisfaction in this organization an important issue to explore.

Various studies have explored the generic framework of communication satisfaction as an outcome variable in the organizational communication process.

Specifically, studies have demonstrated that communication styles (types and preferences) are a predictor of communication satisfaction in employment interviews, performance appraisal meetings, and physician-patient interactions (e.g., Downs, 1992; Ellingson & Buzzanell, 1999; Ralston, 1993). Further, communication satisfaction has been found to be positively influenced by communication openness (Suckow, 1995), communication motive (i.e., need for affection), interaction involvement (Anderson & Martin, 1995), communication norms, frequency, formality, feedback, and quality (Mohr & Sohi, 1995). Prisbell (1985) indicated that interpersonal perceptions (i.e., feeling good, safety, and uncertainty level) were significantly related to communication satisfaction.

In summary, research suggested that communication satisfaction is useful in interpersonal, group, and organizational contexts. Further, communication satisfaction has been shown to interact with communication behaviors, attitudes, values, and other communication-related variables such as style, type, structure, and process. Research on communication satisfaction has been plentiful in both profit and non-profit sectors of organizations but an examination of this framework in a high-risk, high-consequence environment has yet to be done. Verona (1996) found that organizational type affected communication satisfaction. Thus, given the differences in communication needs outlined above, there is a need to extend communication satisfaction literature into this new context. Therefore, the following research question is posed:

RQ 1: What elements of communication satisfaction are evident in the discussion of fire department members during organizational change?

Communication satisfaction guides understanding of communication structure, preferences, and dissemination, yet there is also value in understanding the organizational

structure of the fire department. Particularly, the structure design within an organization can alter the levels of satisfaction. Some structures enable communication and others inhibit communication. These structures, then, can change how organizational members (i.e., firefighters) communicate with one another and with leadership. Giddens' (1984) structuration theory helps to understand how organizational structures are created, developed, and maintained, based on the interactions between individuals. Thus, structuration guides understanding of the organizational structures, particularly as they pertain to communication throughout the organization.

Structuration Theory

During the late 1970s and early 1980s, Anthony Giddens proposed a new theory he named *Structuration* with the intent to raise questions regarding current ideas about societal structure and power over human beings. Giddens intended his theory to be abstract, yet he also wanted the theory to challenge the current theoretical ideas about the human race. Primarily, he wanted his theory to inform the principles of research interpretation rather than guide practice. Thus, structuration theory should be used to help interpret situations, not to predict human behavior. Giddens (1984) used the term structuration to mean the process by which structures emerge from interaction and then become resources for and constraints on future interaction. Giddens was most concerned with the idea of structures within society that serve to alter the ways in which humans act and interact. He wanted to dismantle the idea that structures were physical standings and encourage the idea that structures were interactions among individuals. Through interactions structures are built, changed, and reproduced. Giddens' contention of

structuration focused on the actions and interactions in and among people who create the ways in which others act and react.

Structuration theory is primarily concerned with the relationship between structure and process and the agency of individuals as the interaction unfolds. Further, structuration is a process-based theory. The theory is ontological, suggesting that multiple realities are created through the lived experiences of the individuals rather than epistemological, suggesting reality is co-constructed with the researcher and the individuals but is shaped by individual experience (Poole & McPhee, 2005). The axiology of structuration aligns with that of the social constructivist perspective, whereby individual values are honored and negotiated among the individuals (Creswell, 2013). Structuration theory provides insight to several areas of communication research, including structures, agency, dialectic of control, and the duality of structure.

Structures. Giddens (1979) contended that structures are virtual properties of social systems or broad statements among societal members and focal institutions. These structures are produced and reproduced through human symbolic activity, where the structure guides the social interaction by enabling and constraining behavior. Giddens (1984) further suggested that structures are best thought of as formal and informal rules, symbolic resources, and sets of transformational relations found in ongoing social interactions and practices. Rather than a physical structure enabling or constraining interactions, Giddens (1979) contends that structure refers to the interactions themselves (i.e., communication) that create a transparent structure. Within a fire department, structures are created at multiple levels. As stated, fire departments have clear distinctions between levels (e.g., company, firehouse, district, and platoon). Therefore,

structure that emerges within each level, as well as the organization-at-large, stretches beyond the physical structure of the firehouse and is established by the interactions among individuals within a specified level. Within this transparent structure are rules and resources.

Rules. Giddens (1981) suggested that rules are general procedures tacitly known among people, as they have discussed them, and are used to guide individuals on how to function in society. Individuals constitute meaning to the rules, which suggest how to act competently in, and among, society. The rules are created and reproduced throughout the interactions (i.e., communication) among people. In a fire department, each company, firehouse, district, or platoon creates formal and informal rules based on the interaction of the group. As individuals come in and out of the group, the rules are altered based on the interaction of those who are part of the current group. Further, the structure of the group will change depending on the interactions of the group members. For instance, some groups create a strict, formal, hierarchical transparent structure, where others pride themselves on flatter, informal communication patterns.

Resources. Giddens (1984) proposed that resources enable competent action through *authority* (social conditions and other persons), and *allocation* (material entities). Authoritative resources refer to the “types of transformative capacity generating command over persons or actors” (Giddens, 1984, p. 33). Specifically, this includes the organization of social time and space and the organization or relation of human beings in mutual association. Allocative resources involve material features of the environment, which includes the means of material production and reproduction as well as produced

goods. Simply stated, authoritative resources allow agents to control persons, whereas allocative resources allow agents to control material objects.

Taken together, rules and resources are embedded in an agent's memory and are called upon to perform social actions. This "knowledgeability" refers to what agents know about what they do, and why they do it. Scott and Myers (2010) suggest that structures are primarily local, but they have global implications. Rules and resources also control formal and informal communication structures within an organization.

Formal and Informal Communication Structures. Organizational communication refers to "the relatively stable configuration of communication relationships between entities within an organizational context" (Johnson, 1992, p. 100). The worlds between formal and informal communication within organizational communication offer distinct differences for organizations related to assumptions and premises. Specifically, a formal structure of communication includes particular forms of communication, usually seen throughout a formal messaging center, and identifies individuals as official sources of the information flow (Hartman & Johnson, 1990). This type of structure also emphasizes authoritative coordination of work and clear organizational hierarchy (Dow, 1988). Contrastingly, informal communication structures include the social needs of employees (Johnson, 1993). Informal communication occurs in organizations that have easily assessable information, permeable boundaries, and rewards for taking initiative (Goldhar, Bragaw & Schwartz, 1976). Further, informal communication is contextual. Informal communication influences the overall organization with which members become accustomed in participating. All organizations have informal communication structures that pose a need to understand how these

informal communication structures are initiated, developed, influenced, and/or maintained.

Formal communication structures may be considered the “ideal” way of communicating across the organization, yet emergent communication, or rather, informal communication, sometimes alters this idealist outlook. Throughout literature, formal and informal communication structures have been examined from a network analysis perspective (Johnson, 1993). Organizational members have a number of different networks in which they share information. Multiplexity occurs as each member chooses to share more information with other organizational members. This multiplex network creates opportunities for organizational members to discuss policies, procedures, and organizational decisions disseminated from the formal communication structure. This dissertation argues that formal and informal communication structures are dialectic, in that each structure influences the other. For instance, formal communication structures (e.g., chain of command, memos, etc.) create emergent informal communication (e.g., rumors, gossip, etc.).

Similarly, however, informal communication also influences the nature of the formal communication structures. Informal communication emerges from the formalized communication structures outlined by organizations, based on the interactions occurring (Johnson, 1993). Thus, informal communication remains an uncontrolled aspect of communication for organizational members as it *informally* develops as its own entity, many times in response to set formal structures. Informal communication is also connected with the culture of the organization. Depending on the culture of the group, informal communication gains or loses power for organizational decision-making. As

formal and informal communication patterns are dialectic, if the culture allows for it, informal communication patterns account for gaps in the formal structure. Beyond the emerged structures, agency is also a critical component of structuration theory.

Agency. There is disagreement in the literature (Boden, 1994; Taylor & Van Every, 2000; Weick, 1979) regarding agency, specifically, whether humans make deliberate, rational choices in their behavior. Contrarily, however, there is agreement that humans have the *capacity* to rationalize decisions, which is seen as an important aspect of being human. Giddens (1979) advocated that all social interactions have both intentional and unintentional consequences. Specifically, Giddens (1981) proposed that humans can act strategically and claim reasons for action, but they are not purposive all of the time. People monitor their behavior and attempt to make behavioral choices based on past actions. This ultimately enables a reflexive process that allows people to modify goals, plans, and future action (Fairhurst & Putnam, 2004; Poole, Seibold, & McPhee, 1985). Thus, communication without constant awareness of the social structure is detrimental.

Bandura (1997) further suggested that agency refers to acts done intentionally. The ways in which a person perceives power influences the agency he/she holds. Specifically, if people believe they have power to influence change, they will. If people believe they do not have power, they will not attempt to change organizational structures. Bandura (1997) further argued that people are both producers and products of their social systems. The creation of the social structure imposes constraints as well as provides resources for personal development. Therefore, the agency a person has (or does not have) changes the structure created by the interaction (Bandura, 1997). Agency also

includes seeking out information. Those agents who are active in information seeking are more likely to know more organizational information than those that do not.

Further, those individuals with higher levels of self-efficacy tend to take advantage of opportunities presented within the structure and work to find ways to circumvent structural constraints. Contrarily, those with lower levels of self-efficacy are less likely to take enabling opportunities throughout the structure and are easily discouraged by impediments. Therefore, agency plays an important role in understanding structure development and maintenance (Giddens, 1984; Bandura, 1997). In a fire department, those with higher levels of self-efficacy are more likely to seek out opportunities for advancement or find ways to fix issues that arise on the job. These individuals advance through ranks quicker than people with lower levels of self-efficacy due to their personal belief in their skills. The agency individuals hold influences the emerged structure of the group. The dialectic of control describes the dyadic nature of members within an organizational structure.

Dialectic of Control. Giddens (1984) referred to the dialectic of control as the “two-way character of the distributive aspect of power (power as control); how the less powerful manage resources in such a way as to exert control over the more powerful in established power relationships” (p. 374). Thus, employees have the capacity to act even if the options and circumstances of choice are less than ideal (Giddens, 1991).

Individuals may conform to socialization efforts and rules of the organization, or they may openly resist, attempting to modify rule expectations. Giddens (1998) further proposed that in larger systems, individuals do both simultaneously, opting to adapt to organizational norms in some situations but overtly or covertly resist in others. The

dialectic of control, then, assumes that individuals have an active part in the interaction with the system, especially when interacting with individuals of higher power. Fire departments are hierarchical and bureaucratic organizations that rely on the chain of command system. One example of the dialectic of control in the fire department, then, is informal communication patterns (explained in further detail below), particularly rumors, grapevine, or gossip communication. Those who choose to partake in such communication are viewed as challenging, or resisting, power. This type of communication is overt or covert, depending on the individuals involved. With this in mind, the duality of structure also helps to understand the complexity of structuration theory.

Duality of Structure. Giddens (1984) suggested that there is a mutually implicative relationship between agency and structure. More specifically, individual action cannot be explained separate or apart from the social structures that enable it through resources and constrain it through rules. Cheney, Christensen, Zorn, and Ganesh (2004) described the dual forces at work with the structure (i.e., duality of structure). First, structure is both an *outcome* of and a *resource* for interaction (Giddens, 1979). Structure emerges out of the communication process, which helps to influence future patterns of communication. Specifically, structure is created out of the interaction and persons involved. The structure created will then influence future interaction between those involved. As stated, the structure that emerges throughout each level of the fire department will influence the future interaction of all members of the structure. For instance, those groups who have regular face-to-face meetings will have a different organizational experience than those who primarily receive communication via email.

Second, structure is both enabling and constraining. The structure helps accomplish things, but it can also get in the way. This concept supports the contention that structure and process are *interdependent* (Giddens, 1984). The structure and the way individuals communicate not only enable organizational members to do things easily, but also hinder members by the boundaries set forth by the structure itself. Thus, the structure of the fire department will enable communication in particular ways (i.e., allows for clear, hierarchical communication while on emergency calls) but also hinders communication in other ways (i.e., formal communication structures seem inappropriate for organizations where members live, eat, and sleep together).

Applications of Structuration Theory

Structuration theory did not originate in communication research, yet there have been various studies completed recently outlining the use of structuration theory to understand organizational functions. First, Hoffman and Cowen (2010) used structuration to identify six rules and three resources commonly employed to achieve work/life balance. These “principles or routines that guide[s] peoples’ actions” (Poole & McPhee, 2005, p. 174) outlined what types of work/life requests are appropriate for individuals, as well as how those requests are made. Hoffman and Cowan (2010) surveyed 96 employees in a corporate organization. They found that the rules and resources outlined in the study (e.g., weigh the risk; ask for requests most likely to be granted) shaped the ways individuals interacted in the workplace. Their argument stated a need for further understanding of work/life balance and the choice to use structuration theory was determined as most appropriate for analysis.

Second, Larson and Pepper (2011) used structuration theory to examine the relationship between organizational identification and communication technologies. The authors argued that organizational identification shapes the way communication technologies are used, and in turn, communication technologies influence identification. Based on interviews and focus groups with organizational members from four states (Florida, California, Washington, and Illinois) who all worked at a multinational, high-tech corporation, the authors found that the use of technology in the workplace reinforced existing identifications and disidentifications. Using informational communication technology (ICT), the structure of the organization was socially constructed. Specifically, through a constructivist ground theory approach, they suggested that the ICT was used in one-way, rather than interactive ways. Therefore, the structure of the organization was top-down and one-way information dissemination and was determined by both the identification with the organization as well as the use (or not) of technology throughout.

Finally, Scott and Myers (2010) suggested that specific structuration constructs, such as the duality of structure, provide valuable experience-based techniques and an integrative framework that explains the production, reproduction, and transformation of organizational membership through communication. Specifically, Scott and Myers argue structuration theory helps to explain the role of communication in negotiating organizational membership over time. The authors termed “membership negotiation” (MN) to refer to this process and the consideration of interaction amongst organizational members, primarily focusing on active participation of newcomers and ways this action sustains and alters the negotiation process. Further, membership negotiation theory

outlines propositions concerning “how role expectations, group/organizational norms, formal structure, external and indirect sources of socialization, identification, power relationships, and member interactions are media for ongoing membership negotiations” (Scott & Myers, 2010, p. 79). Based on these propositions, they outlined ways the structure both enabled and constrained the membership negotiation process. Therefore, to gain an understanding of structure in a fire department, the following research question is posed:

RQ 1a: How does *structure* (i.e., dialectic of control, duality of structure, agency) enhance or inhibit communication satisfaction during organizational change in fire departments?

Work/life balance structure (Hoffman & Cowen, 2010), identification and technology structures (Larson & Pepper, 2011), and influence of structure on the membership negotiation process (Scott & Myers, 2010) can all be argued as specific aspects of organizational culture. Various components of structure create the organizational culture, and, in turn, the culture creates various types and acceptance or rejection of structures (Rosenfeld, Richman, & May, 2004). Rosenfeld et al., (2004), further suggested that organizational culture emerges from the structure of the communication within the organization. “Without strong and/or weak task-related communication, including informal socializing, advice-giving, and advice-getting, members of a dispersed network organization may suffer work-related disintegration” (Rosenfeld et al., 2004, p. 32). The author further claimed, “Organizations require consistent and adequate communication in order to promote collaboration and trust toward mutual gain” (p. 33). These features of communication significantly influence the

organization's culture. Ideally, then, organizational structures and organizational culture should align, or rather, the structure should positively support the culture and vice versa. Therefore, organizational culture must be outlined to gain a full understanding of structure.

Organizational Culture

The concept of organizational culture developed in the early 1980s. This concept has continued to be an important aspect of organizational communication research. There are various ways to approach the study of organizational culture; therefore, it is necessary to outline key definitions from the literature.

Hofstede's Approach to Organizational Culture. First, Hofstede (1980) looked for global differences between over 100,000 of IBM's employees in different countries in an attempt to find specific aspects that might influence business behavior. Hofstede demonstrated that there are national and regional cultural groups that affect organizational behavior. Specifically, his research outlined organizational issues of power distance, uncertainty avoidance, individualism and collectivism, masculinity and femininity, and long- and short-term orientation.

Deal and Kennedy's Approach to Organizational Culture. Second, Deal and Kennedy (1982) defined organizational culture as "the way things get done around here" (p. 15). These authors argued that values are categorized as the beliefs and visions that the members hold for an organization and heroes were individuals that exemplified an organization's values. Further, they believed that rites and rituals were organized to celebrate the values and the cultural network was where the values are instituted and reinforced. Their model is also based on four different types of organizations and they

suggest organizations fall into one or more of the categories. Each category focuses on how quickly organizations receive feedback, the way members are rewarded, and the level of risks taken. Deal and Kennedy's (1982) categories include work-hard/play-hard cultures; tough-guy macho cultures; process cultures; and bet-the-company cultures.

First, work-hard/play-hard cultures endure a fast feedback and reward system and low-risk. Stress within these cultures generally comes from the quantity of work, rather than uncertainty of the job. Second, tough-guy macho cultures also have rapid feedback and reward systems, but are high-risk. Therefore, stress from this work develops from high risk and potential loss or gain of the reward. Most of these cultures focus on the present, rather than long-term goals. Third, a process culture has slow feedback and reward system and low-risk. Most stress in these cultures develops from internal politics and creation of bureaucracies to maintain the status quo. Finally, bet-the-company cultures have slow feedback and reward, but high-risk. Stress develops from high risk and delay before knowing if actions have paid off. These cultures rely heavily on planning.

The nature of a fire department would primarily align with either high-risk types of cultures (e.g., tough-guy macho culture or bet-the-company culture); however, given the formal and informal structure of the fire department, aspects of all four types of cultures may be present. Some organizational culture scholars (Schein, 1992) have voiced concern with prescriptive approaches such as Deal and Kennedy's (1982) and instead seek to describe and understand the complex ways the culture is developed and maintained.

Schein's Model of Organizational Culture. Finally, Schein (1992) described culture of a social group as:

A pattern of shared basic assumptions that a group has learned as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems (p. 12).

Schein (1993) believed that culture was a group phenomenon, as individuals cannot have culture. Cultural formation depends on communication. Further, he believed that culture was emergent and a developmental process. In this sense, cultures are learned as a group meets internal and external challenges. Cultures are a socialized aspect of the organization and are difficult to change.

Schein (2004) further stated that, "Culture is an abstraction, yet the forces that are created in social and organizational situations that derive from culture are powerful. If we don't understand the operation of these forces, we become victim of them" (p. 46). From the perspective of the observer, Schein suggested that for one to understand a culture of an organization he/she must examine core beliefs and assumptions, values and behavioral norms, and organizational artifacts. Specifically, Schein (1992) outlined three levels of understanding for organizational culture: artifacts, espoused values, and basic assumptions. These levels of organizational culture differ in terms of meaning and influence on organizational members. Schein's model has been referred to as an onion with multiple layers.

Artifacts. The most visible level of culture is the social environment organizational members have created, or rather what Schein refers to as artifacts.

Artifacts can include items such as architecture, technology, dress, or written documents, as well as behaviors such as communication patterns, decision-making styles, communication during meetings, and the use of various technologies. Sometimes it is difficult to determine what artifacts mean or how they interrelate.

Espoused Values. The second level is composed of individual and group values that represent preferences. Schein notes that organizations do not have values, individuals do. Therefore, individual values hold varying “weight” within an organization. Thus, values tend to fluctuate with changing leadership. This level is defined as espoused values, placing emphasis on the fact that stated value and behavior do not always match. For instance, a major might claim to have an open-door policy, but when issues arise, might not openly speak with subordinates.

Basic Assumptions. The third level of Schein’s model is termed as the core assumptions. These assumptions are reinforced over time and become a natural part of “the way we do things around here.” Many times, basic assumptions are difficult for organizational members to recite as members think of them simply as “the way we are.” Together, these three levels outline the emergent culture and offer understanding of the organization. This emergent nature of culture is similar to Giddens’ (1984) views of emerging structure within an organization. Thus, Schein’s model was chosen as the interpretation of organizational cultural theory for this dissertation.

Additional Approaches to Organizational Culture. Organizational culture research did not end with the development of Schein’s model. Different interpretation patterns exist in an organization, which is a source of conflict and power struggle (Dana, Korot & Tovstiga, 2005). Wu (2008) suggested that, “organizational cultures are

individual choices aggregated into critical masses of people and over time” (p. 19). This definition suggests that organizational culture is a process that is evolutionary within the organization, where members learn from making repeated choices. Such a process is comprised of stages, in which one stage, full of changes, is ultimately followed by another stable or equilibrium stage. Much like Schein, Dedoussis (2004) proposed, however, that values and meanings come from people, not choices. Values do not produce values, instead, people do. Dedoussis stated, “tangible or intangible, deep or shallow, forms or meanings, organizational cultures live among people, come and go when people come and go, and change when people change” (p. 18). Therefore, no cultural products are as encompassing as people, because the people are the generators and carriers of cultures within an organization. Defining organizational culture as critical masses of people allows cultural changes to be tracked. In an organization, some rules become redundant over time and practically ignored by current employees. Therefore, defining cultures as people alerts us to what people are actually doing (e.g., the structures they are actually creating), not simply what the rules say they should do. Because cultures and structures are generally critical masses of people, understanding cultures translates into observing groups of key stakeholders within an organization (Dedoussis, 2004).

Recognizing the way members of an organization communicate aids in the understanding of organizational cultures. Oetzel and Ting-Toomey (2003) proposed that organizational communication reflects the message organizations choose to convey to outsiders, primarily based on how best to send that message to multiple audiences. Each organization should transmit messages that are consistent with purpose, goals, objectives,

and the implementation of the organization's set plans. One way to understand how organizational culture differs from one to the next, then, would be to study aspects within the organization, such as the communication process. Eventually, the organizational culture will emerge from understanding the ways members of the organization communicate. Based on this understanding, the following research question is posed to understand the influence of culture on communication satisfaction:

RQ 1b: How does *culture* (i.e., artifacts, espoused values, basic assumptions) enhance or inhibit communication satisfaction during organizational change in fire departments?

Organizational structure and culture influence one another within an organization. Both structure and culture also play a role in communication processes and procedures, particularly formal and informal communication patterns. This dissertation explores communication satisfaction, internal communication structure, processes, and information dissemination in high-risk, high-consequence organizations, specifically fire departments, during organizational change. Ultimately, this research seeks to understand ways fire departments can reduce risk throughout the organization by improving communication.

Chapter Two outlined the theoretical approach to examining these ideas. Specifically, this chapter explored various components of organizational communication literature to explain how communication is structured, disseminated, and preferred. First, literature on organizational change was previewed. Then, the framework of communication satisfaction was outlined. This framework offered a basis for understanding internal communication processes. Structuration Theory was highlighted to describe organizational structures and explain ways structures emerge from the

interactions between individuals as well as highlight formal and informal communication structures. Finally, literature on organizational culture, particularly Schein's (1992) model, was offered to examine the influence of culture.

Chapter Three: Methods

This dissertation examined organizational structures, including organizational culture, and the influence of these structures on communication satisfaction in the midst of organizational change. Specifically, the following was the overarching research question for this dissertation: *How is organizational change communicated in high-risk, high-consequence organizations, such as a fire department?* The following research questions were posed to assist in answering internal communication aspects of the overarching research question:

RQ 1: What elements of communication satisfaction were evident in the discussion of fire department members during organizational change?

RQ 1a: How does *structure* (i.e., dialectic of control, duality of structure, agency) enhance or inhibit communication satisfaction during organizational change in fire departments?

RQ 1b: How does *culture* (i.e., artifacts, espoused values, basic assumptions) enhance or inhibit communication satisfaction during organizational change in fire departments?

The analysis was grounded in the interpretive paradigm in order to provide “a rich understanding of that social context; and, in some cases, serve the purpose of promoting social change” (Frey, Botan, & Kreps, 2000, p. 20). This paradigm allows for a thematic analysis of multiple data points.

This dissertation used a robust case study approach to analyze multiple data points. A robust case study (Sellnow et al., 2009) approach was most appropriate for this project for several reasons. First, a robust case study approach is defined as a

research tool to examine a “contemporary phenomenon within real-life context” (Yin, 2003, p. 13). A robust case study refers to a study with the ability to uncover detailed information about a particular organization or phenomenon. The multiple data points used in this study allow for such scholarship. The fire department context is an exclusive organizational type, one that has limited scholarship in communication. This robust case study allowed for full access to the fire department meetings, documents, and Intranet. In addition, the organization allowed me to ride along during daily calls and interview members at multiple levels of the organization. These multiple data points outlined various aspects of the life of a LFD firefighter in ways that would not have been possible with other types of research. Thus, this robust case study uncovers an expanded understanding of this distinctive context.

Second, robust case studies are used to explicate a problem, to provide a thorough description of the context or setting as well as the process observed, to allow for a discussion of the important elements, and to offer recommendations or “lessons learned” from the experience (Creswell, 2013). The robust case study method met the goals of the overall research questions and allowed the study to richly describe the context and provide recommendations from the findings.

Third, robust case studies work to explain decisions that inform subsequent action. This often includes why and how strategies were implemented and the result of such implementation. Although case studies cannot be generalizable to populations, they are generalizable to theoretical propositions (Yin, 2003). Thus, findings were not generalizable to another organization, but a case study approach to this fire department project furthered the understanding of literature on communication satisfaction (Downs

& Hazen, 1977) and structuration theory (Giddens, 1984) as it allowed for open analysis and theoretical application.

Fourth, robust case study research is conducted in a comprehensive applied manner with the intent of translating the work into practical recommendations (Yin, 2003). The goal of this research was to translate suggestions from the findings to improve organizational communication processes at the fire department. Thus, the robust case study approach allows the researcher to find the voice of the participants and express the findings in a way that can be offered to the LFD as practical recommendations.

Finally, robust case studies allow for triangulation of multiple data points or evidence to develop converging lines of inquiry to answer questions within an interdependent system (Yin, 2003). Thus, given the multiple data points already collected for this project, both an inductive and deductive analysis (depending on the data set) of the case study evidence allowed themes to emerge from various perspectives within the organization. These data were used to triangulate the findings.

Role of Researcher

In qualitative research, the researcher serves as the primary tool through which the data is collected and filtered (Lindlof & Taylor, 2002). Thus, I must state my role in the research. Before this research began, I had very little knowledge about firefighting in general, much less the organization of fire departments. Therefore, to the extent possible, I approached the project openly, understanding the importance of unbiased opinion throughout data collection.

Boyatzis (1998) believes in the importance of blocking, inhibiting, or, at the very least, reducing the conceptual interference of my own cognitive abilities while I am working to formulate concepts and interpret them. Unfortunately, I was unable to do so. LFD requested help with communication, thus, I approached this research with the intent to understand and potentially improve communication satisfaction. I did not know all issues involved with the process, but I knew LFD administration had communication concerns when they approached the Risk Sciences Division.

Once the research study began, I quickly felt a power distance between the researchers and the participants. My advisor (also female) attended initial meetings and all focus groups with me, and I recognized that being female academics studying a predominately male fire department presented concerns I had not yet considered. For instance, some LFD members were hesitant to share information because they thought we were hired by the city government to report back troublemakers within the organization. This concern was enhanced with the use of the audio-recorder. Even though I explained the purpose of recording and that we were there to benefit them by improving communication, many were still skeptical because they already did not trust the LFD administration. Further, other members were uncomfortable due to our professional dress worn to the meetings. We made this decision, as we wanted to exude confidence as communication experts, but there were times when some participants took quite a while during the meeting to become comfortable with sharing their perspective. Once the focus groups got underway, these issues of trust and concern began to diminish. The findings of the study, however, were the same from the first few focus groups to the very last

focus group – all members, regardless of whether they were comfortable with us initially or not, shared similar concerns with internal communication processes.

Study Design

This robust case study sought to understand the structures, culture, and formal and informal patterns in the fire department's current internal communication strategies and levels of satisfaction with communication and answered the overarching research question to the entire dissertation: *How is organizational change communicated in a high-risk, high-consequence organization, such as a fire department?* Specifically, this dissertation included three points of data collection: 1) informal interviews with district majors, 2) focus groups with rank-and-file firefighters, lieutenants, and captains to determine challenges and opportunities of communication in relation to the dimensions of communication satisfaction, and 3) channel preference surveys on communication channel and message preferences. Each data point is outlined in detail below, including the data collection method for each data point, the research question(s) which the data point will answer, the specific population of the participants, and the data analysis procedure.

Data Collection

This dissertation included three points of data collection: 1) informal interviews with district majors, 2) focus groups with rank-and-file firefighters, lieutenants, and captains to determine challenges and opportunities of communication in relation to the dimensions of communication satisfaction, and 3) channel preference surveys on communication channel and message preferences. Together, these data points are used to answer the following research questions:

RQ 1: What elements of communication satisfaction were evident in the discussion of fire department members during organizational change?

RQ 1a: How does *structure* (i.e., dialectic of control, duality of structure, agency) enhance or inhibit communication satisfaction during organizational change in fire departments?

RQ 1b: How does *culture* (i.e., artifacts, espoused values, basic assumptions) enhance or inhibit communication satisfaction during organizational change in fire departments?

Informal Interviews. During the ride-alongs with district majors, informal interviews were conducted. To gain a more complete organizational perspective, three interviews were conducted with each platoon, totaling nine interviews. The specific interviewee was selected based on availability of the district major. I spent approximately six hours on each ride-along and most of the discussion took place while riding in the vehicle. Before each ride-along began, informed consent was gathered and a survey of channel preferences was completed (see Appendix A).

The interview protocol (see Appendix B) was based on the dimensions of communication satisfaction. Interviews began with questions regarding the communication climate (e.g., describe the communication climate; describe changes in the climate over the past five years), and followed with questions about communication with supervisors (e.g., describe the communication between you and your direct supervisor or between you and other superiors, such as chiefs). The discussion was then focused on satisfaction with organization integration (e.g., describe the amount of information you receive daily) and explored the media quality and understanding among

participants (e.g., describe the media/social media's role in the internal communication process). Further, questions regarding informal communication were asked (e.g., describe the accuracy of information communicated through informal information sources, such as rumors) as well as questions regarding the perception of city government communication during the budget and leadership change (e.g., describe your satisfaction level with city government communication as it pertains to decisions that directly affect you). Finally, the interview concluded with examining communication between superiors and subordinates (e.g., describe your comfort level with sending information up the chain of command in response to communication received) and personal feedback (e.g., describe your comfort level with asking for feedback and/or critique on performance). These questions allowed themes to emerge regarding structure, culture, and formal and informal communication networks.

All questions were asked in a conversational format and the interviewees shared unique experiences pertaining to each question. Most conversations developed naturally, rather than a rigid question and answer session, yet nevertheless, I made certain all questions from the protocol were answered before the discussion concluded. Copious notes were taken (Creswell, 2013) as these discussions developed. Due to the nature of the informal interview process, these discussions were not audio-recorded.

Focus Groups. Recruitment to participate in the focus groups was communicated via multiple announcements on the fire department's intranet, announcements during morning meeting that occurred three days each week (and the minutes posted online), and reminders sent through the LFD's email system. I also visited the firehouses to explain the nature of the focus groups and answer questions in advance when participating in the

ride-alongs. All 27 focus groups discussions included members from the firefighter, lieutenant, and captain ranks, totaling approximately 5-9 participants per group. As stated, given the culture of a fire department, members typically live together for 24-hour periods. Thus, although the focus groups contained members from three populations, there was little concern for a power differential within the groups. Further, although lieutenants and captains were hierarchically immediate supervisors of the rank-and-file members, little direct disciplinary action was taken between these ranks. Therefore, I found it appropriate to keep these populations together during the discussions.

The focus groups were hosted at designated firehouses around the urban community. As soon as participants were gathered together, informed consent (Appendix C) was discussed with the entire room, and then each participant was given a copy of the informed consent to review personally. Signatures were obtained from all participants before discussions began. Most discussions took place around the kitchen table within the firehouse, as it seemed to be the best place in the house for everyone to gather and talk. The discussions were rather informal (e.g., participants made coffee or had a snack during the discussion), allowing participants to feel comfortable as they discussed the issues at hand. The focus group protocol followed the same protocol used for informal interviews, which included a semi-structured questioning route (see Appendix D). Copious notes (Creswell, 2013) were taken during each focus group discussion and all discussions were audio-recorded. Saturation was reached after seven focus groups, and therefore, only those groups were transcribed verbatim for analysis.

Channel Preference Surveys. Channel preference surveys (see Appendix D) were disseminated before the start of each focus group. The survey included questions

regarding communication channel preferences, frequency of checking email, frequency of reading messages sent through specific organizational communication channels (e.g., morning meeting minutes, MasterStream of Unofficial Information, Memos), trustworthiness of channel preferences, and perception of satisfaction with internal communication processes, superiors, and amount of information received. Channel preference surveys also included typical demographic information such as age, rank, sex, tenure as a firefighter, and tenure with LFD. Space was also provided for participants to write in additional comments (qualitative data) regarding channel preferences, information dissemination, and overall communication.

Participants

Target Population

The target population for this dissertation was firefighters in LFD. At the time of the study, LFD had 483 members in the organization. The specific populations for this research included rank-and-file firefighters, lieutenants, captains, and majors. First, as this research was primarily focused on gaining an understanding of the influence of organizational change on organizational members (as it pertains to communication satisfaction), the rank-and-file population was solicited to gain an understanding from the perception of the front-line firefighters. Second, lieutenants and captains were also solicited for this research. Lieutenants and captains offered an understanding of the immediate supervisor's perceptions of the communication during organizational change. Specifically, these populations describe communication both *from* their superiors as well as communication *to* their subordinates. Third, district majors were also included in the

research to gather a middle manager's perception of communication patterns. Table 3.1 outlines the number of organizational members in each group.

Table 3.1: LFD Employee Count by Rank

Rank	Number of Employees
Administration	24
District Majors	15
Captains	21
Lieutenants	48
Firefighters	375
<i>Total Employees at time of Study</i>	<i>483</i>

Informal Interviews. I conducted nine interviews ($N=9$) during the ride-alongs with district majors ranging in age from 41 to 50 with an average of 20.5 years of experience. There are 15 district majors in LFD, all who are male. Thus, all interviews were with males ($n=9$). Of the participants, 88% ($n=8$) reported as Caucasian/white and one person declined to respond. Participants reported a range as a sworn firefighter from 12-26 years ($M=20.6$) as well as a range with being part of LFD, 12-23 years ($M=19$). Participants reported having a high school diploma or GED (11%; $n=1$), completed some college (56%; $n=5$), associate's degree (11%; $n=1$), bachelor's degree (11%; $n=1$), and completed graduate education (11%; $n=1$). District majors are responsible for disseminating information from the morning administration meetings to all houses in their assigned district. For example, the district major of district #1 attends the morning meeting and roll call meeting, and then travels to each of the firehouses in district #1

(which generally includes 5-6 firehouses). Some firehouses in a select district are close in proximity and others are 20+ miles apart.

Focus Groups. Twenty-seven focus group discussions were conducted with firefighters, lieutenants, and captains. The smallest focus group included three people and the largest included 20. On average, 5-9 people participated in the focus groups. Participants were able to participate in the discussions while on duty, yet if emergency calls were received during the discussion, companies were to report to the call, rather than complete the focus group discussion. This occurred on multiple occasions and I simply worked to keep the discussion focused and moving forward with those participants who were not called away. All companies were scheduled for focus groups. However, due to runs and conflicting training during the scheduled time, not everyone had the opportunity to participate in the focus groups. The discussions lasted between 75-90 minutes. My advisor and I were present for all meetings. The focus group participants ($N=261$) were comprised of men ($n=246$) and women ($n=15$) who ranged in age from 23 to 58 ($M=37.7$). The participants reported that they were Caucasian ($n=201$), African American ($n=34$), other ($n=20$), or did not report race/ethnicity ($n=6$).

Participants reported having a high school diploma or GED (19%; $n=50$), completed some college (30%; $n=79$), associate's degree (12%; $n=31$), bachelor's degree (29%; $n=75$), completed some graduate education (2%; $n=6$), completed graduate education (2%; $n=5$), or did not report education (6%; $n=15$). Of the participants, 71% ($n=185$) reported to be rank-and-file firefighters, 15% ($n=40$) lieutenants, 9% ($n=23$) captains, and 5% ($n=13$) did not report rank. Participants reported a range as a sworn firefighter from 1 month – 29 years ($M=10.7$) as well as a range with being part of LFD,

1 month – 29 years ($M=10.1$). In this particular fire department, members are grouped into companies of at least three people. These three people are assigned to a specific truck or emergency response unit. All companies were invited to participate in the focus group and each person was invited to complete a survey individually.

Data Analysis

Informal Interviews. Hand written notes from the informal interviews were typed. This data set was first analyzed to answer this question from a middle management perspective:

RQ 1: What elements of communication satisfaction were evident in the discussion of fire department members during organizational change?

The analysis for RQ 1 was approached primarily from a deductive lens. Specifically, the eight dimensions of communication satisfaction were used for analysis. The coding process occurred in a series of phases. First, each dimension of communication satisfaction (i.e., communication climate, communication with supervisors, etc.) was used as a deductive lens and individually applied to each comment made throughout each transcript (Boyatzis, 1998). For instance, each comment, or rather each token (Creswell, 2013), was read, and labeled in regards to each dimension of communication satisfaction it most represented. Tokens were color-coded to match the dimension (i.e., blue highlights referred to communication climate and yellow referred to communication with superiors, etc.) (Creswell, 2013). Those tokens that did not fit into one of the eight dimensions were pulled from the transcript and placed in a different document. Second, coded tokens were pulled from the transcripts and placed in groups that align with each dimension of communication satisfaction.

Third, the coded tokens were given specific memos based on cues gathered during the participant observation to gain a deeper understanding related the dimension with which they represent (Boyatzis, 1998). Fourth, the constant comparative method was employed for each group of codes (Lindlof & Taylor, 2002). During this final phase of analysis, I identified themes throughout the interview transcripts. Themes that aligned with communication satisfaction were outlined and themes that did not perfectly fit into the framework were recorded as outliers for additional analysis. Themes were supported with thick, rich, description from the transcripts and triangulated with findings from the ethnographic participant observation, focus groups, and survey data.

The data set was then analyzed to answer the following questions:

RQ 1a: How does *structure* (i.e., dialectic of control, duality of structure, agency) enhance or inhibit communication satisfaction during organizational change in fire departments?

RQ 1b: How does *culture* (i.e., artifacts, espoused values, basic assumptions) enhance or inhibit communication satisfaction during organizational change in fire departments?

The analysis for RQ 1a and RQ 1b was also approached from a deductive lens. Specifically, the data set was analyzed to determine which components of structuration (i.e., structures, agency, dialectic of control, and duality of structure) and culture (i.e., artifacts, espoused values, and basic assumptions) were present within the findings of communication satisfaction. RQ 1a and RQ 1b sought to understand the influence structure and culture has on communication satisfaction, therefore, this analysis was secondary to the communication satisfaction analysis. The findings from communication

satisfaction were analyzed for examples of structure and culture. Those findings that aligned as examples of structures, agency, dialectic of control, and duality of structure or artifacts, espoused values, and basic assumptions were pulled into a separate document and examined for themes. These statements were given specific memos, to gain a deeper understanding structure and culture (Boyatzis, 1998). The constant comparative method was employed for each group (Lindlof & Taylor, 2011) and final themes were recorded and described in relation to the influence of structure and culture on communication satisfaction. Themes were supported with thick, rich, description from the transcripts and triangulated with findings from the focus groups and survey data.

Focus Groups. A total of 27 focus groups were completed. Saturation was reached after the seventh focus group; however, I chose to complete all focus groups as requested by LFD to allow all organizational members the opportunity to participate. During the organizational change in LFD, trust in leadership was threatened. Therefore, all focus groups were completed to remove potential issues of preference and/or selection of certain groups over others.

During the focus groups, notes were taken and I created a schema based on my prior knowledge on communication satisfaction. For example, particular comments were marked with an asterisk when participants referred to communication patterns with superiors or a triangle when participants referred to the overall communication climate. Thus, I worked to reduce data through a deductive process during data collection. Following each focus group, summaries were written describing main topics discussed during the focus group. Notes and summaries were then typed and recordings were replayed to ensure accuracy of the notes. The first seven focus groups were also

transcribed. Direct quotes were pulled from the replaying of the audio recordings for the additional 20 focus groups.

Given the nature of a focus group discussion, where multiple people are frequently talking over one another, the unit of analysis was each statement made, rather than the individual who made the statement. Each response transcribed from the focus group discussion was treated as an individual token (Creswell, 2013) for analysis. This data set was analyzed to answer the research questions from the frontline (i.e., rank-and-file) perspective:

RQ 1: What elements of communication satisfaction were evident in the discussion of fire department members during organizational change?

RQ 1a: How does *structure* (i.e., dialectic of control, duality of structure, agency) enhance or inhibit communication satisfaction during organizational change in fire departments?

RQ 1b: How does *culture* (i.e., artifacts, espoused values, basic assumptions) enhance or inhibit communication satisfaction during organizational change in fire departments?

Consistent with the informal interview data analysis, the following steps were taken to analyze the focus group data. The analysis for the focus groups was primarily deductive, using the eight dimensions of communication satisfaction. First, each dimension of communication satisfaction (i.e., communication climate, communication with supervisors, etc.) was used as a deductive lens and individually applied to each comment made throughout each transcript (Boyatzis, 1998). For instance, each token (Creswell, 2013) was read and labeled in regards to each dimension of communication

satisfaction it most represented. Tokens were color-coded to match the dimension (Creswell, 2013). Those tokens that did not fit into one of the eight dimensions were pulled from the transcript and placed in a different document. Second, coded tokens were pulled from the transcripts and placed in groups that align with each dimension of communication satisfaction. Third, the coded tokens were given specific memos to gain a deeper understanding related the dimension with which they represent (Boyatzis, 1998). Fourth, the constant comparative method was employed for each group of codes (Lindlof & Taylor, 2011). During this final phase of analysis, I identified themes throughout the focus group transcripts. Themes that aligned with communication satisfaction were outlined and themes that did not perfectly fit into the framework were recorded as outliers for additional analysis. Themes were supported with thick, rich, description from the transcripts and triangulated with findings from the ethnographic participant observation, informal interviews, and survey data.

The analysis for RQ 1a and RQ 1b was also approached primarily from a deductive lens. Specifically, the data set was analyzed to determine which components of structuration (i.e., structures, agency, dialectic of control, and duality of structure) and culture (i.e., artifacts, espoused values, and basic assumptions) were present. RQ 1a and RQ 1b sought to understand the influence structure and culture has on communication satisfaction, therefore, this analysis was secondary to the communication satisfaction analysis. The findings from communication satisfaction were analyzed for examples of structure and culture. Those findings that aligned as examples of structures, agency, dialectic of control, and duality of structure or artifacts, espoused values, and basic assumptions were pulled into a separate document and examined for themes. These

statements were given specific memos, to gain a deeper understanding structure and culture (Boyatzis, 1998). Fourth, the constant comparative method was employed for each group (Lindlof & Taylor, 2002). Final themes were recorded and described in relation to the influence of structure and culture on communication satisfaction. Themes were supported with thick, rich, description from the transcripts and triangulated with findings from the ethnographic participant observation, informal interviews, and survey data.

Channel Preference Surveys. Descriptive statistics from the channel preference surveys distributed at the beginning of the focus group discussions were reported. The goal of the channel preference survey was to gather initial information regarding preferences in the case that the participant was unable to complete the entire focus group discussion. The survey also gathered demographic information for each participant. This information included sex, age, rank, years of experience as a sworn firefighter, years of experience with LFD, and educational background. In addition, there were five sets of questions on internal communication: channel preferences, email use, additional channel use, filtering perceptions, and levels of communication satisfaction. This data set was analyzed to offer supplemental information for following research questions from the frontline (i.e., rank-and-file) perspective:

RQ 1: What elements of communication satisfaction were evident in the discussion of fire department members during organizational change?

RQ 1a: How does *structure* (i.e., dialectic of control, duality of structure, agency) enhance or inhibit communication satisfaction during organizational change in fire departments?

RQ 1b: How does *culture* (i.e., artifacts, espoused values, basic assumptions) enhance or inhibit communication satisfaction during organizational change in fire departments?

Frequencies were reported for each of the questions on the 14-question survey. Participants were also given the option to add comments in an open-ended format; therefore, these qualitative responses were also reported. Findings were triangulated with results from the ethnographic participant observation, informal interviews, and focus groups.

In summary, Chapter Three outlined the rationale for choosing a robust case study design, the role of the researcher, and the description of the study design, data collection, and data analysis procedures. This dissertation began with nine informal interviews with district majors. Following this, 27 focus groups were conducted with rank-and-file members (i.e., firefighters, lieutenants, and captains). All focus group participants completed a survey reporting channel preference for communication and demographic information. The methods described in Chapter Three were engaged to examine organizational structures, including organizational culture, and thereby formal and informal communication practices, and the influence of these structures on communication satisfaction in the midst of organizational change. A case scenario of LFD is presented prior to the results of the research. The case scenario chapter is designed to offer a contextual background of the research organization.

Chapter Four: Case Scenario

In May 2012, the Lexington Fire Department (LFD) contacted the Risk Sciences Division of the College of Communication and Information at the University of Kentucky regarding communication concerns in the midst of organizational change. The organizational change stemmed from the removal of the fire chief due to no confidence, a federal investigation on alleged discriminatory hiring practices, staffing issues (e.g., LFD was 80 firefighters under staffed), and “browning out” fire stations due to budget cuts. At the time the Risk Sciences Division was contacted, most organizational members were unaware of what was happening and why. Thus, leadership determined that the organizational change was a growing concern throughout the department. The myriad of challenges faced by LFD required further examination to protect the well-being of the Lexington community.

External and Internal Perceptions of LFD

A Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis conducted by LFD determined that communication was the primary challenge throughout these changes. LFD leadership therefore asked for assistance in understanding communication barriers in the fire department. Upon further investigation, the issues surrounding LFD were much larger than just communication. Background research on LFD was conducted before data collection was initiated. This began with an analysis of media reports covering changes occurring in LFD (external perceptions) and an analysis of the Strategic Plan Survey responses LFD gathered the year before my study began (internal perceptions).

First, external perceptions of LFD were examined through analysis of media stories. Brownouts, the federal investigation, and the change in Fire Chief were key terms used in the search for media stories about LFD. Findings suggested that media stories primarily covered the organizational change issue of brownouts. Particularly related to this change, the community and the media voiced concern for LFD as well as concern for the community of Lexington. Many believed that brownouts would cause slower response times and larger community problems.

The perception of LFD, however, was neutral. Instead, media reports and community responses blamed the city government of Lexington, particularly the city Mayor. However, even after the findings were shared with LFD members, they still believed that the media “hated them.” Therefore, there was a misperception between the reports in the media and what members *thought* was portrayed in the media. Based on further conversations with LFD members, this is in response to the fear of speaking to the media. Members frequently commented on the incorrect stories written in the media (e.g., police used the Jaws of Life to extract someone from a car). However, no one was willing to correct the stories (e.g., only firefighters are trained to do extractions), by speaking to the media. Some members (both district majors and rank-and-file members) wished for media training, but commented that speaking with the media was above their pay grade. Even more, historically, firefighters were penalized if they were caught talking to the media by having to buy breakfast for the house. Therefore, not only was there a misperception between LFD and the media, there was also confusion of expectations in terms of who could and should speak to the media.

Second, the internal perceptions were gathered from the Strategic Plan Survey. LFD members perceived a lack of communication from the administration. Members were satisfied with the improvements due to the change in Fire Chief, however, many referred to the positive changes as “short lived” and believed that the initial increase of information would not continue long-term. The Strategic Plan Survey asked generic questions about perceptions of members and statements regarding a lack of communication appeared frequently throughout the responses. A majority of the responses were characterized as perceived weakness (70%) or potential future problems (9%) in LFD. Findings also indicated that perceived positive attributes were the change in leadership and the improvements of communication following the change.

Perceived weaknesses in communication were categorized as structural challenges of dissemination and consistency, a lack of a relationship with the public, and failed radio communication. These opinions were supported by the interviews and focus groups a full year later. Members appreciated the increase of information flow when Chief Jackson was appointed as Fire Chief, but were frustrated that the frequent email messages and announcements directly from the Fire Chief faded with time. Thus, members were frustrated with a lack of communication from administration and the internal perception of communication was poor. Understanding the external and internal perceptions of LFD helped shape the direction of the research study design. Upon completion of this background analysis, participant observation was also conducted to gain a deeper understanding of the daily happenings within the LFD organization.

Behind the Scenes with LFD

Based on the external and internal perception findings, I chose to also participate as a participant-observer in LFD through ride-alongs with district majors. The goal of the participant-observation was to experience a typical day-in-the-life of LFD members. Particularly, the experience allowed me the opportunity to understand the nuances of communication patterns. Once I was able to determine these nuances, I felt prepared to conduct the focus group discussions with rank-and-file members. I participated as a participant-as-observer and studied the scene from the vantage point of specific organizational members (e.g., district majors) (Lindlof & Taylor, 2002). Based on this experience I was able to discern humor, sarcasm, disgust, etc. in daily talk.

Over a period of five weeks, I spent time as a participant-observer with LFD. Trujillo (1992) asserted, “ethnographic methods require researchers to immerse themselves in the field for an extended period of time in order to gain a detailed understanding of how members interpret their culture” (p. 352). Ethnographic research is used to describe and interpret values, behaviors, and beliefs that are shared and learned patterns within a group. To understand the values and culture of LFD, I logged 55 hours of participant observation to gather initial knowledge on levels of communication satisfaction, culture, and structure before the study began. During this time, I attended weekly meetings with LFD administration, participated in the daily “roll call” meeting where district majors assign firefighters to a given firehouse or apparatus (engine, ladder, etc.) for that specific day, rode along with district majors to each house in the assigned district, and participated in informal meetings at each firehouse visited. Based on the working schedule of 24 hours on-duty/48 hours off-duty, LFD conducted morning

leadership meetings three times per week (i.e., Tuesday, Wednesday, and Thursday each week) to ensure each district major in each of the three platoons received the same information.

I rode with nine district majors on nine different meeting days, which allowed for a glimpse of the organizational culture (Creswell, 2013) of the fire department from the perspective of a middle manager (i.e., leader and follower). The primary participant observation occurred with the district major, but informal communication discussions were also completed at each house visited. The informal discussions at the firehouses allowed me an opportunity to gain an understanding for the culture as well as learn accepted practices in communication. During these discussions, I discussed the upcoming focus groups and encouraged firefighters to participate. Doing so introduced the idea of the research before the focus groups began, with the goal of increasing participation. Some members were excited for the opportunity to discuss issues with the potential for improvement, and others were skeptical that I was hired by the city government to “interview” people for their own jobs. The fact that I was an academic woman made some of the introductions challenging, therefore, I chose to return to houses multiple times to gain trust with the members.

Spending time with LFD allowed me to experience the daily life of LFD members. For instance, the participant-observation helped me understand the type of calls members respond to most. For instance, on average LFD responds to 22 fire calls and 100 EMS calls daily, totaling on average, approximately 122 calls per day. During these calls, LFD has an average of 87 patient contacts and 74 patient transports. Calls to

extinguish an actual fire average about two per day. Therefore, the bulk of LFD calls are EMS calls.

Further, I also attended specific daily meetings, such as the “Morning Meetings,” the “Roll Call” meetings, and rode along with district majors throughout the workday. LFD holds leadership meetings on Tuesdays, Wednesdays, and Thursday mornings every week. Three meetings are held each week to ensure all three platoons receive the same information. The goal of each meeting is to allow a time when administration can report updates, changes, reminders, or general information to district majors and the district majors then travel to each house within their assigned district to share that information. The goal of my participant observation was to gain an understanding of the culture of the department and allow participants to become accustom to my presence (Lindlof & Taylor, 2002) before the focus group discussions began.

The first day of observing was set for a Tuesday in August, about two months after the Interim Chief was officially appointed as Chief. I arrived on the second floor of Station 1 at 7:45 before the meeting began at 8:00 a.m. I walked into the meeting room, where a long table was placed in the middle of the room, surrounded by chairs. Chairs also lined the outer walls. People trickled in and the meeting began at 8:02 a.m. The meeting began with updates from the Fire Chief. Following his updates, the Fire Chief then went around the room and asked for updates from each Assistant Chief. Comments included updates from the Chaplain, such as “The citizen’s fire academy is making blankets to give away to families this winter and would like to have LFD involvement. The first workshop is this Saturday from 9-12 at the Episcopal Church. Please inform everyone and have them email me to sign up.” Another comment came from the

Battalion Chief of Human Resources, “Officer training orientation will take place tonight and tomorrow night at 6:00 p.m. at the training center. This training is required for Captains and Lieutenants. On-duty members cannot attend. Please remind members of this required training.”

All Assistant Chiefs were given the opportunity to speak. Some district majors took notes and others did not. The Morning Meetings were tape-recorded and later transcribed by an office assistant not physically present in the meeting. The transcribed notes from the recordings were uploaded to the organization’s intranet where all members could access the information. The official meeting was recorded, but conversation generally continued after the meeting was concluded and the recorder was shut off. There were even times during the official meetings when members would say, “Let’s table this discussion until after the recorder is shut off.” Therefore, important conversations (i.e., those that took place after the recorder was turned off) were omitted from the transcripts that were shared with the entire organization.

During my time as a participant-observer, I witnessed multiple discussions on topics of policy changes, rank-and-file complaints, and concerns about individual people within the organization during these “off the record” conversations. This sparked further conversations with district majors where I found out that the recorder was strategically turned off to restrict information from being disseminated to all LFD members. Particularly, it was an opportunity for administration to discuss sensitive issues at a convenient time (as administration was required to attend the morning meetings), but it was not meant for the entire organization to know. Although these discussions were meant to only cover sensitive issues, organizational updates were discussed as well.

Therefore, important organizational information was also not caught on tape and not disseminating to the entire organization, which was problematic.

The first meeting lasted for 50 minutes, and 11 updates were given. Discussion followed most updates during which attendees asked for further clarification or voiced concern with the update. I attended nine Morning Meetings and the same process was followed during each meeting. The shortest meeting was 22 minutes and the longest meeting ran for 65 minutes. The length of each meeting was dependent on the amount of information discussed. The average was approximately 40 minutes. Most everyone was welcoming, however, some were confused as to my role during the meeting. Even though I was introduced to administration during the first meeting, some members were unsure of why I was there. This seemed to be a common occurrence during the participant-observation.

I attended meetings on Tuesdays, Wednesdays, and Thursdays to experience similarities and differences between each day. The schedule was determined based on availability of my work schedule and LFD's training schedule. Most weeks I was able to attend two meetings and other weeks I was only able to attend one. Nevertheless, I visited each platoon three different times on various days of the week (see Table 4.1).

Table 4.1: Participation in Weekly Meetings with all Platoons

Week 1:		
1	Tuesday	1 st Platoon
2	Wednesday	2 nd Platoon
Week 2:		
3	Tuesday	2 nd Platoon
4	Thursday	1 st Platoon
Week 3:		
5	Tuesday	3 rd Platoon
Week 4:		
6	Tuesday	1 st Platoon
7	Thursday	3 rd Platoon
Week 5:		
8	Tuesday	3 rd Platoon
9	Thursday	2 nd Platoon

The Fire Chief, Assistant Chiefs, and Specialty Chiefs attended each day. The district majors were different each day as they rotated with the working schedule. The meetings were planned to be the same meeting each day, with the exception of additional information added when new updates were ready. However, I noticed that meetings on Tuesdays shared more information than those on Wednesdays and Thursdays. Most of the information was to be repeated with each new group; however, the only new people to the meeting each day were the rotating district majors. Therefore, some announcements were forgotten with the repetition of meetings. Nonetheless, discussions were recorded and Morning Meeting Minutes were transcribed and posted to the Intranet every Tuesday, Wednesday, and Thursday. These minutes were supposed to be posted by noon on each day, however, many times the minutes had yet to be posted when I left for the day (e.g., usually around 5:00 p.m.).

Following the Morning Meeting, I attended the “Roll Call” meeting in the basement of Station 1. The goal of the Roll Call meeting was to ensure that all

companies have at least three people each working day, including at least one captain or lieutenant amongst the three. Three people were required for each fire engine, ladder truck, or emergency care unit (EC, ambulance) to be on-call. If a company did not meet these requirements, members were moved from their regularly assigned company to a different company for that working day. The Roll Call meeting was quite complex. I quickly learned that LFD had an active Union and the contract allowed members to take off select hours during the day in addition to full days. Therefore, there were many times when firefighters were moved to a different company for 2-3 hours (i.e., from 1:00 p.m. to 4:00 p.m.). Every person working needed to be accounted for every hour of the working day. On a good day, the roll call meeting lasted 1.5 hours. The longest meeting lasted for 3.5 hours. Most averaged around 2 hours. District majors included me in the Roll Call meeting. Most explained their personal process and openly answered questions.

Following the Roll Call meeting, district majors were expected to visit each house in their district. Some districts have four houses and others have five houses. I had the opportunity to ride along during these visits. It was during this time that I talked one-on-one with district majors and spent time at the firehouses. Most all district majors were open to discussing communication practices, and a great deal of information was gathered during these ride-alongs. Upon arriving at each house, the district major and I would walk inside the firehouse and gather all members around the kitchen table. This was an informal setting. All district majors reported updates to each house. Some district majors read their personal notes taken during the Morning Meeting; others printed the Morning Meeting Minutes from the previous day (e.g., those transcribed by the office assistant) and read them word-for-word to the members. Many times discussion followed

the announcements when members asked for clarification on particular updates. During the house visits, most organizational members asked why I was there with the district major. Even though ride-alongs occur frequently during the week (e.g., community members have the opportunity to ride-along at any time), members were thrown off by the fact that I actively took notes during the meetings. Once we were able to discuss my presence, members then began to ask questions about the upcoming focus group discussions. This helped to familiarize them with the research well before it began.

Riding with the district majors allowed me the opportunity to have a day in the life of a district major. The culture of LFD became apparent as I spent more time with organizational members. Particularly, components surrounding formality, consistency, expectations, and the sporadic nature of LFD emerged.

Informality. First, all meetings within LFD were informal. As a para-military organization, research would suggest that formality would be valued and practiced. This was not true in LFD. Instead, the feel of the organization was lax and people treated each other as though there was not a hierarchy in place. Jokes were a common part of the meetings and firefighter jargon was frequently used. Morning Meetings were called to order, but all other meetings did not share this formality. For instance, when a district major arrived at the firehouse to relay information, he yelled throughout the house to have everyone join him at the kitchen table for announcements. People frequently made food or drink during the meeting. Expectations were low in terms of formality for most meetings.

Consistency. Second, all information was shared from the district majors to those in the firehouse, but each district major decided how to disseminate information. Thus,

the consistency of dissemination was quite different. District majors who printed the notes from the meeting and read them covered the most detailed information.

Conversely, those district majors who took mental notes and shared information from memory did not cover as much information and frequently omitted information (whether intentionally or not). Thus, the consistency of information dissemination greatly varied from person to person, but also platoon to platoon. Each platoon has its own culture within the larger organizational culture. For instance, 1st platoon was organized, held efficient meetings, and covered information quickly, yet effectively. Their Roll Call meeting generally lasted around 75 minutes. Conversely, 3rd platoon was much more informal. Their meetings ran long, their updates were organized, and information was repeated frequently. Their Roll Call meetings lasted up to 4 hours. Thus, the platoon represented largely influenced the expectation for message dissemination from the district major to the firehouses.

Expectations. Third, the expectations of the rank-and-file members also differed throughout firehouses and platoons. Certain firehouses had a schedule of the time that the district major would come to their house. If the company was on a call during that time, the updates were placed in a particular place in the house, where everyone knew where to find them. Other houses located farther out of town, went multiple work days without seeing their district major and had to rely on the intranet and email to get updates. The expectations of the rank-and-file members in each of these instances varied greatly. For instance, those who saw their district major every workday expected to receive updates face-to-face. Those who did not began to rely more on electronic means (whether preferred or not), such email, memos, or the MasterStream of Unofficial

Information for their information dissemination. The MasterStream was generated by a district major who reported the morning meeting minutes in a tongue-in-cheek fashion. His goal was to encourage members to improve readership of the minutes. The MasterStream was emailed to all LFD members. Even with multiple channels of information available, expectations and preferences did not always align.

Sporadic Nature. Finally, the culture of LFD can be defined as sporadic. The role of the firefighters is to respond to a 9-11 call as soon as they are assigned to their company. Thus, every workday is dependent on the emergencies within the community. District majors rarely had everyone in the house present during the house meetings. Schedules changed by the minute and firefighters were moved to different firehouses and different companies multiple times throughout the day. The sporadic nature of LFD appeared to frustrate members. For instance, comments such as “we never were told about this,” or “we’ve never heard of this before right now” were frequently made. This component also made it difficult for each district major to successfully make his rounds. There were times we would show up to an empty firehouse. This wasted time and resources going to and from each firehouse across the district.

Participating as an observer of LFD opened my perspective of the organization. I gained knowledge on the culture of the group, the daily schedule of members, and typical expectations from both administration and rank-and-file members. I was fortunate to have the opportunity to not only ride along with the district majors, but also participate in meetings. There were three instances when I was asked to step outside the room during discussions. I was later told that was because of discussions on response calls and discussing it with me violates the Health Insurance Portability and Accountability Act

(HIPAA). Thus, I felt this experience increased my understanding of LFD. Upon completion of the participant-observation, the study was launched and informal interviews, focus groups, and channel preference surveys were conducted with LFD members.

Chapter Five: Results

This dissertation examined organizational structures, including organizational culture, and the influence of these structures on communication satisfaction in the midst of organizational change. To answer the posed research questions, informal interviews were first conducted with nine district majors. Following this, 27 focus groups were conducted with rank-and-file members (i.e., firefighters, lieutenants, and captains). All focus group participants completed a survey reporting channel preference for communication and demographic information.

Communication Satisfaction Analysis

This dissertation examined perceptions of communication satisfaction during organizational change and was most concerned with channel preferences for communication, communication challenges with superiors and subordinates, and the overall communication climate and perspective. Data collected for this dissertation gathered information from rank-and-file members as well as district majors.

Informal Interviews. During the ride-alongs, informal interviews were conducted with district majors ($N=9$). The interview protocol was designed from the framework of communication satisfaction (see Appendix B). All eight dimensions were applied in the questioning route, in addition to other questions about the internal communication process. The goal of the informal interviews was to understand the middle manager perspective to internal communication.

Communication Satisfaction. This data set was first used to answer the following research question from a middle manager's standpoint:

RQ 1: What elements of communication satisfaction were evident in the discussion of fire department members during organizational change?

The framework of communication satisfaction was applied to the interview transcripts as a deductive analytical lens. Thus, the results are designed to follow the eight dimensions. Examples of organizational structure and organizational culture are also outlined within the communication satisfaction dimension.

Communication climate. The first dimension is characterized as the extent to which communication in the organization motivates workers to meet organizational goals, including attitudes toward communication and whether those attitudes are healthy (Downs & Hazen, 1977). District majors held rather unhealthy attitudes towards the communication climate within the organization. Issues with the communication climate included uncertainty of work roles, decision-making, and timing of information, particularly related to the use of email. First, district majors discussed uncertainty with work roles. One district major stated, “We have three levels of Chiefdom,” referring to the multiple levels of leadership throughout the organization. He discussed challenges within LFD due to uncertainty surrounding work roles, and who should be trusted with information and who should not. Second, another believed this to be a barrier to communication, “We really have a lack of communication due to different levels within the organization.” Another agreed:

Our right hand doesn't ever know what our left hand it doing. It is frustrating that even majors don't know what is going on in this place. We should know. We are responsible to letting everyone else know. But we don't. We have too many chiefs and not enough Indians.

Another district major commented on decision-making:

Decisions are not based on principle, but more on people. Unfortunately, the more things change, the more they stay the same. We had this problem in the past and it is now back again. If one person makes a mistake, everyone is held accountable. This is demotivating.

The communication climate is influenced by the structure within LFD and the uncertainty surrounding one's role as well as the expectation for message dissemination.

Finally, the timing of message dissemination was also stated as a concern in regards to the communication climate. One district major mentioned, "Our issue with communication is all about timing and understanding of that timing. Ultimately, we need to learn to accept it." This district major discussed timing as an important issue and believed that much of the frustrating surrounding a lack of communication came down to frustration with not getting information fast enough. Another agreed, "We can't plan too far in advance because as soon as the call [9-11] comes in, it changes. Timing is tricky." Another agreed, "We think that we need to know. But, in all honesty, the guy at the big desk has information that he can't tell until the right time. We need to be patient. But sometimes we all struggle with that."

Similarly, the increased use of email was mentioned as an additional challenge to timing of message dissemination in their communication climate. As one district major said, "Nothing important comes through email. If they need me, they can call me. Anything on email can wait," and another, "We have an overabundance of email, a lot of information gets lost." "Email is not a great option," another complained, "you definitely miss information if you are not on duty the day it is announced."

Satisfaction with superiors. The second dimension examines both upward and downward communication with superiors; specifically the extent to which each superior

listens and pays attention when asked questions (Downs & Hazen, 1977). This dimension is also concerned with the ways superiors offer guidance for solving issues. District majors believed that their superiors mocked the idea of suggesting improvements, that administration fed them the information on a need-to-know basis, yet still held a hope for improvement in this communication based on changes with the new administration.

First, district majors frequently mocked the communication (or lack thereof) between them and their superiors. For instance, when asked for suggestions for improvement of communication practices and processes, one district major simply laughed at the thought of even trying to come up with a suggestion. He said, “Funny you should ask. But they [administration] won’t listen to what I have to say anyway.” Another replied to the same question with the response, “I cannot advise,” which he later disclosed meant that he did not feel comfortable giving his opinion for suggestions for improvement.

Second, district majors believed they were fed information. One stated “District majors could be described as a mushroom head – the administration can just stick our feet in the ground and then can feed us shit.” He frequently mentioned that he quit asking for clarification and further explanation on information because he was frequently told, “you don’t need to know.” Another agreed, “Leadership sees that people on the floor don’t need to communicate to the line. They just feed us what we need to know.” This frustration was heightened given the role of the district major – they were expected to disseminate information to the line, but were not always privy to information. As one stated, “There is nothing more frustrating than being held accountable for a new policy

and not knowing about it first.” Most all of the district majors referenced the frustration of not knowing information they felt as though they needed to know to do their job.

Finally, there was still hope for improvement with the installation of the new Fire Chief, but unfortunately, the hope was short lived. “I want to say things have gotten a little better with Chief Jackson,” one stated, “but I don’t think he has put out as much information he has eluded that he would do.” Another agreed with this sentiment by referring to the meeting of all “white shirts,” who I later found out to be the executive level. Their quarterly meeting was called their CUB meeting. “They had a CUB meeting the other day and apparently important decisions were made. I’ve had a lot of guys ask me about changes that were announced at the meeting and I look stupid when I don’t know anything.” Another agreed, “Our change in Fire Chief is really a hot topic right now. We have seen some improvements in just a few weeks, but I honestly think that the changes are only skin deep.” These district majors all mentioned initial excitement with Chief Jackson, but followed up with frustration that promises were still left unfilled.

Organizational integration. The third dimension includes satisfaction with the amount of information received regarding policies, changes, or requirements (Downs & Hazen, 1977). District majors discussed the difference between needing information and wanting information, described a division that followed a particular rank, and believed that communication was detrimental to LFD.

First, one district major mentioned, “There is a huge discrepancy on who should know specific information.” Another agreed:

There is a difference in *needing* information versus *wanting* information. We have many who want more information than they actually need to do their job. But, I think as a Major, I should know what’s going on. Apparently, those above me don’t agree.

Another replied in reflecting on his interactions with his district, “Some guys don’t need to know certain information. It is my responsibility to disseminate information that I think they need to know.”

Second, other district majors commented on communication challenges within the organization. One stated, “We have a very clear division of communication that follows the division of rank,” and another offered specific challenges to the current design of dissemination, “We have a lot of meetings to disseminate information. We are asked to talk about different things. But, our morning meetings don’t help anything. They are a waste of time.” Another district major said, “Our biggest problem is the changing of plans, etc. We have an eight-day rule. If you are upset about something, don’t worry because things will change in about eight days.” Thus, dissemination expectations evolve frequently because plans, policies, etc. change often.

Finally, one major suggested that improving communication is detrimental to the organization, “Worrying about communication interferes with how to do our job. We are here to save lives, not to worry about how to talk to each other.” Another agreed to an extent, “We have a lot to think about in this job. Much of what you are asking me isn’t on the top of our minds and it shouldn’t necessarily be a priority.” The amount of information received, then, is dependent on individual priorities and levels of satisfaction differ depending on the expectation for received information.

Media quality. The fourth dimension refers to the extent to which employees perceive the media as effective to the goals of the organization (Downs & Hazen, 1977). This includes not only the external media, but also internal media such as an intranet, email messaging system, and additional electronic ways of disseminating information.

First, two district majors were more interested in external media issues than internal ones. One stated, “I think our issue is our lack of communication with the media. I think we are fine internally – well, as fine as we can be, I guess.” He mentioned the need for media training for all members. “Our guys need to be trained, hell; I don’t even know how to talk to the media. Most of the time, I dodge the camera.” Another agreed but introduced a different reason behind this issue:

I don’t want to talk to the media because I fear my job. I am really frustrated with stories I hear on TV because most of the time, they are wrong. But, I’m not willing to risk my job to correct it.

There was also a belief of a negative perception from the media towards LFD. One mentioned, “They hate us. They blame us for the brownouts. They blame us for not responding quickly enough. They make the community hate us too.” Yet, the same response followed, “But I’m not going to be the one to fix it.” The district majors frequently mentioned feeling caught in the middle between administration, and in this case, the media.

Second, internal media components were also mentioned as a root of miscommunication. “We have an Intranet,” one stated, “but no one knows where anything is placed.” Another agreed, “There is no one place to go for information. They try with the Intranet, but it really is an ineffective way of information dissemination,” and another agreed:

We have five places to go for information – meetings, meeting minutes, MasterStream, Friday morning minutes, and Major dissemination – but not all of the same information is shared by each place. We need somewhere where the important information is all found in ONE spot.”

Similar to the issue with communication with superiors, as noted, email dissemination was mentioned as a frustrating tool. “Email is the worst decision made in this fire

department,” one stated. Collectively, district majors did not see much value in their internal emailing system.

Informal communication patterns. The fifth dimension examines ways organizational members receive information from peers, such as grapevine communication and the extent to which a rumor mill is active (Downs & Hazen, 1977). Rumors were of most concern to the district majors. “When we don’t cover the information they [the line] want, rumors spill out and spread quickly,” one mentioned. Another agreed, “Our rumor mill is worse than in a high school,” Another followed up with, “but the worst thing is that rumors are generally close to reality.” Another mentioned, “When information is not available to everyone, rumors will start, and operations could easily be affected.” Therefore, district majors believed that rank-and-file organizational members use rumors to fill in gaps when official information is not shared.

General organizational perspective. The sixth dimension refers to the level of satisfaction with the overall functioning of the organization, particularly relating to information shared regarding government action that affects the entire organization (Carriere & Bourque, 2009). Collectively, district majors did not comment on the general organizational perspective.

Communication with subordinates. The seventh dimension is concerned with upward and downward communication with subordinates, specifically with the responsiveness of subordinates and the extent to which they feel responsible for initiating upward communication (Downs & Hazen, 1977). Issues surrounding communication with subordinates were concerned with email and the need to be liked.

First, one district major stated, “Our job as majors is to disseminate what we think they should know. If they want more information, they know where to get it.” The policy requires all members to catch up on correspondence each workday. “Everyone on the line is required to read their email and check the minutes by 8:00 a.m.,” one district major said. But not all members follow this policy, “Majors almost always read the minutes from the meeting, but the line doesn’t. But, that’s not really my problem. If they don’t want to find it, they won’t always know what is going on.” Others commented on their managerial choice, “My guys are turned off by micromanagers, so I respect that. I do filter information, but I don’t see it as negative. I filter for the benefit of the guys – it simply doesn’t pertain to them.” Another agreed, “I don’t see a point to relay all information because it is given to them in other ways. There is a misperception that it is the major’s job to disseminate. That’s just not true.”

Second, some district majors discussed the positive side of this issue, “Guys want to be liked. We don’t want to make our guys mad. So I try to just tell them, be calm, and stick with us.” Another stated, “My guys complain about a lot of things, but that just means they are full of ideas, and passionate about their jobs!” Other district majors commented on timing of releasing information as it relates to the information disseminated to their subordinates. One stated:

I try to give as much information as I can, but the problem is, a certain amount I cannot give away. I’m not hiding the information, some is just sensitive to the timing of when it is released.

Thus, district majors believed that they give as much information as they see suitable to members in their districts.

Personal feedback. The eighth and final dimension includes the amount of feedback given to an individual member in response to goals and achievements (Downs & Hazen, 1977). Feedback can come from coworkers, managers, or leadership. Personal feedback did not seem to be of high importance from the perspective of the district major. One stated, “You watch out for yourself around here. If you want something to happen for your career, you need to make sure you know what you need to do. Nobody is going to do it for you.” Another replied:

We know when the promotion exam dates are set. They are the same every testing period. Getting ready for the exam is on you. People will study with you, but you need to say that you want their help.

Therefore, district majors believe that it is the individual’s responsibility to advance in his/her own career.

Information seeking responsibility. District majors were adamant in their beliefs that it was the responsibility of each member to find his/her own information. “The information is there,” one said, “they just need to look for it.” Another agreed, “They think it is our responsibility to tell them what they need to know. It’s not. They are grown-ups. They can find their own information. If they miss something, they have only themselves to blame.” Another person offered a reason behind this issue:

We’ve really changed over the last few years. It used to be that information was only spread through face-to-face communication from the district major. Now, we have a lot more technology. This is a problem. Different guys expect different things and we haven’t quite figured out how to fix it yet.

Another mentioned, “I dunno, maybe it is our job, but I don’t think anyone should rely on someone else to advance their own career. At some point, he needs to take the bull by the horns and just make it happen.” Another stated:

I personally think it is frustrating to get blamed for not getting information out there,” one stated, “I mean, I can’t be in multiple places at once. I have to travel around to the entire district and I know I miss information sometimes. But, everyone has the information available to them. They just gotta find it.

District majors were frustrated that some members fail to find information on their own.

Thus, the responsibility of information seeking is an additional dimension to communication satisfaction. Findings from communication satisfaction were further analyzed to determine ways structure and culture influence levels of communication satisfaction.

Organizational Structure and Culture. The informal interview data set was also used to answer the following research questions from a middle manager’s standpoint:

RQ 1a: How does *structure* (i.e., dialectic of control, duality of structure, agency) enhance or inhibit communication satisfaction during organizational change in fire departments?

RQ 1b: How does *culture* (i.e., artifacts, espoused values, basic assumptions) enhance or inhibit communication satisfaction during organizational change in fire departments?

Specifically, the data set was analyzed to determine which components of structuration (i.e., structures, agency, dialectic of control, and duality of structure) and culture (i.e., artifacts, espoused values, and basic assumptions) were present within the findings of communication satisfaction.

Structures. Structures are produced and reproduced through human symbolic activity and structures guide the social interaction (Giddens, 1979). Structures are referred to as rules, resources, formal, and informal patterns of communication. Findings from informal interviews suggested that statements regarding communication climate

were influenced by the *structures* of LFD. Specifically, rules were designed within LFD to dictate communication. Specifically, the chain of command determined who reported to whom. These rules created the communication structure LFD was to follow. Even so, district majors were quite unclear of their role as it related to communication. Most were uncertain about their dissemination responsibilities, specific information that should or should not be shared, and their responsibility for gathering information from superiors to share with their subordinates. For instance, some believed disseminating information was their responsibility and others believed it was the responsibility of the rank-and-file member to find his/her own information as needed. Thus, the communication climate was challenged by the structure. Likewise, structural issues also influenced the amount of information shared. Majors voiced their dissatisfaction with the misunderstanding of who should know specific information. The communication structure was unclear, and therefore, the amount of information to be shared with individual members was also unknown.

Finally, internal media applications, such as email and the Intranet were used as a resource for LFD communication structure. Incorporating the use of technology as a way to communicate changed the interactions and expectations for information dissemination among members. This also aided in the misunderstanding of work roles from a district major's perspective. Overall, the use of internal media was misunderstood, where district majors did not know if the internal media was to support their dissemination to the district firehouses or replace the face-to-face communication between them and their districts.

Agency. Bandura (1997) suggested that agency refers to acts done intentionally. If people believe they have power to influence change, they will. If people believe they do not have power, they will not attempt to change organizational structures. District majors referred to agency from the rank-and-file perspective as well as their own perspective. First, district majors repeatedly referred to a lack of responsibility taken by rank-and-file members to find their own information. They claimed that all information was available, individuals simply needed to find it. This is an example of low levels of self-efficacy related to agency from a rank-and-file perspective. Further, some district majors mentioned the discrepancy between rank-and-file members *wanting* to know more information and *needing* to know more information. Some majors reported that rank-and-file members in their district simply wanted to know information, but did not necessarily need to know the information. However, according to Bandura (1997), those who want the information are individuals with high levels of self-efficacy to seek information. This discrepancy challenged levels of communication satisfaction because those who perceived a lack of information (i.e., higher levels of self-efficacy) were dissatisfied with the current communication practices.

Second, district majors referred to their own agency. Specifically, the structure that emerged from interactions with leadership also changes levels of comfort with speaking with superiors. For instance, district majors who felt as though they had the power to produce results (i.e., more agency) were more comfortable approaching and/or challenging administration, and therefore, had different levels of communication satisfaction. Those with higher levels of self-efficacy approached superiors to clarify

unclear information (such as work roles/dissemination responsibilities). Thus, agency also influenced levels of communication satisfaction.

Dialectic of control. Individuals may conform to socialization efforts and rules of the organization, or they may openly resist, attempting to modify rule expectations (Giddens, 1984). District majors explained the dialectic of control from a rank-and-file perspective as well as their own perspective. Specifically, rumors and filtering were examples of the use of dialectic of control. First, district majors referred to the use of rumors to accomplish goals. They mentioned that the rank-and-file members responded to a lack of information by starting rumors. Thus, district majors believed that lower level ranks used rumors to gain control throughout the organization. Rank-and-file members were dissatisfied with the amount of information received, and used rumors to demand more information.

Second, communication with subordinates also offered examples of the use of dialectic of control. Particularly, district majors admitted that they filter information before sharing with people in their district. They viewed this as their responsibility. The use of filtering was an example of district majors gaining power within the organization. Filtering resulted in dissatisfaction with communication among rank-and-file members.

Duality of structure. Organizational structure is both an outcome and a resource for interaction and emerges from the communication process. Further, structure is also both enabling and constraining (Giddens, 1984). Communication structural tools such as email messaging and internal media dissemination tools (i.e., Intranet) present examples of a duality of structure. For example, email was an active part of the communication structure. The use of email was decided by administration as a way to ease information

dissemination (i.e., enabling), however, email has presented multiple concerns (e.g., overabundance of email, missing of information when off-duty) from the district major perspective (i.e., constraining). Further, district majors mentioned that the administration viewed the Intranet to be a useful source as all information is stored in one place (i.e., enabling). Unfortunately, many district majors commented that part of the frustration and confusion with the department was that members have to go to multiple places within the Intranet system to find the information they need (i.e., constraining). Thus, the use of internal mediums such as email and the Intranet created a duality of structure that influenced levels of communication satisfaction.

Organizational culture aspects of artifacts, espoused values, and basic assumptions (Schein, 1992) also influence levels of communication satisfaction. Each dimension of organizational culture is described in detail below.

Artifacts. Artifacts can include items such as architecture, technology, dress, or written documents, as well as behaviors such as communication patterns, decision-making styles, communication during meetings, and the use of various technologies (Schein, 1992). Multiple comments from district majors referred to organizational culture artifacts, particularly relating to communication practices and decision-making styles. Communication practices specifically included the use of email and Intranet (e.g., internal media).

The choice to use email and the Intranet as primary communication processes influenced the culture within LFD as it drastically changed the ways in which individuals communicated. Before the installation of the use of this technology, the culture of LFD relied on face-to-face communication dissemination from the district major to the houses.

Thus, incorporating email and the Intranet to disseminate information in addition to (or in some districts, in place of) face-to-face communication shifted the communication culture. Thus, the pattern of communication valued in previous years changed with updating of technology. Some members appreciated this shift and others did not. The organizational culture change of LFD influenced the communication climate and channel preferences, simply through incorporating evolving technology.

Espoused values. Schein (1992) noted that organizations do not have values, individuals do. Therefore, individual values hold varying “weight” within an organization. Values tend to fluctuate with changing leadership. An espoused value refers to an individual’s values and the “weight” of such values depending on the person who holds them. An individual’s values can shift the direction of the organization. District majors commented on the shift of culture with the change in administration as well as the expectations for message dissemination.

First, district majors frequently commented that the emerged culture in LFD regularly shifted with the leadership of the organization. This was an important concern in LFD, as the change in leadership was one of the most prominent changes occurring. Specifically, the values believed by the previous administration were different from the values of the new Fire Chief. Comments such as, “Things are different than they were before,” “It is nicer around here,” “it is more open now,” support this change in values, as well as the change in the organizational culture. The change in culture also influenced perceptions of communication satisfaction with superiors. For instance, district majors commented on the positive change of more open lines of communication and hoped that it would continue in the future.

Second, the expectations for message dissemination were also espoused values within the LFD. Particularly, the expectations vary from person to person, and rank to rank. As stated, whether information should (or should not) be disseminated is unclear. The expectation for the person disseminating and the expectation for the receiver of the information likely aligns with the value of the individual. Thus, communication satisfaction is dependent on one's individual values.

Basic assumptions. Basic assumptions are reinforced over time and become a natural part of “the way we do things around here” (Schein, 1992). The external media and informal communication presented two basic assumptions of the LFD organizational culture from the district major perspective. First, the lack of relationship with external media was deeply rooted throughout the organization. Many district majors commented that the relationship with the media was poor and some went as far to say that the media “hated them.” The relationship was determined as “just the way we do things around here.” The relationship with external media was perceived as tainted and district majors were not willing to risk their job to try to fix it. Thus, this basic assumption influenced satisfaction with communication with external media.

Second, informal communication was also described a basic assumption throughout the department. Specifically, district majors referred to rumors as “part of our culture here,” or rather, “just what we do.” Rumors were accepted as part of the communication culture and all commented that this was never going to change. Thus, rumors are a basic assumption within the organization, one in which members are socialized and encouraged to partake. Some members remained unbothered by the use of

rumors throughout the organization and others were dissatisfied with the amount of information dissemination that “officially” occurred via rumors.

In summary, informal interviews were conducted with district majors during participant observation. The goal of the informal interviews was to understand levels of communication satisfaction and the influence of structure and culture on communication satisfaction from a middle manager’s perspective. Each dimension of communication satisfaction (Downs & Hazen, 1977) was used in the analysis, as were the dimensions of structuration theory (Giddens, 1984) and organizational culture (Schein, 1992).

Focus Groups. Focus group discussions were conducted with rank-and-file firefighters, lieutenants, and captains. The focus group protocol was designed from the framework of communication satisfaction. All eight dimensions were applied within the questioning route, in addition to other questions about the internal communication process. The goal of the focus groups was to understand the rank-and-file perspective to internal communication.

Communication Satisfaction. This data set is used to answer the following research questions from a rank-and-file standpoint:

RQ 1: What elements of communication satisfaction were evident in the discussion of fire department members during organizational change?

The framework of communication satisfaction was applied as a deductive lens to analyze the transcripts from the interviews. Thus, the results are organized to follow the eight dimensions.

Communication climate. The first dimension is characterized as the extent to which communication in the organization motivates workers to meet organizational

goals, including attitudes toward communication and whether those attitudes are healthy (Downs & Hazen, 1977).

For the rank-and-file firefighters, lieutenants, and captains, the communication climate primarily focused on the use of email, the expectations for leadership, and evolving changes. First, the use of email was perceived to be the main tool for information dissemination. One said, “Part of your daily duties is to read your email. That is the responsibility of everyone working here – to check and read your email,” and another said, “I usually check it every third day. I check it about three times while I’m at work.” Another mentioned the ease of email now that email is available on personal cell phones, “Email on my phone has made it easier to get information. I don’t have to go to any other place, it all comes right here.”

When asked if people actually *read* the emails coming in, many responded with, “no,” or “no I don’t.” One further explained, “I don’t block it. They all get there, but honestly not all get opened. There’s a couple of people who mass email several times a day and I’ve fallen into their trap too long.” Another mentioned the evolution of cell phones in regards to email again, “Everything changed when I got an iPhone. It is so much easier to get the information on my phone. There are too many layers of passwords to get to your email on the house computers.” Line members believed that emails sent to cell phones increased satisfaction with amounts of information received, minimized a need for other channels, and changed the expectation for information seeking. By receiving information on the phone, there was not a need to seek information elsewhere.

Second, members looked to administration to send frequent and meaningful emails. When emails failed to come, they viewed the lack of email as “they don’t care.”

One stated:

He [Fire Chief] started out sending updates through email a lot in the beginning, but that has faded. The emails we get right now are junk – stuff about retirement parties and bake sales. The only helpful thing in email is that they [administration] email to tell us a new memo has been posted and where to find it. This helps. But when they [administration] don’t email at all. It’s obvious they don’t care about us knowing.

Another agreed, “Yeah, there is always stuff to tell us, they just choose not to.” Many agreed that they want to receive official information from leadership via email. “I like to have it written down and sent in an email,” one said, “that way if I’m on a run, I know I can always go back and read it.” Another agreed, “I think having the official stuff in an email would make sure everyone gets the same information.” Thus, the line members expected leadership to communicate important information, changes, and updates via email. They did not see a need to seek out this information for themselves.

Third, rank-and-file members also mentioned frustrations with prior administrations, but commented on the improved communication climate with the current change in leadership. One simply said, “It’s nicer around here,” and another stated, “We had an administrative change and things have improved. If anything, we are able to say more now than before.” Another mentioned:

This has been one of the toughest summers I’ve ever had on the job. Staffing was so low, everything was changing and no one ever knew where they were supposed to go or what they were supposed to do. There was so much that we didn’t know and it was upsetting. But, in the face of all of that, morale was still better than it was last summer. I wonder where we would be under the same administration as last year.

The change in leadership was seen as the root of the improvement for morale. One mentioned, "It got stale and monotonous around here. New energy started with the administration change and things just were better. He [Fire Chief] actually started to talk to us and tell us what was going on." The communication climate was perceived to have improved with the change of leadership. However, a secretive communication climate still persisted even with the new administration. "We still have people that keep stuff from us," one said. One stated his frustration, "I've never been up there in the meetings, so I don't know what is going on. I don't want to second guess them or anything; I just don't know what things are so secretive." Another mentioned:

I don't think the administration hides anything from the major – maybe just the major hides it from us. I think they all have their plans on how they think it should be distributed. We may disagree, but they still are the bosses and get to make the rules. We just have to follow what they say, I guess.

Thus, the communication climate was perceived to have improved, yet rank-and-file members still believed the climate included a secretive nature.

Satisfaction with superiors. The second dimension examines both upward and downward communication with superiors; specifically the extent to which each superior listens and pays attention when asked questions (Downs & Hazen, 1977). This also is concerned with the ways superiors offer guidance for solving issues.

Rank-and-file members discussed the issue of filtering information, the bottleneck of the chain of command, and the need to hear from administration through official channels of communication. First, members discussed frustrations with superiors, particularly district majors filtering information. One believed:

Some guys will sit there and filter some of the stuff. You know, every, what is it, Tuesday, Wednesday, Thursday the chiefs have their meeting with all the majors. All the chiefs get together. A lot of that stuff, it's the same thing over and over

every day. People start getting to the point where they scrub a lot of that and they quit listening. Then it gets down here. Not so much, there are still majors out there that do that, but not all of them. It's getting better I think.

Another said, "Well you don't know what's being chosen to be filtered. Like if he's a riding major, he comes and tells me five minutes worth of stuff but there was two hours of it, I don't know what I'm missing," and another offered his perspective, "My district officer is very good. To a large degree, you're going to get not as much fact, and a lot more opinion. Everything is filtered through that person's point of view." Another member agreed:

Well, I'm not saying that they are choosing it, they may not necessarily choose it, they just may take what someone says and turn it into something else. That is dependent on that person listening and what they choose to remember. If there is a lot of information, they may not catch it all. I always check the morning minutes because that is recorded and written down. We know everything that was said from that meeting.

Most members agreed that filtering takes place, however, whether that was positive or negative remained unclear. Some appreciated the filtering but others did not. One said, "I want all of the information to make decisions," and another commented, "There is definitely certain things I don't want to hear about so I don't have to deal with it."

Second, members also were concerned that information did not always make it to the intended audience. One mentioned, "Everything we tell them [the major] should go up and I feel comfortable that it will go up through the major but not sure if it ever gets to the top or not." Another agreed, "You gotta send to your chain of command but then they gotta send it up too." Another member also agreed but offered an additional concern, "I told my major and he went up the chain and came back and said that it's good to go. But, it was 6 months later and the issue was different." Thus, rank-and-file members perceived this to be a bottleneck in the chain of command, particularly when

sending information up the chain. Most felt comfortable with communicating with their immediate supervisor, but many also questioned whether information is shared beyond the initial conversation.

Finally, members frequently referred to the need to hear from administration within LFD. They believed that the communication culture had improved with the new Fire Chief, yet remained frustrated with the lack of communication from the top of the organization. One said, “I like Chief Jackson, but he doesn’t always know what is going on with the line.” Others commented, “It would be a lot better to hear about changes from those that are making the decision instead of hearing it from another station. I’d rather hear it from the top.” Many also mentioned how they would like to see the Chiefs more often:

I think that would be nice to see them around here more often. The chief sent some emails when he took office and it was nice. I enjoyed that – sending out emails to tell us what is going on. But that isn’t really happening anymore. I’d like to see him stop by once in a while – show that he cares.

Others offered suggestions for improving communication from the top. One stated, “They could do a State of the Department address once a quarter. I don’t know what they would talk about the entire time, but it is a good idea probably to have something like that.” Another offered:

We could have a face-to-face in-service. Maybe even just twice a year. Our training lasts four weeks so maybe this could be put in place for one of those. Have a spokesperson or something. But, it needs to cover what is actually going on, not what they want us to hear.

Finally, these members relied on their superiors to give them the information they needed to know. Individual responsibility was viewed as a secondary priority behind dissemination from administration. One mentioned:

First of all, while I know we are all individually responsible, the captains are responsible for each of us being on top of it and the majors are responsible for the entire platoon. Yes, we have individual responsibility, but we also have chain of command also responsible for making sure that everyone is up to date. It is the way we are set up.

Therefore, rank-and-file members wanted to hear more information from the administration of LFD. Most were satisfied with the communication from the district major, but an overwhelming majority shared frustrations of not knowing those in administration, as well as, administration not knowing them.

Organizational integration. The third dimension includes satisfaction with the amount of information received regarding policies, changes, or requirements (Downs & Hazen, 1977). There was a discrepancy between members wanting all information and those only wanting information that pertained directly to them. This difference challenged levels of satisfaction with the amount of information received. For instance, some said they wanted to know everything to make an educated decision, “I’d like to know as much as I can so I can make a decision,” but others mentioned specific topics that were not of interest, “Our hiring process – we don’t need to know anything about that.” Another stated:

I am going to be honest. I wouldn’t want information about budget for a new hiring class. We have elected officials that deal with the city. I let them handle that and deal with the city. As far as budget issues, sure, in passing, it is nice to know, but I don’t need any of that information for my job.

Another explained his view:

Some stuff you’re not going to know because it’s not owed to you. Like roll call, sometimes you get moved to a certain truck in the middle of the day and you’re like “why is that happening?” Nobody’s gonna sit down and spend 15 minutes explaining roll call.

However, some disagreed, “I think it would be better coming from our administration, not the news.” Therefore, rank-and-file members wanted more information regarding changes and updates, but many also mentioned that they did not want too much information that did not directly pertain to them.

Finally, email was perceived to be a common channel for information dissemination. However, important information did not seem to be shared via email. One stated, “97% of my emails probably ought to go to the spam folder. There are particular individuals or groups that send out inordinate amounts of emails. It almost makes you not want to check your email.” Some rank-and-file members set up filters to skim out all emails from the city government because they were typically about Farmer’s Market hours and retirement parties for city employees outside the department. Unfortunately, that meant important emails from the city, such as those concerning benefit changes, were also filtered out. Thus, rank-and-file members commented on the flexibility and availability of using email for dissemination, but would like the channel to be used more for official information dissemination and less junk mail.

Media quality. The fourth dimension refers to the extent to which employees perceive the media as effective to the goals of the organization (Downs & Hazen, 1977). This includes not only the external media, but also internal media such as an Intranet, email messaging system, and additional electronic ways of disseminating information.

First, the relationship with external media was seen as ineffective to the goals of LFD. Particularly, rank-and-file members feared repercussions for talking with the media and were unclear about the media policies. As one stated:

There was a time when you got on TV that you had to buy breakfast for everyone the next day – so we didn’t have a culture that supported us talking to the public

and the media. That is the past and that was the way it was. They didn't want to say what they did – just wanted to do it and then leave.

Another agreed:

It's kind of the culture of the fire service, you don't want to be that guy on camera. You get ribbed, get poked, so when the cameras come out, the guys all hide. You either go in and work, or you get behind a truck.

Other members commented on the rules of the department in regards to speaking with the media, "We are told not to speak," and another said, "We have one spokesperson that is in charge of talking to the media. So, no, I won't do it." But another member had a different perspective on the policy:

Well, generally, it goes through that one person, I don't know that we have ever been told NOT to speak. It depends – when they show up on scene, generally, the highest ranking officer is the only one who speaks to them. We just can't give out personal details.

Many were uncertain about the policy, but shared their frustrations when information is shared incorrectly:

The public doesn't know, neither does the media. We've done a poor job over the years of educating the public and educating the media. I'll pulled up something on channel 18's website, "Police do something with stabbing." There's one cop and five firefighters standing there but it was police that did it. They didn't do squat with the stabbing. They put up some yellow barricade tape and walked around.

Others offered suggestions for improvements:

Historically, I think we probably tried to dodge the media, but we probably need to do a little better job of not dodging them on runs and stuff and rather than trying to hide behind the trucks we should try to say something reasonably intelligent.

Members frequently commented on the need for media training to increase self-efficacy to talk in front of a camera. Most were confused on the policy and others simply were uncomfortable talking with the media.

Second, rank-and-file members appreciated the flexibility and availability of information internally disseminated through media channels, including email, Intranet, and memos. Recall that email was an important component of the description of the LFD communication climate. When asked specific questions about internal media channels used, the Intranet and internal memos were also described as effective tools for flexibility of information dissemination. As one stated, “I am most likely to notice information on the front page of the Intranet. I don’t get on my email multiple times a day, so I just see what is posted on the front of the Intranet.” Another agreed, “I like the Intranet front page, when the memos pop up there. You can see right away if something has changed.” Another commented on the improvements over the last few years:

When I came on – there was no Intranet and very little email. The only way you heard about anything is if the Major told you, so you also relied on rumors even more. Now, they are leaps and bounds beyond what they used to have as far as information dissemination.

Memos were viewed as the most official information source; however, some complained that memos were difficult to find. As one said, “When a new memo is sent, it isn’t attached to the email, so I have to go on the Intranet to find the actual memo.” Some chose not to look for them and relied only on what was sent via email. Thus, email remains an important aspect of message dissemination to LFD. The Intranet, however, was also mentioned as a useful information source when asked on what types of media members relied.

Informal communication patterns. The fifth dimension examines ways organizational members receive information from peers, such as grapevine communication and the extent to which a rumor mill is active (Downs & Hazen, 1977). Rumors were reported as the most common informal communication network, especially

as changes were occurring throughout the department. There was disagreement with the validity of rumors, and rumors were used to not only cause waves, but also initiate change. Many rumors also became reality so some rank-and-file members offered suggestions on ways to debunk the rumor mill.

First, the discrepancy on the validity of rumors was voiced. One mentioned, “Most rumors are just that – rumors. Most are not official information,” and another agreed, “Rumors are probably our biggest barrier to communication. False information is shared a lot.” Others disagreed and commented on the validity within rumored information. One stated, “I’d say about 70-80% of rumors are actually true,” and another agreed, “You get the good stuff in the rumors. They generally end up coming true.”

Another member described his perspective on why rumors are relied on throughout the department:

Rumors are like a fungus that only spreads in dark, uniformed environments. So, the more communication is open and transparent, or the more sunlight that is given to the information – there won’t need to be a rumor mill. It will cleanse itself.

Some use rumors to cause waves:

I know that is a game we used to play. We would start out at the shift and tell another buddy that we heard this was happening, something just to mess with somebody else we knew. We told another crew an entirely thing and it got to where all this, by the time it got back to the person it was about it was an entirely different story. I mean it was funny but it grew. People like to spread stuff and add to it.

Others use rumors as a way of initiating change:

If you start the rumor, if you’re not careful that may become the truth. In the absence of truth, we’ll grab on to anything. This is worse than a beauty shop. We may know the truth and we may still say, no, that’s the truth but we’re going to tell this rumor because that’s more fun. Just to poke with each other and just to give each other a hard time.

Members mentioned that rumors frequently are turned into reality and that some of the best ideas come from rumors. They mentioned that the only way to debunk rumors is to tell the truth and disseminate properly. One member suggested:

In the absence of truth, we'll grab on to anything. If you want to cut down on the rumors – tell the truth. They couldn't tell the truth. I was like, no, just tell the truth and there's no rumor to be had.

Another suggested, "Sunlight is the best disinfectant to squashing rumors." Many agreed that rumors were detrimental to the organization and needed to be stopped. As one stated:

When there is a major change in the fire department, whatever it is, guys are going to make their own assumptions. They send a memo down, they send a plan down, guys are reading it and they've got questions. The major can't answer all those. It takes forever if it ever does get back down to us. I think this is a great setting right here. I understand that you can't go to 23 fire stations 3 times. But, he could come out here with a bunch of guys sitting here and he can answer those questions one-on-one. It may not be the chief for the part, it may be one of the chiefs that came up with the plan or whatever. A face-to-face meeting is the best way to get things out there to us.

Conversations regarding rumors took place in all focus groups. This was an important issue regarding message dissemination. One member stated, "But just like anything, you have to learn to parse out information and figure out what is realistic and what is not." Thus, members agreed that even though rumors are used, each individual must learn how to critically analyze information given through this type of informal network.

Finally, rank-and-file members also relied on their companies, houses, and district majors to receive information informally. Many times people would hear of information when responding to a 9-11 call and encountering other units on the call. One member stated, "We go out on a run and something will get passed on." Others relied on their company officer, "I guess you just rely on the company officer. If they deem something

beyond the normal traffic that's put on then they can pass it on to the guy that was off.”
The informal networks fulfilled breaks in the formal communication structure.

General organizational perspective. The sixth dimension refers to the level of satisfaction with the overall functioning of the organization, particularly relating to information shared regarding government action that affects the entire organization (Carriere & Bourque, 2009). Rank-and-file members perceived a time-release issue with most important information. Further, they also see the union as a useful information source.

First, the time release concern was discussed as both an internal and government level issue. One stated, “I think there is a time release capsule, they know information but keep it until they want others to know,” and another stated, “They wait until things have been released to the public before they release it to us.” Yet, some viewed the city as secretive, but not the department:

I think they DO hold stuff back. The city specifically – not the department, but the city does NOT tell us what is going on. An example is the health insurance – we didn't know what was changing with the health insurance until right before the papers had to be signed. That's the city – not the department.

Second, when official information was lacking, members gathered information from other sources. However, the source of information varied. The following conversation took place during the focus group to describe various sources of information for different people:

Firefighter 1: “I get my information from the union president's Twitter feed. I know not everyone Twitters.”

Firefighter 2: “Right, that is where we differ, you get on Twitter, I get on Facebook.”

Firefighter 1: “Yes, but he sends out tons of great information on Twitter.”

Firefighter 2: “Well, but then you are privy to information because you follow it on there. I have to wait for a different way of communicating.”

Firefighter 3: “And I don’t Facebook or Twitter or anything, so I never know what is going on.”

Firefighter 4: The union also has a union meeting every month if you want to know what is going on and don’t Facebook or Twitter.

Firefighter 5: I learn on shift. I wait for the minutes and updates or I ask the union rep.

Firefighter 1: The info is available if you want to know. I learn more stuff through the union than anywhere else. The union is pretty up on what is going on. We get some good information from them.

When information is perceived to be held back from members, the members go to other sources to fill in the answers. Frustration heightened when important information is shared via the media before it is shared internally, whether it is coming from the city government or the LFD administration.

Communication with subordinates. The seventh dimension is concerned with upward and downward communication, specifically with the responsiveness of subordinates and the extent to which they feel responsible for initiating upward communication (Downs & Hazen, 1977). The rank-and-file members of LFD did not generally have subordinates with which to communicate; however, a few comments were made regarding the expectation for using the chain of command. One stated:

I think the one failure they are having right now – with all of the different travels, more recently, is that they are not going through the chain of command back down. People downtown came and changed the roll call for this district, but didn’t let our acting major know. So we have all of these people moving around to different companies and houses, and we are questioning why this and this is happening, and they are not really supposed to do that. They are supposed to call and let each major know if their roll call has changed. This is after the day has begun and scheduling the next day.

Others agreed: “I took direct calls from the chief telling me where I needed to go and when – that really shouldn’t be happening, we should hear from the chain,” and “I had no idea where I was supposed to go and I didn’t know where everyone was.” Another mentioned, “I don’t think they do any of this on purpose, they are trying to staff

everything. Probably in his mind, it made more sense to make one call and send that person. But no one knew where anyone was.” Thus, rank-and-file members argued that the chain of command should be followed both upward and downward.

Personal feedback. The eighth and final dimension includes the amount of feedback given to an individual member in response to goals and achievements (Downs & Hazen, 1977). Feedback can come from coworkers, managers, or leadership. Personal feedback was one topic that was rarely received, but wanted (and needed) by rank-and-file members. Particularly, rank-and-file members wanted post-mortems following emergency calls to learn what worked and what did not work. As one stated, “When something goes wrong, it would be nice to actually talk about to make sure it doesn’t happen again.” Another agreed, “Some companies talk about what happened on their own, but it would be nice to learn from mistakes of other companies as well. I mean, if they mess up, we don’t want to do the same thing.” LFD members saw post-mortems as a way to learn from mistakes, develop as a firefighter, and avoid issues from occurring more than once.

Further, rank-and-file members were frustrated with insincere personal feedback from superiors and wished for useful feedback for improvement. Specifically, one member stated, “They [administration] cheer for us when it makes them look good.” Another agreed, “We don’t have real feedback from anyone, really. We just get yelled at when we mess up. It would help to get feedback along the way, rather than just when we’ve done something wrong.” Another added, “Well, we actually all get in trouble even if it is just one person who did something wrong.” Therefore, rank-and-file members voiced their need to have useful feedback from superiors. Rather than getting fake

“attaboys”, where members are insincerely celebrated, rank-and-file members would prefer to receive personal feedback to learn before additional issues occur.

Organizational structure and culture also played a significant role in levels of communication satisfaction among rank-and-file members.

Organizational Structure and Culture. The focus group data set was also used to answer the following research questions from a rank-and-file perspective:

RQ 1a: How does *structure* (i.e., dialectic of control, duality of structure, agency) enhance or inhibit communication satisfaction during organizational change in fire departments?

RQ 1b: How does *culture* (i.e., artifacts, espoused values, basic assumptions) enhance or inhibit communication satisfaction during organizational change in fire departments?

Specifically, the data set was analyzed to determine which components of structuration (i.e., structures, agency, dialectic of control, and duality of structure) and organizational culture (i.e., artifacts, espoused values, and basic assumptions) were present within the findings of communication satisfaction. First, components of structuration were outlined.

Structures. Recall that structures are produced and reproduced through human symbolic activity and structures guide the social interaction (Giddens, 1979). Structures are referred to as rules, resources, formal, and informal patterns of communication.

Rules put in place to require members to use internal media (i.e., Intranet and email) and the chain of command used to dictate communication patterns influenced the flow of communication. First, the use of internal media was described as a useful tool for communication dissemination. Rank-and-file members believed that the use of email

made information dissemination easier because, for many, the information came right to their phone. Based on the rule to check email daily, members looked to administration to send frequent and meaningful emails with updates about the department. Therefore, rank-and-file members were satisfied with the incorporation of internal media for quicker dissemination, yet were dissatisfied with information actually sent via the internal mediums.

Second, the chain of command was described as a barrier to the flow of communication. Specifically, rank-and-file members described the chain of command as a bottleneck, one where information is sent up the chain but unlikely to reach the intended audience. Further, the chain of command was also a frustration for many rank-and-file members due to differing expectations between ranks. Members were required to follow the chain of command upward, but the chain of command was rarely followed downward. Thus, members believed that requirements and/or expectations should be the same throughout the department. Both the bottleneck of the chain of command and the need to hear from administration are structural components of the organization. Rules were in place in LFD to determine who reports to whom, however, the interactions between members within the organization challenge the chain of command structure and the availability of administration to visit firehouses. Regardless, the chain of command influenced levels of communication satisfaction.

Agency. Bandura (1997) suggested that agency refers to acts done intentionally. If people believe they have power to influence change, they will. If people believe they do not have power, they will not attempt to change organizational structures. Rank-and-file members described their need to know information as a way of seeking out their own

information. Many wanted to receive more information from administration. They believed that with full amounts of information, they would have the power to be an active participant within the organization. Further, rank-and-file members argued that they were unable to speak on behalf of LFD because they rarely had enough information to support the organization. Rank-and-file members believed that if they were given more information, they would have more agency within the organization. Contrarily, others relied on district majors to “tell them what they need to know.” These members mentioned that the responsibility for information dissemination was held at a district major level, not a rank-and-file rank. They did not view this as their responsibility to find the information they needed. Rank-and-file members were dissatisfied with the uncertainty surrounding message dissemination.

Dialectic of control. Individuals may conform to socialization efforts and rules of the organization, or they may openly resist, attempting to modify rule expectations (Giddens, 1984). Similar to the findings in the informal interviews, the informal communication act of sharing rumors were described as a “tool” to instigate change, cause waves, and encourage administration to listen to the ideas of the rank-and-file members. Rank-and-file members believed that rumors were a response to a lack of information from administration. They believed that rumors spread quickly throughout uninformed environments. Thus, dissatisfaction with communication dissemination led to the spreading of rumors, which is described here as an example of a shift in the distribution of power. Specifically, rumors were one way for the less powerful to act as though they were more powerful. This is further supported because rumors often caused change throughout the department. Many reported that rumors they have started became

a reality in a short amount of time. Thus, the use of rumors were used as a structural way to initiate change from the bottom of the organization.

Duality of structure. Organizational structure is both an outcome and a resource for interaction and emerges from the communication process. Further, structure is also both enabling and constraining (Giddens, 1984). Filtering and the chain of command were both described as a duality of structure. First, some rank-and-file members appreciated district majors filtering out “useless” information, when others viewed this as strategically withholding information. Thus, filtering enabled some to be free from information not pertinent to daily work lives yet constrained others from receiving all organizational information desired. Similarly, filtering increased satisfaction with some members as they were not given information they did not need, and others were dissatisfied with filtering because they felt as though information was strategically kept from them.

Second, rank-and-file members also discussed ways that the chain of command both enabled and constrained the communication climate. Specifically, the chain of command offered a clear distinction for who should speak to whom and which information should be shared with specific people. The chain of command allows all members of the organization the opportunity to voice concerns as needed, as long as they follow the chain of command. Unfortunately, however, the chain of command was not followed in both directions, and thus, many organizational members were unclear about who to talk to and when. For example, recall that the focus groups included firefighters, lieutenants, and captains. Captains hold a role of leadership over the other two ranks. The communication from the Captain to the lower ranks was challenged by

administration not following the chain of command on the way down. Instead, Battalion Chiefs were calling firefighters and telling each where to move for the working day. The problem occurred when the Captain did not know of this change and he/she was in charge of the firefighter. Thus, the chain of command also created a constraining communication structure, and members were unclear when the chain was not followed both ways. This led to a dissatisfaction with communication.

Rank-and-file members wanted the chain of command to be followed both upward and downward. They felt as though they correctly followed it on the way up, but administration did not follow it on the way down. Failing to follow the chain of command in both directions influenced the interactions between members and trust between superiors and subordinates. The chain of command enabled open information flow and clear expectations of who should talk with whom, however, the chain of command also constrained interactions by only allowing people to communicate with particular ranks. Therefore, the chain of command created a barrier to communication and constrained individuals from being actively involved.

Organizational culture aspects of artifacts, espoused values, and basic assumptions (Schein, 1992) also influenced levels of communication satisfaction. Each dimension of organizational culture is described in detail below.

Artifacts. Artifacts can include items such as architecture, technology, dress, or written documents, as well as behaviors such as communication patterns, decision-making styles, communication during meetings, and the use of various technologies (Schein, 1992). Similar to the findings in the informal interviews, internal media used by LFD (i.e., email and Intranet) were frequently referred to as influencing the

communication patterns throughout LFD. Many rank-and-file members voiced their preference for face-to-face dissemination from the district major for all information. The cultural shift in using electronic means for dissemination, then, was dissatisfying for some members when they were comfortable in a face-to-face organizational culture. The artifacts within the LFD culture changed with the development of technology.

Unfortunately, some members did not understand this change. The use of technology became an artifact used by administration that was challenged by some rank-and-file members.

Espoused values. Schein (1992) noted that organizations do not have values, individuals do. Therefore, individual values hold varying “weight” within an organization. Thus, values tend to fluctuate with changing leadership. Rank-and-file members agreed that values within LFD shifted with the appointed administration. Specifically, previous LFD administrations did not encourage an “open door” policy to communicating with administration. The new administration with Chief Jackson does. Although rank-and-file members appreciated this change, the value of open communication between ranks shifted with the leadership. Further, the espoused value for a specific amount of information also shifted with the individual. One person in the organization might be comfortable with all information and another might just want the basic information to complete his/her job. Thus, the needed amount of information shared differs from person to person and the espoused values influenced levels of communication satisfaction throughout LFD.

Basic assumptions. Basic assumptions are reinforced over time and become a natural part of “the way we do things around here” (Schein, 1992). Rumors and the

relationship with external media were both described as basic assumptions throughout LFD. First, rumors were also referred to as “part of our culture here,” or rather, “it is just what we do.” Thus, rumors are a basic assumption within the organization, one in which members are socialized and encouraged to partake. Many rank-and-file members openly disclosed that they actively participate in the rumor mill. Second, similar to the findings with the informal interviews, relationships (or lack thereof) with external media are deeply rooted throughout the organization, which is argued to be a basic assumption within the organizational culture. This relationship is “just the way we do things around here.” Rank-and-file members are socialized into this assumption and the idea is confirmed repeatedly.

In summary, focus group discussions were conducted with rank-and-file firefighters, lieutenants, and captains. The goal of the focus groups was to understand the rank-and-file perspective to internal communication. Each dimension of communication satisfaction (Downs & Hazen, 1977) was used in the analysis, as were the dimensions of structuration theory (Giddens, 1984) and organizational culture (Schein, 1992).

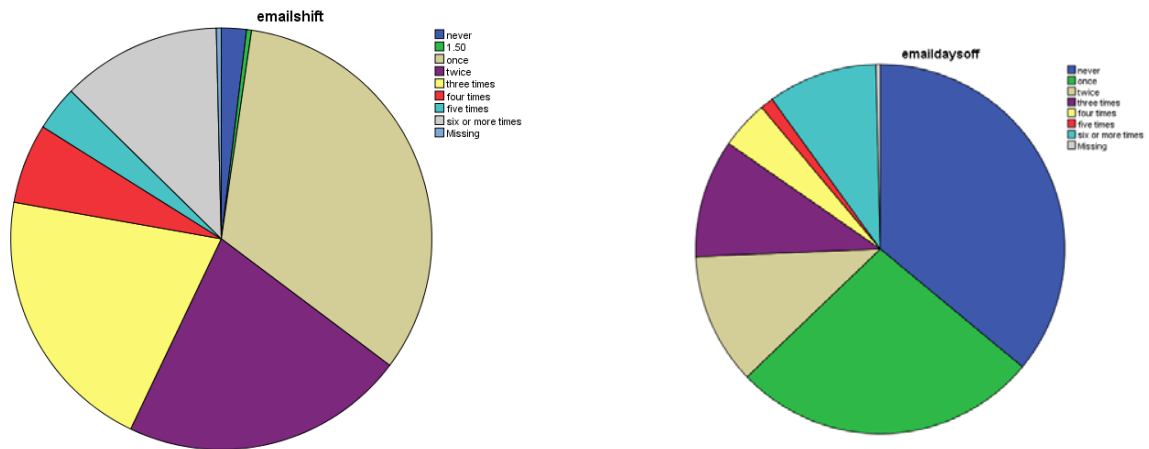
Channel Preference Surveys. Before participants participated in the focus group discussions, they were asked to complete a 14-question survey on their preferences for internal communication. Focus groups were conducted while the participants were on-duty. The goal of the survey was to gather initial information regarding preferences in the case that the participant was unable to complete the entire focus group discussion. The survey gathered demographic information for each participant. This information included sex, age, ethnicity, rank, years of experience as a sworn firefighter, year of experience with LFD, and educational background. In addition, there were five sets of

questions on internal communication dissemination: channel preferences, email use, additional channel use, filtering perceptions, and levels of communication satisfaction.

Channel Preferences. The opening question to the survey asked participants to rank, in order, the channels that they prefer most. Options included email, face-to-face, MasterStream, text messaging, memos, Morning Meeting Minutes, and Intranet. There was also an option for participants to write in a channel I had not yet considered. Email and face-to-face communication were the two channels most frequently listed as a first and second choice preference.

Email Use. The second set of questions (i.e., questions 2-5) gathered information on email use. Questions asked participants to respond to email use during their working shift, on days off, and whether they check email accounts on the work computer or cell phone. Of the responses, 33% ($n=86$) only check their email once per working shift and 22% ($n=57$) check it two times (see Figure 5.1). Of the responses, 36% ($n=94$) never check email on their days off and 27% ($n=70$) only check it once (see Figure 5.1).

Figure 5.1: Email Use during Shift vs. Days Off

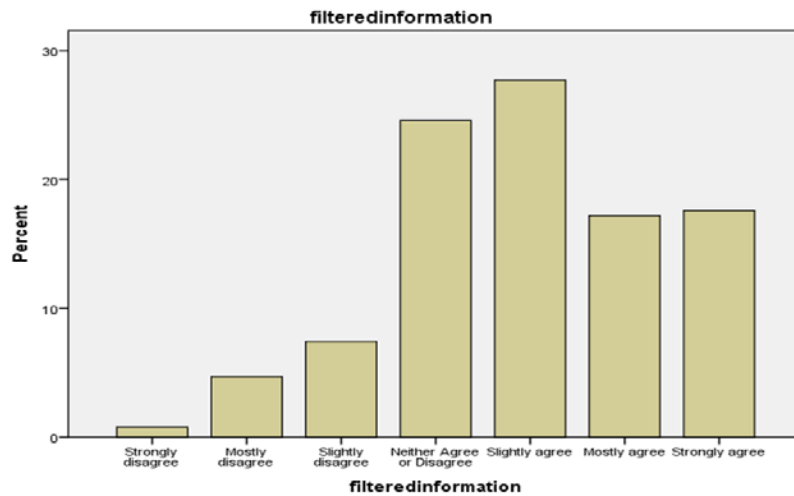


Finally, 24% ($n=23$) check email on computers stationed in the firehouse and 35% ($n=92$) check their email on their personal cell phone. Conversely, 24% ($n=63$) never check email on the company computers and 41% ($n=104$) never check their email on their personal cell phones.

Additional Channel Use. The third set of questions (i.e., questions 6-9) gathered information on the frequency of use of other channels. Of the responses, 41% ($n=108$) never or rarely read the Morning Meeting Minutes and only 18% ($n=48$) always read the minutes. The MasterStream of Unofficial Information was more popular, as 37% ($n=96$) always read this information and 12% ($n=30$) never read the publication. An overwhelming majority of participants read the memos posted to the Intranet (70%; $n=182$ marked sometimes, occasionally, frequently, and always). Finally, participants were asked which channels they relied on most. Face-to-face (55%; $n=144$) and email (61%; $n=159$) were marked as first or second choice for the majority of participants.

Filtering of Information. The fourth set of questions (i.e., questions 10-11) gathered information on perceptions of filtering information disseminated to everyone in the organization. Of the responses, 61% ($n=160$) responded that they slightly agree, mostly agree, or strongly agree that information is filtered out before the message reaches them (see Figure 5.2).

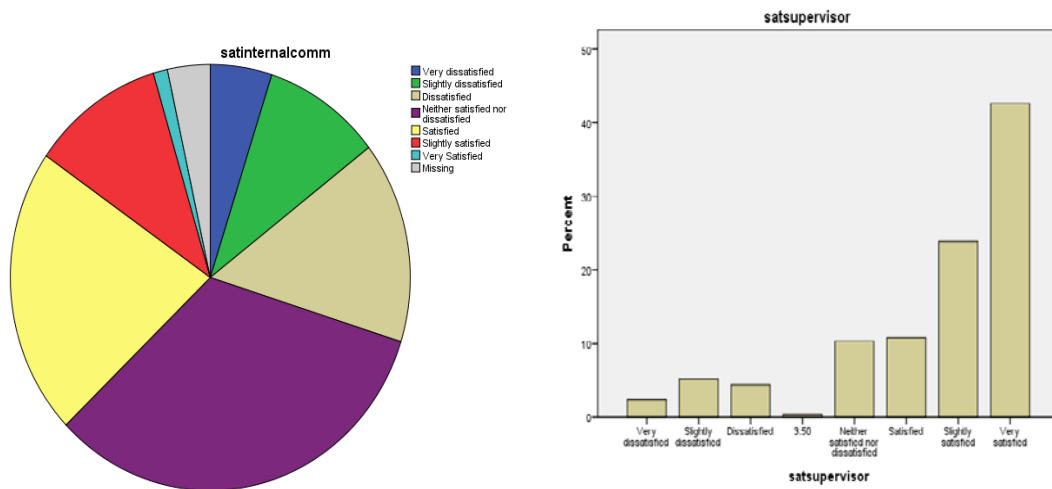
Figure 5.2: Perceptions of Filtering of Information (Rank-and-File Perspective)



The second question in this set asked participants to rank, in order, which channel is most trustworthy of information. An overwhelming majority (74%; $n = 167$) reported memos as the most trustworthy information source.

Satisfaction. The final set of questions (i.e., questions 12-14) gathered information on perceptions of communication satisfaction with disseminated messages, specifically satisfaction with internal communication processes. Of the responses, 15.3% ($n=40$) reported to be dissatisfied with internal communication, 33% ($n=86$) reported to be neither satisfied nor dissatisfied, and 21.8% ($n=57$) reported to be satisfied (see Figure 5.3). The second question in this set was concerned with the perceptions of communication satisfaction with immediate supervisors. Of the responses, 41% ($n= 107$) reported to be very satisfied with communication from their immediate supervisor, 23% ($n=60$) reported slightly satisfied, and 10.3% ($n=27$) reported to be satisfied (see Figure 5.3).

Figure 5.3: Satisfaction with Internal Communication vs. Satisfaction with Immediate Supervisor



Finally, participants were asked to respond with their levels of satisfaction with the amount of information received on a daily basis. Of the responses, 16.5% ($n=43$) responded to be dissatisfied with the amount of information received, 22.2% ($n=58$) reported neither satisfied or dissatisfied and 23.4 ($n=61$) reported to be satisfied. Therefore, communication with immediate supervisors was perceived as positive, whereas overall communication satisfaction with internal communication, particularly with the amount of information received teetered around the neither satisfied or dissatisfied area.

Qualitative Responses. Space for additional comments and/or information was also provided at the end of the survey. Of the responses, 8% ($n = 22$) commented. Of these comments, the most prominent theme regarded a lack of communication from the LFD administration to the rank-and-file members. Comments such as, “Below the rank of Major, communication is poor. Meaning info from the Major and above is kept from the men/women,” “The communication breakdown seems to occur at the top.

Sometimes it appears there is a complete disconnect between the upper ranks and those of us in the street,” “Communication from the rank of major and above is very poor.

Department calendar, morning minutes, emails, and texts without confirmation of verbal follow-up are relied on and too much information is “lost” or passed on incorrectly,” “The disconnect seems to exist from the 2nd floor down to the line companies” outlined the frustration with a lack of communication from the administration to the line.

Participants also offered suggestions for improving the message dissemination issue. “Faster, more efficient official communication from the administration to the line would eliminate the effects of rumors on morale,” and “I would like to receive more information from the Fire Chief in reference to FD direction and happenings” were offered as ways to improve.

The results from the 14-question survey on preferences for internal communication dissemination offered insight into perceptions of the participants. The goal of the survey was to gather initial information regarding preferences in the case that the participant was unable to complete the entire focus group discussion. The four sets of questions, channel preferences, channel use, filtering perceptions, and levels of communication satisfaction, each offered a unique perspective on preferences throughout various components of internal communication.

This dissertation examined organizational structures, including organizational culture, and the influence of these structures on communication satisfaction in the midst of organizational change. During ride-alongs, informal interviews were conducted with district majors. Following this, 27 focus groups were conducted with rank-and-file members (i.e., firefighters, lieutenants, and captains). All focus group participants

completed a survey reporting channel preference for communication and demographic information. Results were offered for each of the data sets, and findings were supported by comments in the interviews, focus groups, and channel preference surveys.

Chapter Six: Discussion

This dissertation examined organizational structures, including organizational culture, and the influence of these structures on communication satisfaction in the midst of organizational change. During ride-alongs, informal interviews were conducted with district majors. Following this, 27 focus groups were conducted with rank-and-file members (i.e., firefighters, lieutenants, and captains). All focus group participants also completed a survey reporting channel preferences for communication and demographic information. Results were offered in Chapter Five for each research question, and findings were supported by comments in the interviews, focus groups, and channel preference surveys. Data points of this robust case study aimed to answer the primary research question for the dissertation:

How is organizational change communicated in a high-risk, high-consequence organization, such as a fire department?

First, the application of the framework of communication satisfaction is offered, describing how this dissertation research offers new understanding to the framework. Next, the influence of organizational structure and organizational culture on communication satisfaction is discussed. Finally, the explanation of misaligned messages during organizational change in LFD is outlined as further explanation for the communication issues.

Communication Satisfaction: A New Look

This dissertation examined communication satisfaction in high-risk organizations, such as fire departments, during organizational change. Communication satisfaction is important to study because communication with others can influence other types of

satisfaction in the workplace (i.e., job or workplace satisfaction) (Mueller & Lee, 2002), which is heightened during organizational change. Organizational change is notoriously a difficult process that affects the daily life of organizational members (Donahue & Tuohy, 2006) and can challenge levels of communication satisfaction. Weber and Weber (2001) found that during change, clearly defined goals had a positive impact on employee attitudes, and employee participation throughout change had positive impacts on *trust* in management. Effective communication during organizational change, then, helps to avoid low morale, high turnover, low performance, and dissatisfaction. The way an organization introduces and maintains change either encourages or deters information sharing among organizational members.

Findings of this dissertation suggest that a majority of LFD members were neither satisfied nor dissatisfied with the overall communication received regarding the organizational changes occurring in LFD. Yet, morale was low, trust with administration was wavering, and members were dissatisfied with the secretive nature held throughout the department. This dissertation advances knowledge on communication satisfaction in a high-risk organization during organizational change and offers development for the communication satisfaction framework, incorporating research from organizational change literature.

Communication satisfaction has been most recently defined as “an employee’s affective appraisal of the organization’s communication practices” (Carriere & Bourque, 2009, p. 31). Traditionally, communication satisfaction has been examined in corporate organizations. The communication satisfaction framework consists of eight dimensions: communication climate, communication with superiors, organizational integration, media

quality, informal communication, organizational perspective, communication with subordinates, and personal feedback (Carriere & Bourque, 2009; Downs & Hazen, 1977). The typical model of the communication satisfaction framework as outlined in literature (Carriere & Bourque, 2009; Downs & Hazen, 1977) treats seven of the eight (communication climate excluded) dimensions equally (see Table 6.1).

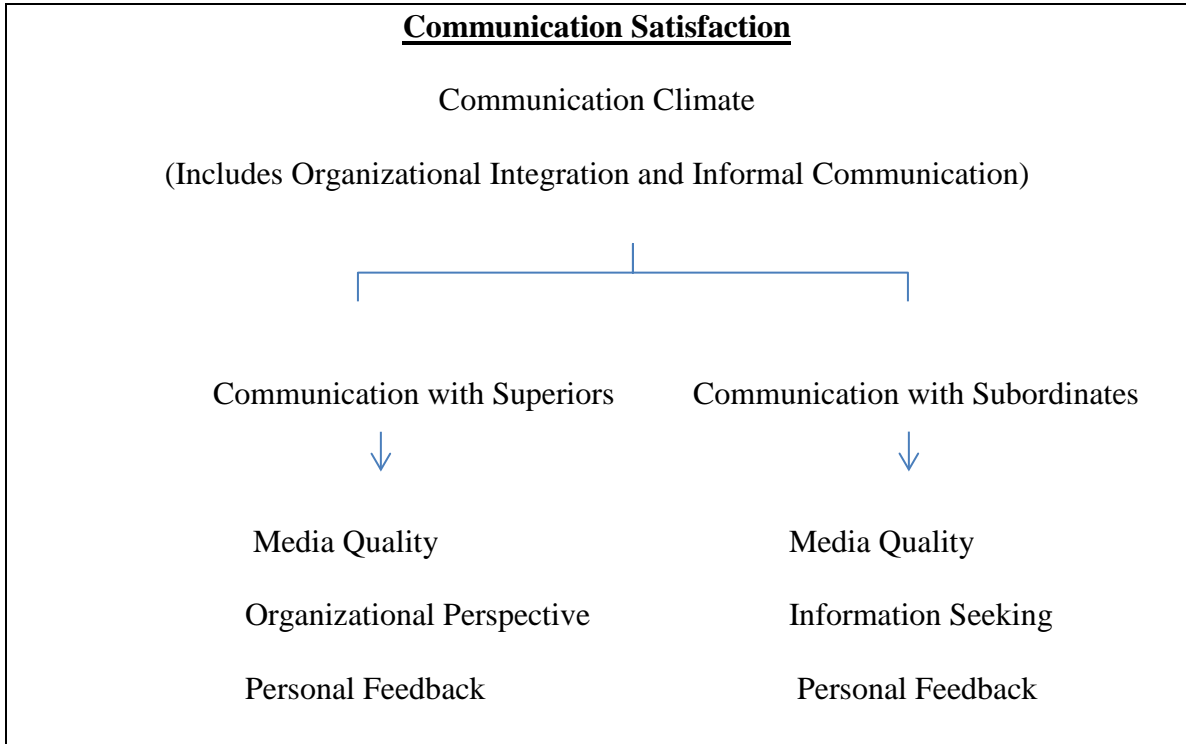
Table 6.1: Design of Communication Satisfaction from Literature

Communication Satisfaction (Downs & Hazen, 1977)
1. Communication Climate
2. Communication with Superiors
3. Organizational Integration
4. Media Quality
5. Informal Communication
6. Organizational Perspective
7. Communication with Subordinates
8. Personal Feedback

Downs and Hazen (1977) suggested that the communication climate dimension was most important. Findings of this dissertation support this claim. However, findings also suggest that organizational integration, or rather satisfaction with the amount of information, was connected to communication climate. Informal communication, even in formal settings, was also observed as part of the overall communication climate. Further, the findings suggest that there are distinct differences in levels of communication satisfaction depending on whether the communication occurs with a superior or

subordinate. A revised model for communication satisfaction is posed based on the findings of this dissertation (see Figure 6.1).

Figure 6.1: Communication Satisfaction in Fire Departments



This study suggests research on communication satisfaction must first examine communication climate (including organizational integration and informal communication), then communication between superiors and communication with subordinates. Within communication with superiors, the media quality, organizational perspective, and personal feedback must be questioned. Within the communication with subordinates, media quality, personal feedback, and information seeking must be questioned.

Communication Climate. Communication satisfaction includes various components of communication dissemination and reception. Downs and Hazen (1977)

suggested that the communication climate is the most important aspect of communication satisfaction when determining satisfaction levels of employees. Findings of this dissertation support this claim and further argue that communication climate should be viewed as the overarching dimension to understanding communication satisfaction. Findings further suggest that the communication climate actually includes components of organizational integration and informal communication, and therefore, challenges the notion that these three dimensions are separate.

Recall that communication climate refers to the extent to which communication motivates workers to meet organizational goals, organizational integration includes an individual's satisfaction with the amount of information received each day, and informal communication refers to communication received from peers and whether the information is accurate and free-flowing (Downs & Hazen, 1977). Findings in this dissertation suggest that satisfaction with the amount of information received (i.e., organizational integration) and how that information flows from peers (i.e. informal communication) is perceived to be part of the communication climate in LFD.

First, regarding organizational integration, members of LFD frequently referred to the amount of information (or lack thereof) when asked to respond about their current communication climate. The perception of communication climate was mostly concerned with information dissemination and reception. Therefore, frustrations of not receiving enough information (i.e., organizational integration) were shared and this issue was categorized as an unsatisfactory communication climate.

Further, members frequently referred to a clear distinction between a *need* and a *want* to know organizational information. Yet, the expectation differed between ranks

(i.e., district majors held a different expectation than rank-and-file members). This expectation gap appeared during the participant observation, informal interviews, focus groups, and channel preference surveys. Most categorized the expectation gap as a frustration with the communication climate; however, much of the gap was concerned with the amount of information received daily. Thus, members of LFD determined that receiving information (or not) was the best way to explain communication climate and these two dimensions blurred into one overarching dimension.

Second, informal communication is concerned with peer communication. However, since firefighters spend so much of their time in informal settings with peers who may later become superiors, this communication was observed as part of the communication climate. District majors and rank-and-file members both discussed this type of communication. Rumors were the most common form of informal communication discussed by both groups. Rank-and-file members started rumors to cause waves and spark organizational changes and district majors accepted that rumors began when information was incomplete. Neither group determined whether they were satisfied or unsatisfied with rumors. Rather, rumors were simply viewed as part of the LFD communication structure and culture. This type of communication was also viewed as effective throughout the organization as many times rumors became reality. Informal patterns of communication (i.e., rumors) tend to fill in gaps of formal communication patterns. Therefore, when examining communication satisfaction, informal patterns of communication must be considered as part of the overall communication climate. Under the overarching dimension of communication climate, there are two divisions: communication with superiors and communication with subordinates.

Superior vs. Subordinate Communication. Findings suggest a distinct difference in communication satisfaction between communicating with superiors and communicating with subordinates. The media quality perceptions and personal feedback expectations differed depending on whether the communication was with a superior or subordinate. Further, the responsibility for information seeking was most important with communication with superiors and the organizational perspective most important with communication with subordinates.

Dimensions of communication satisfaction were applied to data sets collected from two populations: district majors and rank-and-file members. Thus, communication satisfaction was examined from the perspective of both middle managers and rank-and-file employees in one organization. Findings suggest that district majors and rank-and-file members did indeed view communication satisfaction in different ways. Thus, when examining communication satisfaction, one should consider the population with which the framework is applied, and the expectations that group has for message dissemination with superiors or with subordinates.

The distinction of communication satisfaction between both groups offered a deeper understanding of the framework. For instance, district majors were satisfied with communication with subordinates. Most felt as though they successfully communicated updates and changes and believed rank-and-file members were satisfied with the information they were receiving, and if they were not, it was the rank-and-file members' responsibility to seek information elsewhere. Conversely, district majors were unsatisfied with communication with their superiors. They felt as though administration withheld information and regularly referred to the time-release issue with messages.

Rank-and-file members were unsatisfied with communication from the administration/leadership. Most were satisfied with communication with immediate superiors (lieutenants and captains), but were dissatisfied with communication from higher administration, which they categorized as district majors, assistant chiefs, and the Fire Chief. Rank-and-file members did not seem too concerned with communication subordinates. This is not too surprising, as many of them did not have subordinates with which they regularly communicated as they were at the bottom of the chain of command. However, a trend occurred in both groups – both were unsatisfied with communication with superiors, each simply had different superiors to which they were referring. Furthermore, there was a misunderstanding regarding communication satisfaction as district majors believed rank-and-file were satisfied with the information they reported yet rank-and-file were actually unsatisfied with the communication from district majors. This is an example of a breakdown in communication. The expectation from one group to the next differed, which influenced levels of communication satisfaction. Thus, findings suggest that superior and subordinate communication should be examined separately. The dimensions of media quality, personal feedback, organizational perspective, and information seeking are each outlined below in ways they aligned under superior or subordinate communication.

Media Quality. Questions surrounding media quality and personal feedback were categorized in different ways depending on whether the person was disseminating or receiving information (i.e., whether the person was a superior or subordinate). For instance, internal media quality was a point of contention with both district majors and rank-and-file members. Internal media quality refers to Intranet, email, and other

electronic modes of communication (Downs & Hazen, 1977). Email was viewed as an important channel with which to disseminate information and the timing of information was a critical component as to whether members were satisfied with information received. There were various complaints with the use of email, many of which related to time-release issues. Some members preferred face-to-face dissemination, and therefore, did not want to use email for these purposes. Others complained that useless information was sent via email rather than important information and were frustrated that they were required to check email each day, only to find useless information.

There was also a distinct difference between whether one was communicating with a superior or a subordinate. For instance, district majors believed that communicating with rank-and-file (i.e., subordinates) via email and the use of the Intranet was effective and efficient. Yet, many rank-and-file members were frustrated that email correspondence replaced the traditional face-to-face rounds from district majors. Thus, each group perceived communication satisfaction differently depending on whether they were disseminating or receiving information via email, or rather internal media.

Personal Feedback. Personal feedback also differed between communication with superiors and communication with subordinates, particularly as it related to expectations for personal feedback. Personal feedback refers to the amount of feedback given to individual members in response to goals and achievements (Downs & Hazen, 1977). District majors commented that all members of LFD have the responsibility to make their own success in LFD. They believed that everyone had the responsibility to build their own path as well as to study for exams to be considered for a higher rank.

Most district majors did not believe this was their responsibility to provide feedback to members of their district.

Rank-and-file members viewed personal feedback differently. They voiced their need for more personal feedback from superiors, particularly by learning from mistakes. Rank-and-file members wanted companies to come together and learn from one another through post-mortems when issues arise on emergency calls. Rather than having discussion on ways to improve, they felt as though they were yelled at by administration when something went wrong. They were frustrated that “feedback” was only given reactively after a mistake, rather than proactively. Therefore, rank-and-file members commented on personal feedback in terms of improving skills while on an emergency scene, rather than in terms of advancing in rank (as district majors viewed it). This likely stems from the promotional procedures outlined by the LFD union. Specifically, members are promoted based on achieving a bench marked test score. Testing is offered every two years and all qualified members have the opportunity to participate. Those with the highest score are offered promotion first. Thus, if the route to promotion is based on a person’s ability to pass a standardized test, personal feedback in this regard is not necessary. However, if personal feedback *was* given, rank-and-file members wanted useful feedback from superiors, rather than fake, insincere “attaboys.” Members felt as though they were only congratulated when administration wanted to look good to the community. Therefore, personal feedback expectations varied between communication with superiors and communication with subordinates.

Organizational Perspective. Organizational perspective refers to the level of satisfaction with the overall functioning of the organization, particularly as it relates to

information shared regarding governmental action (Downs & Hazen, 1977).

Communication satisfaction with the organizational perspective dimension was only apparent when members (both rank-and-file and District Majors) discussed communication with superiors. Members would like to receive updates on governmental actions that affect their personal lives (i.e., insurance premium increases) from superiors directly rather than from the city. In addition, rank-and-file members were highly annoyed with city-level communication pertaining to upcoming events such as the Farmer's Market and personnel changes in other departments across the city.

Information Seeking. Responsibility for information seeking refers to the ability and self-efficacy of members to seek out their own information for the purposes of staying updated with organizational changes and policies updates. This dimension is proposed as an additional component of communication satisfaction. This dimension, however, was only apparent when district majors discussed communication with subordinates. District majors believed that all pertinent information for the organization was readily available. They believed that members had a responsibility to find the information that was available to them, but some chose to ignore the information or simply failed to look for the information. This expectation for information seeking differed between district majors and rank-and-file members. Rank-and-file members felt they should not have to look for the information, but rather, the district major should provide information. Therefore, adding this component to the framework of communication satisfaction would aid in outlining expectations for communication, and in turn, help to understand levels of satisfaction with disseminated messages.

This dissertation was also concerned with the influence of organizational structure and organizational culture on the dimensions of communication satisfaction.

Communication satisfaction helps to explain members' perceptions of communication dissemination patterns. The organizational structure also offers understanding to how information is shared and which ranks were privy to specific information. LFD is a bureaucratic organization that follows a strict chain of command. This structure influenced communication patterns, which also influenced whether members were satisfied with communication. Further, the organizational culture of LFD was different on-scene (e.g., on a 9-11 call) and off-scene (i.e., in the firehouse). The culture, then, also influenced the ways in which LFD members communicated, and therefore, influenced levels of communication satisfaction.

Influence of Organizational Structure and Culture

Organizational structure and organizational culture both influence levels of communication satisfaction in LFD. Giddens (1984) suggested that scholars use structuration theory to interpret emerged interactions throughout an organization. Findings of structuration theory that were similar between both populations are reported here as they suggest a commonality between both organizational populations. Specifically, findings for structure, agency, and dialectic of control (Giddens, 1984) were similar between both populations (e.g., district major and rank-and-file members).

Influence of Organizational Structure. First, the chain of command structure influenced levels of communication satisfaction. Specifically, the chain of command offered clarification for communication patterns, yet those patterns were challenged by additional factors within the organization. Structure changes depending on the

interactions of the organizational members (Giddens, 1984) and the rules dictate interactions. In LFD, the chain of command dictated the communication. However, this structure influenced levels of communication satisfaction because some individuals wanted more information than the chain of command would allow. The chain of command influenced interactions and the rules dictated with whom to communicate. This structure was dissatisfying to both district majors and rank-and-file members, however, as structuration theory (Giddens, 1984) argues, LFD created and maintained these structures with which they were most frustrated. Even though the chain of command was the decided structure for communication, members complained about the issues with the chain, rather than working to improve it. Thus, the structure that resulted in dissatisfaction was created, and ultimately sustained, by the people in the organization.

Further, expectations of the use of the chain of command were particularly frustrating for the rank-and-file members. Specifically, rank-and-file members felt as though they were required to follow the chain of command when communicating with those in higher ranks, yet they were frustrated that the chain of command was not followed when higher ranks wanted to communicate with the rank-and-file. For instance, rank-and-file members were required to communicate with their district major before they could discuss scheduling concerns with the Battalion Chief. However, if a Battalion Chief wanted the rank-and-file to change schedules, the battalion chief would call the rank-and-file member directly and skip over the district major. Rank-and-file members were frustrated with this action as it cluttered the chain of command structure, and therefore, the communication structure. As a middle manager, however, district majors did not comment on this particular chain of command concern.

The use of new media also influenced communication patterns, and further influenced levels of satisfaction among organizational members due to its change in the overall communication structure. Some were satisfied with this new communication structure (i.e., quick access to email on one's phone) and others were dissatisfied with the change (i.e., replacing of face-to-face communication). These differences were apparent in both populations. Further, some were dissatisfied with the use of internal media because expectations for this information were unclear. Katz's (1957) "magic bullet" theory suggested that once a message is sent from opinion leaders, the message is communicated. LFD administration subscribes to this notion and holds the expectation that communication occurs once information is disseminated. Further, LFD discouraged the use of social media among members. LFD members wanted to post pictures and show pride for their work on social media sites, but administration reprimanded those who did for the fear of violating HIPPA. Although members were frustrated with this action, most reported that they have not made their frustrations known, therefore, members are creating in the structure in which they despise (Giddens, 1984). Even so, these frustrations influenced satisfaction levels throughout the department. Thus, incorporating technology (or restricting the use) influences levels of communication satisfaction.

Second, agency influenced levels of communication satisfaction. Agency refers to one's capacity to make decisions (Bandura, 1997). Those who seek out more information have higher levels of self-efficacy. District majors believed that rank-and-file members did not take responsibility for seeking their own information, but rather relied on others to disseminate to them. From their perspective, most rank-and-file

members did not have high levels of self-efficacy. Rank-and-file members voiced dissatisfaction with dissemination from district majors because they believed it was the district majors' responsibility to communicate changes to them. Therefore, they did not see themselves as having low levels of self-efficacy, but rather, the district majors were not doing their jobs. The similarity here is that both groups were unclear about responsibilities for information seeking for themselves as well as for others. Both blamed the other for this responsibility, yet neither identified themselves as needing to take responsibility. Giddens (1984) suggests that the members of the organization create structures through their interactions and communication with one another. Thus, structuration theory (Giddens, 1984) would suggest that district majors and rank-and-file members have the ability to change the structure of information seeking, simply by suggesting ideas for improvement and then acting on the suggestion.

Finally, the structuration component of dialectic of control also influenced levels of communication. Specifically, rumors were used to not only cause waves, but also to initiate change from the bottom of the chain of command. Rumors were a way for less powerful individuals to appear more powerful to administration (i.e., dialectic of control). This was heard from both populations. However, according to Giddens (1984), members of the LFD created allowances for rumors, which resulted in a structure where rumors are an influencing factor.

Similar to the allowances for rumors, filtering of information was also shared as a way for less powerful (i.e., district majors) to convey power. Some district majors chose to filter information simply to have more power (i.e., information as power). Ting-Toomey (2003) suggested that when members are dissatisfied with the organization, they

might choose to retaliate. In LFD, rumors and filtering of information were used to retaliate when dissatisfied with communication. The ability to do so is granted by the structure within the chain of command and the role associated with a given rank. Some rank-and-file members were satisfied with filtering from the district majors, and others were quite dissatisfied. By not asking for information from certain district majors, the rank-and-file members allowed for filtering to take place. Even though some rank-and-file members were dissatisfied with filtering, allowing it to occur simply created a communication structure where filtering became normal. Nevertheless, components of structuration influenced levels of communication satisfaction.

Influence of Organizational Culture. Organizational culture components also influenced levels of communication satisfaction. Specifically, both populations mentioned the same artifacts and basic assumptions. First, similar to the structural influence, the artifacts of internal media (i.e., email and Intranet) influenced the organizational culture regarding communication. Those who preferred face-to-face communication felt as though face-to-face communication created a “brotherhood” among the district and looked forward to seeing the district major each day as it ensured one time during the workday where everyone was required to reconnect. Introducing the use of internal media, then, decreased satisfaction with communication because this group of individuals preferred the face-to-face channel.

Second, both populations also agreed that the basic assumptions of informal communication patterns (i.e., rumors) and the relationship with the external media were both deeply rooted within the organization. Rumors were described as a piece of the organizational culture that have been, and would always be, a part of the LFD culture.

Some described this informal communication pattern as a way to poke fun and create a sense of community or “brotherhood” within LFD. Other strategies used to create this community were pranks, practical jokes, and hazing practices, yet these have been discouraged or banned over the years as the fire department has become more professionalized. Recall that Tracey et al., (2006) found that fire department members use humor to deal with the high demands of the job. LFD members also use rumors to create humor in their high-risk working environment.

Others described the use of rumors as a strategic tool to change the organization. The more a rumor was spread, the more likely it was to come true. One rank-and-file member said he once heard an administrative chief comment, “I get all my best ideas from rumors.” Rumors influenced levels of communication satisfaction because some appreciated rumors and actively participated in the rumor mill, and therefore, were satisfied with information dissemination taking place via rumors. Contrarily, others were dissatisfied and described rumors simply as that –rumors. Johnson (1993) suggested that informal patterns of communication, such as rumors, influence the formal patterns of communication, such as the chain of command. Further, informal communication frequently remains an uncontrolled aspect of an organization’s communication. Thus, the use of rumors will likely continue throughout LFD, regardless of the motive.

Another basic assumption was the taboo nature of talking to external media. Currently, LFD members experience repercussions for “getting caught on camera.” Both populations described the LFD-media relationship as a frayed relationship that no one from the ranks of district major or rank-and-file were prepared to fix. Members commented that this relationship was “just the way things were” around LFD, however,

many also commented that they would appreciate learning how to talk to the media. As a basic assumption of the organization, media training would require a shift in the organizational culture and constant support from all ranks in the organization. As evidenced here, these basic assumptions influenced levels of communication satisfaction within LFD. Therefore, both organizational structure and organizational culture influenced levels of communication satisfaction within LFD.

The influence of organizational structure and culture extending into an evidenced misalignment found throughout the analysis. This misalignment made communication throughout LFD even more difficult and unclear. Specifically, the structure and culture of LFD did not always align and members were frequently confused about expectations for formal and informal patterns of communication. For instance, rank-and-file members were required to follow a strict, formal chain of command when communicating with superiors, yet the LFD administration would send informal text messages to rank-and-file members when they needed to disseminate particular information to specific people. Expectations for dissemination, then, differed throughout ranks. Furthermore, LFD members received misaligned messages regarding requirements for message dissemination and reception (which developed from the structure and culture difference). For instance, LFD administration told members that their doors were always open if they wanted to come to discuss concerns about the organizational changes. However, those that took advantage of this opportunity were further told that they must follow the chain of command to voice concerns. Members were frustrated with receiving messages that were seemingly contradictory. Thus, the misalignment of messages is described as an additional level of explanation in understanding levels of communication satisfaction.

Beyond Structure and Culture: Influence of Misalignment

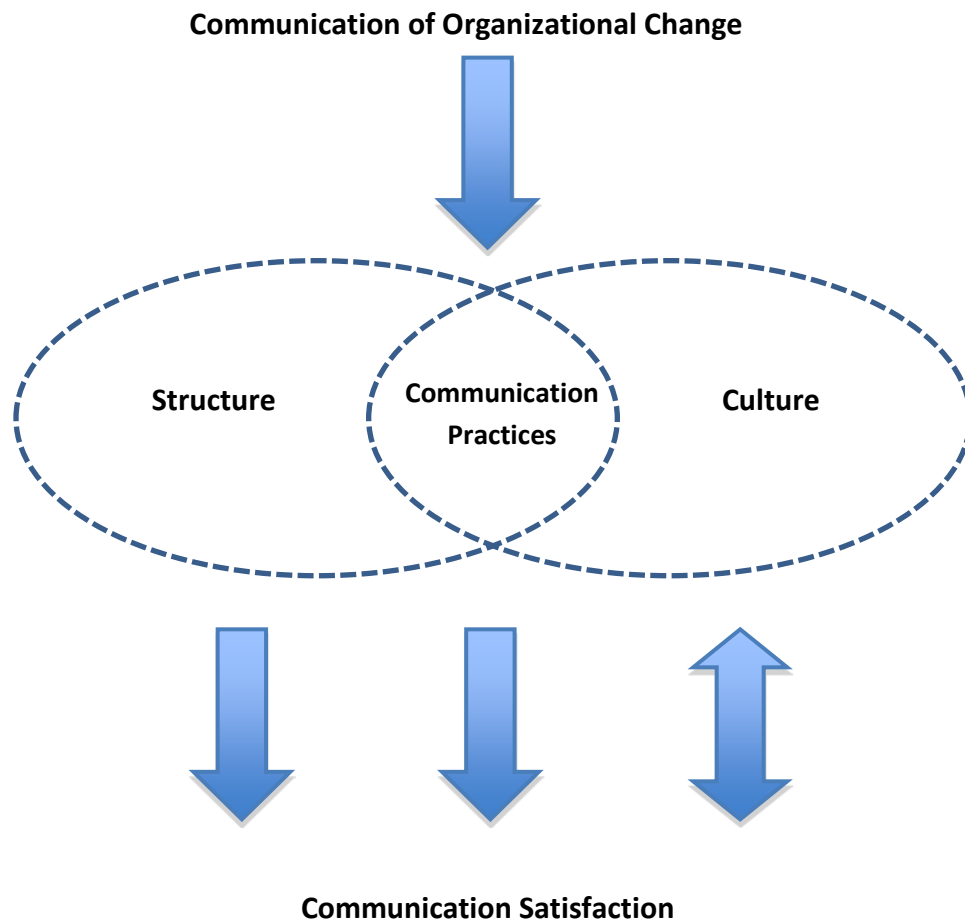
LFD is a para-military organization with a hierarchical chain of command. This chain of command is particularly important during emergency calls as the chain directs communication between members with the goal of keeping everyone safe and allowing for effective responses to those in need. LFD, like many fire departments, is also like a family. After completing an emergency response, LFD members returned to the firehouse where they live together. They cook meals together, eat together, clean the house together, and sleep in the same rooms. The chain of command structure fades during these times as members take on more of a culture of a family. Maintaining this balance is difficult, especially as it pertains to communicating organizational changes. Further, the chain of command blurs as members begin to communicate openly with “friends” in their company, regardless of rank. This poses unique challenges to maintaining levels of communication satisfaction.

Generally, when a chain of command is in place within an organization, expectations for communication are clear. The chain of command tells members who to talk to for specific needs (Dedoussis, 2004). The culture of bureaucratic, hierarchical organizations tends to coincide with the chain of command organizational structure (Johnson, 1992). This means that the artifacts, espoused values, and basic assumptions align with the chain of command structure and expectations for communication dissemination are relatively clear (Schein, 1992). However, this was not evident in LFD. Although the chain of command existed, the communication structure was unclear. Further, the organizational culture and structure did not align. Research suggests that organizations are most successful when organizational structure and culture align

(Cheney et al., 2004). Misalignment of organizational structure and culture can cause additional issues throughout the organization (Cheney et al., 2004).

Figure 1.1 described in Chapter One aligns with the literature between organizational structure and organizational culture, suggesting these components should be aligned. Note that this model of organizational structure, culture, and communication satisfaction could be placed in any specific context. For the purposes of this dissertation, however, the model is applied to high-risk organizations going through organizational change. Based on the findings of this dissertation, Figure 6.2 is offered as a revised version of Figure 1.1.

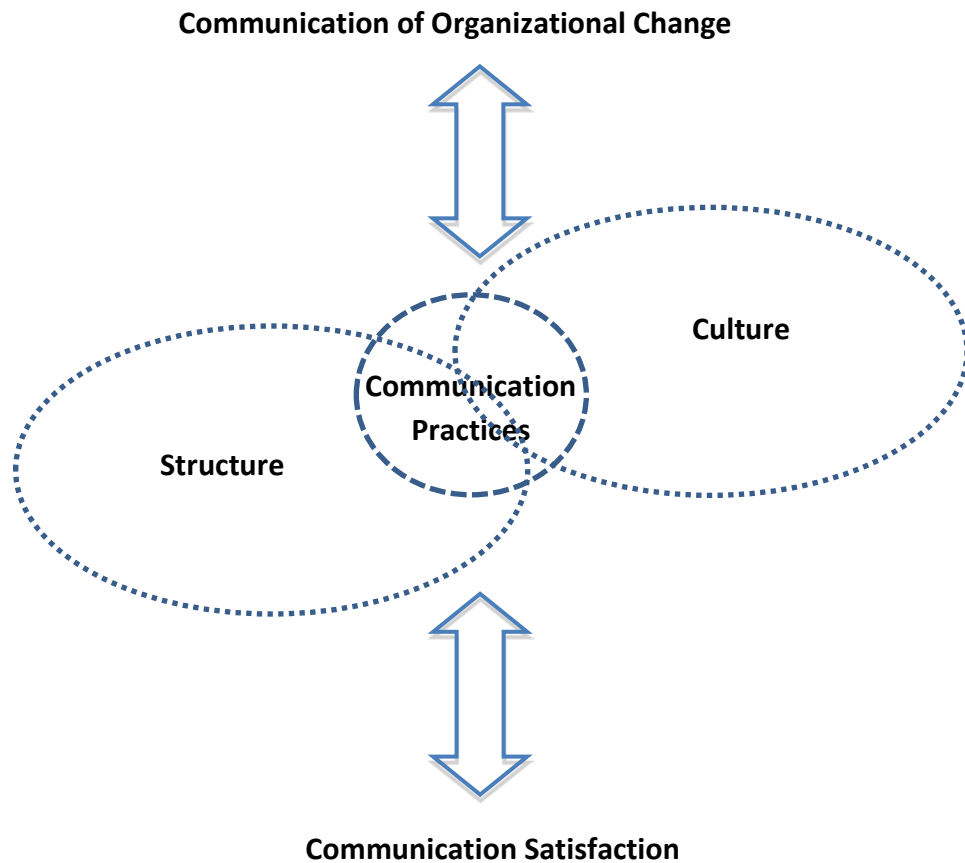
Figure 6.2: Revised Model of Communication Satisfaction during Organizational Change in High-Risk Environments



Specifically, Figure 6.2 suggests that the alignment of both structure and culture leads to communication satisfaction, especially when organizations are going through organizational change. Both structure and culture influence communication practices (i.e., dotted line) and the communication regarding the organizational change is also permeated by structure and culture (i.e., dotted line) which together influence communication satisfaction. Finally, structure also influence communication satisfaction. Whereas culture influences communication satisfaction *and* communication satisfaction influences culture and informal patterns of communication. Thus, Figure 6.2 explains the ideal way for high-risk organizations to communicate organizational changes to organizational members, paying particular attention to the influence of organizational structure and organizational culture.

However, findings of this dissertation suggest a misalignment of the structure and culture in LFD (see Figure 6.3).

Figure 6.3: Communication of Organizational Change and the Influence of Organizational Structure and Culture on Communication Satisfaction in LFD



There are distinct communication practices that follow the organizational structure (i.e., chain of command on emergency calls) but there are also communication practices that follow the organizational culture (i.e., informal communication, rumors). This study suggests that the mix of structure and culture influences communication patterns, which includes the amount and free-flowing nature of messages as allowed by the organizational structure and culture. Communication practices also drive all other components of communication satisfaction. Therefore, communication practices are argued here to be characterized by the perception of organizational integration and informal communication patterns, as they exist within the structure and organizational culture of the organization. Figure 6.3 further explains what is occurring in LFD:

structure and culture are misaligned as demonstrated by the communication patterns, which influences levels of communication satisfaction in different ways. Therefore, this model helps to explain dissatisfaction throughout LFD. The structure and the culture did not align. Therefore, messages that were sent to organizational members were misaligned and frustrated organizational members.

Recall that the structure of LFD is para-military, bureaucratic, and strictly hierarchical. Yet, employees live together, sleep in the same rooms, and make meals together – much like a family. Therefore, the structure and culture together do not align. Due to this, members are unclear of work roles, communication patterns, and hold varying expectations due to the uncertainty surrounding the misalignment. As leadership changes and policies are updated (i.e., brownouts and staffing changes), LFD members need to know who to ask and where to gather information. Instead, LFD administration shared information with specific people, jumped the chain of command when convenient, and made important changes to the lives of members without any explanation (movement to different houses). Doing so resulted in mistrust with leadership, frustration among all ranks, and low morale. During the participant observation, informal interviews, and focus groups, this was quite apparent. LFD members voiced their concern that “things will never change” and even questioned the validity of my study claiming, “they [leadership] will never make any positive change.”

Furthermore, structuration components such as duality of structure and agency also help to explain this misalignment. Duality of structure explains that structures are both enabling and constraining to the interactions within the organization (Giddens, 1984). In LFD, a duality of structure was present in the use of internal media and

misaligned messages existed between varying channels of internal media. For instance, email correspondence would be sent by administration discussing an update, the district major would explain only what he considered most important in face-to-face meetings, and sometimes the MasterStream of Unofficial Information would make a joke about the update drawing its truth into question. By the end, the original message was completely changed, or worse, contradicted what the actual update suggested. LFD's dissatisfaction with using internal media for dissemination was due to the misalignment of messages that were sent through the differing channels. As McQueen (n.d.) found, multiple channels disseminating information is only successful in fire departments when the same message is sent via each channel. LFD had varying misaligned messages that influenced levels of communication satisfaction. The duality of structure present in internal media would be alleviated if the same messages were sent via all channels.

Further, both populations suggested that espoused values within LFD shifted with the change in leadership. LFD should pay close attention to this concern as new leadership takes place. This shift in organizational culture likely contributed to a misalignment of messages because organizational members were uncertain about which values LFD was currently following. Tracey et al., (2006) found that socialization of newcomers is also an important part of the organization. LFD members need to understand values of leadership to successfully socialize under the new administration. Thus, all messages must be clearly aligned within structure *and* culture in LFD to avoid misalignment and the risk of confusing members of all ranks.

Multiple examples of misalignment of messages emerged throughout this research. These misalignments of messages regarded design, adaptation, and efficiency

of messages. For example, LFD required members to check email before 8:00 a.m. each working day, however, the technology in each house was not designed to support this requirement. Only one or two computers were available at each firehouse for as many as 9-12 people. If members did not have the ability to receive email on their phone, they were required to check their email on the house computers. If a company was called for a run as soon as they checked in for their shift at 7:00 a.m., their ability to check email by 8:00 a.m. was further diminished. Therefore, the requirement to check email before 8:00 a.m. was mandated, yet the design of the organization did not always support this requirement. Thus, many simply did not get the information until the district major arrived for rounds. Members were told that this was a policy, yet the design of the organization did not allow the policy to be followed – the message was misaligned.

Issues of adaptation also occurred due to a misalignment of messages. For instance, historically in LFD, pranks, practical jokes, and the practice of hazing new firefighters were commonplace and were described as part of the “brotherhood” – or rather, the soul of the organization. As noted, over the years LFD has been required to become more professional and eliminate all hazing and harassing practices. Rank-and-file members were frustrated with this change because it removed demonstrations of “brotherhood” and some of the power that rank-and-file members had over younger firefighters. Some also felt as though LFD was losing its “true self” through professionalization. Furthermore, LFD members were unsure of what was allowed and what was not. Even though administration worked to preserve some of the cornerstones of LFD, they were required to adapt to a more professional atmosphere. Unfortunately, these misaligned messages were disseminated during this process and many members

were frustrated because they were uncertain about the old versus the new “culture” requirements. The only teasing practices “allowed” were creating and spreading rumors.

Finally, LFD tried to make communication more efficient, but in reality, the use of internal media actually enhanced the number of misaligned messages. Many members were frustrated with the incorporation of the use of technology because multiple messages were sent via multiple channels and many contradicted one another, which caused confusion among LFD members. The incorporation of (and requirement to use) technology was implemented to improve efficiency of message dissemination, when in reality, it made LFD members less satisfied with communication overall.

Therefore, in LFD, the structure and culture were not aligned, which resulted in misaligned messages. Giddens (1981) suggested that communication without constant awareness of the social structure is detrimental. Communication in LFD frequently occurred without acknowledge of the structure and culture. As stated here, this was detrimental to the organization because misalignment Therefore, this research supports Giddens (1981) suggestion. When the messages misaligned, or at times even contradicted one another, LFD members were more likely to revert back to the information they knew prior to the update/change. Further, as Rosenfield et al., (2004) suggested, for effective communication to occur, structure should, at the very least, positively support the culture and vice versa. This did not occur in LFD. Therefore, when organizational messages fail to align with both the structure and culture of the organization, communication does not occur and levels of satisfaction are influenced by the misalignment.

This dissertation argues that the organizational structure and organizational culture need to align in LFD before levels of satisfaction improve. The communication climate, which drives all other components of communication satisfaction, is likely to reflect the organizational structure and culture. Structure and culture did not align in LFD, which helps to explain levels of dissatisfaction among certain members. Thus, this dissertation argues that in fire departments, communication satisfaction cannot be examined effectively without taking organizational structure and culture into consideration.

Chapter Six discussed the results of this dissertation in relation to the literature. Specifically, a new application of the framework of communication satisfaction was offered. Next, the influence of organizational structure and organizational culture was explained to demonstrate that communication satisfaction cannot be examined without full consideration of organizational structure and organizational culture. Structuration theory was described throughout various examples to show the influence of communication and interactions on structure and culture. Finally, a description of the misaligned structure and culture in LFD was offered. Misaligned structure and culture lead to misaligned messages and LFD members who received misaligned messages were less satisfied with overall communication. LFD members were getting information about the changes, however, they were not receiving the *right* information. Thus, misaligned messages are argued here to be a barrier to communication satisfaction when high-risk organizations are communicating change to organizational members. The alignment begins with clear and effective communication.

Chapter Seven: Conclusions

This dissertation examined organizational structures, including organizational culture, and the influence of these structures on communication satisfaction in the midst of organizational change. First, informal interviews were conducted with district majors. Following this, 27 focus groups were conducted with rank-and-file, rank-and-file members (i.e., firefighters, lieutenants, and captains). All focus group participants completed a survey reporting channel preference for communication and demographic information. Results were offered for each of the data sets, and findings were supported by comments in the interviews, focus groups, and channel preference surveys.

The primary goal of a fire department is to effectively respond to emergencies. However, the internal communication, or rather the “behind the scenes” information dissemination influences the ability to respond effectively as well as reduce risk when responding. Understanding this process is heightened when organizational change is occurring. Thus, this dissertation uncovered the communication practices that enhanced or detracted from this process and outlined ways to improve overall communication.

Summary of Research Questions and Findings

Specifically, the primary research question for this dissertation is: *How is organizational change communicated in a high-risk, high-consequence organization, such as a fire department?* Research questions were posed to assist in answering internal communication aspects of the primary research question. Specifically, this dissertation examined communication satisfaction with messages surrounding organizational change and the influence of organizational structure and organizational culture. The following research questions were posed to answer the primary research question – RQ 1: What elements of communication satisfaction were evident in the

discussion of fire department members during organizational change?; RQ 1a: How does *structure* (i.e., dialectic of control, duality of structure, agency) enhance or inhibit communication satisfaction during organizational change in fire departments?; and RQ 1b: How does *culture* (i.e., artifacts, espoused values, basic assumptions) enhance or inhibit communication satisfaction during organizational change in fire departments? Informal interviews with district majors and focus groups with rank-and-file members (i.e., firefighters, lieutenants, captains) were collected to answer these questions. Channel preference surveys were also collected from all rank-and-file members.

Findings indicate that seven out of eight dimensions (i.e., communication climate, communication with superiors, organizational integration, media quality, informal communication, communication with subordinates, and personal feedback) of communication satisfaction were present during the informal interviews.

Organizational perspective was not present in the informal interviews. All eight dimensions of communication satisfaction were present in the focus group discussions.

The findings further suggest that the dimension of communication climate led other dimensions within communication satisfaction. The organizational integration and informal communication dimensions are both contributing factors to communication climate. Under the overarching dimension of communication climate was communication with superiors and communication with subordinates. Media quality and personal feedback were included in both communication with superiors and communication with subordinates but are viewed differently depending on each category. Finally, individual information seeking responsibility was a proposed new dimension within the category of communication with subordinates. Organizational

perspective aligned under the communication with superiors. The updated organization of the dimensions was offered based on the findings of this dissertation.

Further, organizational structure and organizational culture influenced levels of communication satisfaction. First, organizational structure and organizational culture must be aligned within the organization. When organizational structure and culture align, communication satisfaction increases. Second, the communication climate (as argued throughout this dissertation to drive all other components of communication satisfaction) is likely to reflect the organizational structure and culture. Misalignment between structure and culture influenced levels of communication satisfaction because the structure suggested one way of communicating and the culture suggested another. Thus, this dissertation argues that in fire departments, communication satisfaction cannot be examined effectively without taking organizational structure and culture into consideration.

Finally, a misalignment of structure and culture influences communication satisfaction. When misaligned messages are received, members revert to previous information rather than accepting to one of the two misaligned messages. Findings here suggest that misaligned messages influence levels of communication satisfaction, as members are frustrated with receiving such information. Unfortunately, multiple misaligned messages were sent and received in LFD and these messages influenced levels of satisfaction among LFD members. Specifically, those members frustrated by misaligned messages were also dissatisfied with communication overall.

Theoretical Implications

Communication satisfaction is a guiding framework for explaining themes presented in this research, yet theoretical implications exist for future understanding of the framework. First, this dissertation offers a new understanding of the communication satisfaction framework. Research on communication satisfaction suggests treating each of the eight dimensions individually and, with the exception of communication climate, equally when examining satisfaction levels of messages. The findings of this dissertation suggest communication climate is the overarching dimension of communication satisfaction all other dimensions support. Findings further suggest that the rest of the dimensions build a model that all influence the communication climate. A new model was presented to understand how each of the dimensions aligns within a fire department. This model increases our understanding of communication satisfaction in high-risk environments. Further, a new dimension was also presented: information seeking. Adding the dimension of information seeking helps explain the expectation gap seen throughout the findings.

Second, findings of this dissertation suggest that communication satisfaction cannot be fully examined without taking organizational structure and organizational culture into account. The communication climate was influenced by misalignment of the structure and culture of LFD, and therefore, communication patterns were also influenced. The structure was bureaucratic and the culture was family-like. Structure and culture do not exist alone, but rather influence one another. Therefore, structure and culture must be aligned before true understanding and improvement of communication satisfaction can occur. These misaligned messages frustrated organizational members

and therefore influenced levels of communication satisfaction. When organizational members receive contradictory information, they are less likely to be satisfied with communication overall. Therefore, misaligned messages are a structural and cultural barrier to communication satisfaction and altered perceptions of leadership and overall internal communication processes. Further examination of communication satisfaction must take structure and culture into consideration.

Case Implications to Fire Departments

Practical implications for fire departments were present throughout the research. As Boyd (2010) suggested, leadership must be fully aware of the power held and need to frequently reflect on ways to use such power for encouraging (not suppressing) communication. First, leadership within fire departments must consider the impact of a formal chain of command structure has on LFD members. Although the chain of command is in place to determine who speaks to whom, it constrained information flow more than it enabled. The chain of command will likely remain a part of this hierarchical organization. Therefore, LFD needs to pay particular attention to the influence the chain of command has on levels of communication satisfaction and work to improve communication dissemination even with the use of the chain of command. Clarifying work roles and communication expectations is the first step of improvement.

Second, LFD communicated through various channels daily. With the design of the organization, the use of varying communication channels must continue. It is critical, however, that the message that streams through each channel remains the same. This is likely easier to do through internal media, whereas, the message can be copied and pasted from one channel to the next. This is likely to be more difficult between the face-to-face

channel and other internal media channels. Thus, clear expectations for message dissemination for district majors must be shared and required.

Third, rumors are an active part of the LFD culture. Members use rumors to create waves, initiate change, and poke fun at one another. Rumors are also made into reality frequently in LFD. Therefore, administration must actively work to debunk rumors. The MasterStream of Unofficial Information was reported as an active information source. Administration should acknowledge the MasterStream as an official source of information and use the forum to debunk rumors, as most members read this channel. This way, members would know which rumors are actual rumors and which were true changes and/or updates.

Fourth, LFD should work to improve the relationship with media outlets across the Lexington community. First and foremost, members need to be comfortable talking to the media, rather than fear reporters. Much can be gained from working directly with the media and viewing the media as a way to reach community members. The more LFD is willing to talk with the media, the more trust will be gained by both parties. LFD should invest in media training for all company officers, district majors, and chiefs and encourage media engagement on scene. Further, LFD should incorporate the use of social media both by administration and by rank-and-file members. Members want to show pride for their work and social media is a valuable medium by which to do so. Policies for the use of social media, so as not to infringe on HIPPA, should be created and communicated to all members.

Finally, a majority of the LFD members reported to be neither satisfied nor dissatisfied with communication overall. This group of individuals can be swayed to

either the satisfied side or the dissatisfied side. Therefore, LFD should capitalize on the opportunity to improve communication with the goal of swaying the “undecided” group to the satisfied side. LFD administration should incorporate small, but impactful changes immediately to gain trust of rank-and-file members. For instance, LFD should ensure that all information is communicated the exact same way via all channels, including face-to-face, email, memos, Intranet, and the MasterStream of Unofficial Information. This would also need to include training for district majors to clarify their role in message dissemination. Further, expectations for communication should also be clarified. All ranks should understand their responsibility for information seeking and disseminating. This includes not just the rank-and-file members and district majors, but also the Chiefs. Members repeatedly commented on wanting to hear from the Fire Chief. Some suggested a quarterly State of the Department update to inform everyone at the same time. LFD administration should clarify their role in message dissemination as a leadership team and make sure all LFD members are up-to-date. Adjusting these communication practices would likely increase overall perceptions of administration, trust with administration, and morale throughout LFD.

Implications for High-Risk Organizations

Implications for high-risk settings also exist. First, high-risk organizations are generally fast-paced organizations. Thus, taking time to consider internal communication practices and the influence on other components of the job is not seen as important as getting the information out. However, high-risk organizations need to recognize that internal communication influences other areas of the organization. High-risk organizations must share the same message through all channels, determine how the

structure of the organization is influencing the communication flow, and align the organizational culture with the structure of the organization. Doing so will help to align communication practices and improve the communication climate. Members who receive mixed messages are at risk. For instance, if a member in an emergency care unit was not updated on how to use the new defibrillator, the member could be at risk, as well as the patient. High-risk environments should acknowledge the impact a lack of internal communication has on the safety of its members.

Second, high-risk organizations need to acknowledge the risk of misalignment in their organization, especially during abrupt change. All organizations have a structure and a culture and ideally, structure and culture should align. Unfortunately, as evidenced here, that does not always happen. This implication of misalignment is two-fold. First, high-risk organizations must consider the risk of a misalignment of the structure and culture during any time, not just during organizational change. When these fail to align, larger organizational issues may appear (e.g. uncertainty, mistrust). This alignment is even more important during organizational change as members will revert to what is comfortable during times of uncertainty. Aligning structure and culture, then is critical in high-risk organizations to ensure decisions and changes made align nicely with the structure and culture. Second, high-risk organizations must be cognizant of the risk of misaligned *messages* especially during abrupt change. Members need to have enough information *and* the right information when policies are changing. LFD had multiple messages channeled through multiple media during their change. Not only did messages fail to align, many times, they were contradictory. This resulted in dissatisfaction, significant frustration, and lowered morale. These issues have likely always been part of

LFD; however, the organizational change exemplified them even more. Thus, high-risk organizations increase the risk for their employees when communication is unclear. This risk is heightened when messages misalign as well as when leadership, policies, and procedures change. Members need correct, timely, and clear information to be able to save lives. If a misalignment exists, members are at a higher risk for mistakes, which ultimately increases the risk of those to which they are responding.

Limitations

As with any study, it is important to view the results with limitations in mind. First, this study was conducted in a bounded system, specifically; this dissertation examined a specific fire department that was dealing with a specific set of changes. This research is important as an exploratory study and revealed important components to consider during organizational change in a high-risk environment. However, generalizations cannot be made to all fire departments or all high-risk organizations.

Second, 13% of fire departments across the United States are categorized as either “career” or “mostly career,” and 87% were registered as “volunteer” or “mostly volunteer” (USFA, 2013). Fire departments within the state of Kentucky reflect these comparisons, with approximately 8% of fire departments as career and 92% as volunteer (NFPA, 2013). LFD falls into the 8% of career fire departments in Kentucky, as all firefighters are paid, full-time employees. Thus, this study focused on a relatively small number of fire departments across the country. This is a limitation because the findings are limited to only a career fire department when the majority of fire departments are volunteer.

Third, this research only included data collected at the firehouses, while members were on duty. Each time I went to the firehouses during the participant-observation, I was with the district major. This could have changed the reactions of the members with which I spoke. Further, the focus group discussions also had a mix of ranks (i.e., firefighters, lieutenants, and captains), which could have also altered the responses. Information collected from places outside of the firehouse while members were at common hangouts (i.e., churches or bars) could have been valuable in offering knowledge about the “life” of a firefighter.

Fourth, this dissertation conducted interviews with one population (i.e., District Majors) and only nine district majors were interviewed. Even though this is over half of the district majors within the organization, there may have been information missed that would have been covered by additional interviews. Further, the interviews with district majors were informal and not recorded. This decision was made to help ease into the research site and gain trust and understanding with organizational members before focus groups began. Even so, this is a limitation to the study, as formal, recorded interviews would have gathered more detailed information from the district majors.

Fifth, only focus groups were conducted with rank-and-file members (i.e., firefighters, lieutenants, and captains). Focus groups are a useful research tool when gathering perceptions of large groups. However, focus groups can also mute voices of those who are not comfortable speaking out within a group of people. Interviews with rank-and-file members were offered to everyone, but no one took the offer. Including interviews with these populations may have offered additional insight into communication satisfaction, structure, and culture.

Sixth, this dissertation does not include the perspective of administration. Many organizational members discussed issues with administration; therefore, including the perspective of administration would have been helpful to determine both sides of the story. However, since previous research has primarily had a managerial bias (Boyd (2010), this study offered a refreshing new look on communication satisfaction, organizational structure, and organizational culture.

Suggestions for Future Research

This dissertation points to new directions for future research. First, this research was conducted in an urban fire department where all members were career firefighters. Urban and local fire departments have very different organizational goals (Hoene, 2009). Therefore, future research should also examine the perspective of smaller, local, volunteer fire departments, as each is likely to approach organizational change differently. To explain, most fire departments across the country are volunteer fire departments. Therefore, these firefighters have a career outside of firefighting. The ways in which these members communicate, then, are likely different from full-time, career firefighters. However, internal communication is still arguably important to consider. Future research should examine internal communication practices in volunteer fire departments and draw comparisons to the findings here.

Second, communication satisfaction is only one component to explore during organizational change. Future studies should examine additional factors to organizational change (i.e., motivation, conflict management, etc.) to outline a greater understanding of the context from a variety of lenses. Specifically, examining motivation would identify intrinsic and extrinsic factors that motivate firefighters to stay involved during

organizational change. Further, examining conflict management strategies of members would identify ways individuals deal with conflict, and therefore, offer suggestions for leadership. This additional research would allow administration to construct effective messages for a diverse population, as it would explore various ways people work through organizational change. Examining these factors will further inform organizational scholars of the ways in which organizational change influences the communication needs of an organization.

Third, 27 focus groups were conducted with the fire department. For the study of communication satisfaction, saturation was reached during the seventh focus group; however, a large data set exists that can be used for additional research. Specifically, future research should further parse out the understanding and the influence of misaligned messages throughout the focus groups and determine whether these messages lead to potential danger for the organizational members. To do so, research should focus on one or two misaligned issues that move beyond just frustrating the firefighters. Researchers would need to work to resolve this issue with observations of cause and potential for resolution. Researchers would also need to establish the potential for misaligned messages and the heightened consequences they pose for high-risk organizations.

Fourth, a new model for the framework of communication satisfaction was offered. The next step for this research would be to test the model for validity and reliability of findings. Testing of this model would provide the discipline of communication a revised version of communication satisfaction and offer a model for further analysis and examination. First, the revised model of communication satisfaction (Figure 6.1) would need to be tested to support the divisions suggested here. Based on

these findings, Figure 6.3 should then be tested applying findings from testing of Figure 6.1.

Fifth, future research should also explore power dynamics in a firehouse and the ways in which these dynamics challenge reception of messages. The male-dominated work environment of a firehouse may have unique power dynamics not yet examined. Further, power dynamics in a high-risk environment also pose potential concerns considering the hierarchical, bureaucratic nature. The organizational structure may conveniently silence particular voices. Future research should take a critical/cultural approach to explore these dynamics and the influence in high-risk environments.

Finally, additional high-risk organizations should also be studied to see whether similar findings are present. Organizations include police departments, emergency rooms, and nuclear power plants. Analysis of these high-risk environments would allow comparisons to be made across high-risk organizations and advance understanding of the value of communication satisfaction, structure, and culture. All organizations have distinct needs for communication; therefore, analysis must expand into other contexts. These contexts include a similar work environment, therefore, would be beneficial for further examination.

Final Summary

This dissertation examined organizational structures, organizational culture, and the influence of these structures on communication satisfaction in the midst of organizational change. Informal interviews were conducted with district majors, and focus groups and channel preference surveys were conducted with rank-and-file (i.e., firefighters, lieutenants, and captains).

Findings indicate that understanding of communication satisfaction in a high-risk environment must be examined with the organizational structure and culture in mind. Further, high-risk organizations that utilize multiple channels of communication must ensure that the same message is disseminated throughout each channel (including face-to-face communication). Organizational structure and culture did indeed influence levels of communication satisfaction. Namely, the chain of command, use of internal media, rumors, and filtering of information were active influencers on communication satisfaction. Thus, these aspects must be considered in fire departments examining communication satisfaction and its impact on organizational life.

Fire departments communicate through various channels daily. With the complex design of the organization, the use of varying communication channels must continue. It is critical, however, that the message that streams through each channel remains unified. If handled improperly, organizational change can undoubtedly cause a trickle effect within an organization, resulting in larger issues overall. Thus, fire departments must take careful precaution during change to ensure members are well-informed, paying particular attention to the source, frequency, and amount of information shared.

The primary research question of this dissertation asked: *How is organizational change communicated in a high-risk, high-consequence organization, such as a fire department?* Currently in LFD, organizational change is communicated via misaligned messages. These messages stem from a misalignment between the organizational structure and the organizational culture. Misaligned messages frustrate organizational members and detract from levels of communication satisfaction. When organizational members receive messages that are contradictory, they tend to revert to patterns of

communication with which they are familiar, rather than adhere to either side of the message (Stohl & Cheney, 2001). Further, when organizational members receive contradictory information, they are less likely to be satisfied with communication overall. In LFD, morale was low, trust with administration was wavering, and members were dissatisfied with the secretive nature held throughout the department. These issues likely stemmed from the use of misaligned messages. Members were told contradictory information, and therefore, unclear of expectations because certain expectations aligned with the structure of the organization and others aligned with the culture. Therefore, misaligned messages created a structural and cultural barrier to communication satisfaction and altered perceptions of leadership and the overall communication climate.

Appendix A: Informal Interviews Informed Consent

Consent to Participate in a Research Study

Clearing the Smoke: Understanding Organizational Change Communication in High-Risk Contexts

WHY ARE YOU BEING INVITED TO TAKE PART IN THIS RESEARCH?

You are being invited to take part in a research study about the internal communication strategies in an urban fire department. You will be asked various questions regarding the current communication strategies as well as have an opportunity to offer your own suggestions for improvement. More specifically, you are being invited to take part in this research study because of your current position in the Lexington Fire Department and your involvement in bettering the overall communication. You will be one in approximately 50 people participating in the interview portion of this research. Each participant in this research will be asked to sign this informed consent form. By signing this informed consent form, you agree to voluntarily participate in the interview portion of the research study only.

WHO IS DOING THE STUDY?

The person in charge of this study is Dr. Shari Veil of University of Kentucky Department of Communication. Laura Young, a second year doctoral student, will be assisting in conducting this study.

WHAT IS THE PURPOSE OF THIS STUDY?

There are multiple ways to communicate, both verbally and nonverbally. Every day, people receive countless messages in varying forms – phone calls, text messages, email memorandums, and face-to-face communication. In organizations, understanding these different communication strategies is very important as a breakdown in communication can cause an even longer series of unwanted events. The high traffic of daily messages can potentially cause some organizational members to miss important information. Service organizations, such as that of fire departments, then, are a worthy context to examine such internal communication strategies as the daily information these members receive are of high importance and affect the safety of an entire county. The purpose of this study is to identify specific ways fire departments internally communicated by identifying what works well and areas for improvement. Ultimately, this research seeks to outline recommendations for fire departments seeking to improve internal communication.

ARE THERE REASONS YOU SHOULD NOT TAKE PART IN THIS STUDY?

You should not take part in this study if you are under 18 years of age. You should not participate if you are not employed by the Lexington Fire Department.

WHERE IS THE STUDY GOING TO TAKE PLACE AND HOW LONG WILL IT LAST?

The research will be conducted at an agreed upon location. You will be part of an individual interview during the study. That visit will take approximately one hour. Thus, the total amount of time that you will be asked to contribute will be one hour during a one-time meeting in a specified location.

WHAT ARE YOU ASKED TO DO?

During this interview you will be asked to do several things. First, you will be asked to complete this informed consent form. Your name will not be required, and the demographic information will only be reported in cumulative form for descriptive purposes. This information will not be associated with specific feedback that you provide during the interview, and will not be used to identify you in research reports. Second, you will be asked a series of questions regarding the current internal communication strategies. These questions will include both broad and specific questions, where your personal opinion will be solicited. Following this, you will be asked further questions on suggesting improvements of the current internal communication practices. Throughout the entire interview, you will be asked to openly discuss the strengths and weaknesses of the internal communication strategies. This interview will take last approximately 60 minutes.

As part of this study, the interviews will be audio recorded to assist the researchers in thoroughly and accurately capturing the information that will benefit the assessment of the internal communication strategies. Your name will not be associated with the interview information or the demographics that are collected, so your opinions will remain confidential when we share or publish research results.

WHAT ARE THE POSSIBLE RISKS AND DISCOMFORTS?

To the best of our knowledge, the things you will be doing have no more risk of harm than you would experience in everyday life.

WILL YOU BENEFIT FROM TAKING PART IN THIS STUDY?

There is no guarantee that you will get any benefit from taking part in this study. However, your willingness to take part may help improve overall communication throughout the fire department.

DO YOU HAVE TO TAKE PART IN THE STUDY?

If you decide to take part in the study, it should be because you really want to volunteer. You will not lose any benefits or rights you would normally have if you choose not to volunteer. You can stop at any time during the study and still keep the benefits and rights you had before volunteering.

IF YOU DON'T WANT TO TAKE PART IN THE STUDY, ARE THERE OTHER CHOICES?

If you do not want to be in the study, there are no other choices except not to take part in the study.

WHAT WILL IT COST YOU TO PARTICIPATE?

There are no costs associated with taking part in the study, except for the time you spend to participate.

WILL YOU RECEIVE ANY REWARDS FOR TAKING PART IN THIS STUDY?

There are no tangible rewards for participating in this study.

WHO WILL SEE THE INFORMATION THAT YOU GIVE?

We will make every effort to keep private all research records that identify you to the extent allowed by law.

Your information will be combined with information from other people taking part in the study. When we write about the study to share it with other researchers, we will write about the combined information we have gathered. You will not be personally identified in these written materials. We may publish the results of this study; however, we will keep your name and other identifying information private.

We will make every effort to prevent anyone who is not on the research team from knowing that you gave us information, or what that information is. The recordings of the interviews will be transcribed using pseudonyms (e.g., Participant A) and will be stored electronically by the primary researcher in password protected computer files.

We will keep private all research records that identify you to the extent allowed by law. However, there are some circumstances in which we may have to show your information to other people. For example, the law may require us to show your information to a court or to tell authorities if you report information about a child being abused or if you pose a danger to yourself or someone else. Also, we may be required to show information which identifies you to people who need to be sure we have done the

research correctly; these would be people from such organizations as the University of Kentucky.

CAN YOUR TAKING PART IN THE STUDY END EARLY?

If you decide to take part in the study you still have the right to decide at any time that you no longer want to continue. You will not be treated differently if you decide to stop taking part in the study. There will be no consequences for withdrawing from the study. If you wish to withdraw, please inform the interview facilitator at any time during the interview.

WHAT IF YOU HAVE QUESTIONS, SUGGESTIONS, CONCERNS, OR COMPLAINTS?

Before you decide whether to accept this invitation to take part in the study, please ask any questions that might come to mind now. Later, if you have questions, suggestions, concerns, or complaints about the study, you can contact the investigator, Dr. Shari Veil at (859) 257-9470. If you have any questions about your rights as a volunteer in this research, contact the staff in the Office of Research Integrity at the University of Kentucky at 859-257-9428 or toll free at 1-866-400-9428. We will give you a signed copy of this consent form to take with you.

_____	_____
Signature of person agreeing to take part in the study	Date

Printed name of person agreeing to take part in the study	
_____	_____
Name of [authorized] person obtaining informed consent	Date

Appendix B: Informal Interviews Questioning Route

Introductory Questions

1. Tell us some of the positive aspects of the current processes of internal communication.
2. How do you typically receive information about current job updates, such as upcoming events, promotion information, training information, policy changes, etc.? Are you satisfied with this channel for this information?
3. How much attention do you pay to this information?

Probing Questions

4. The survey asked about trust and filtering of the information you are receiving -- is there information you feel that you are not receiving?
5. The survey also asked about preferred communication channels, what would you consider the best channel to receive information? Why?
6. How would you describe the amount of information you receive daily? Is it too little, too much, just right?
7. Is there a way to distinguish critical emails from every day emails? Is this important to you?
8. How has internal communication changed throughout the fire department in the last 5 years?
9. How would you describe the communication climate? Is it motivating, condescending, encouraging, discouraging, etc.?
10. How would you describe the communication between you and your direct supervisor? Between you and other supervisors, e.g. the chiefs?
11. Do you hear more accurate information through rumors or official information?
12. What specific barriers do you believe exist within your current internal communication process?
13. How satisfied are you with the way city government decisions that directly affect your job are communicated to you?
14. Do you believe there is a 'buddy' system in place where you have to be friends with particular people to get the right information? If so, is this problematic?
15. What part does your Union play in your internal communication? Is the union inhibiting, promoting, encouraging, supportive, etc.?
16. How would you describe the media/social media's role in you internal communication process?
17. How comfortable are you sending information up the chain of command?
18. How do you think the current internal communication strategies can be improved?
19. Are there any other comments or suggestions about this topic that you would like to add?

Appendix C: Focus Group Informed Consent Form

Consent to Participate in a Research Study

Clearing the Smoke: Understanding Organizational Change Communication in High-Risk Contexts

WHY ARE YOU BEING INVITED TO TAKE PART IN THIS RESEARCH?

You are being invited to take part in a research study about the internal communication strategies in an urban fire department. You will be asked various questions regarding the current communication strategies as well as have an opportunity to offer your own suggestions for improvement. More specifically, you are being invited to take part in this research study because of your current position in the Lexington Fire Department and your involvement in bettering the overall communication. You will be one in approximately 150 people participating in the focus group portion of this research. Each participant in this research will be asked to sign this informed consent form. By signing this informed consent form, you agree to voluntarily participate in the focus group portion of the research study only.

WHO IS DOING THE STUDY?

The person in charge of this study is Dr. Shari Veil of University of Kentucky Department of Communication. Laura Young, a second year doctoral student, will be assisting in conducting this study.

WHAT IS THE PURPOSE OF THIS STUDY?

There are multiple ways to communicate, both verbally and nonverbally. Every day, people receive countless messages in varying forms – phone calls, text messages, email memorandums, and face-to-face communication. In organizations, understanding these different communication strategies is very important as a breakdown in communication can cause an even longer series of unwanted events. The high traffic of daily messages can potentially cause some organizational members to miss important information. Service organizations, such as that of fire departments, then, are a worthy context to examine such internal communication strategies as the daily information these members receive are of high importance and affect the safety of an entire county.

The purpose of this study is to identify specific ways fire departments internally communicate by identifying what works well and areas for improvement. Ultimately, this research seeks to outline recommendations for fire departments seeking to improve internal communication.

ARE THERE REASONS YOU SHOULD NOT TAKE PART IN THIS STUDY?

You should not take part in this study if you are under 18 years of age. You should not participate if you are not employed by the Lexington Fire Department.

WHERE IS THE STUDY GOING TO TAKE PLACE AND HOW LONG WILL IT LAST?

The research will be conducted at an agreed upon firehouse. You will attend one focus group discussion during the study. That visit will take approximately one hour and 15 minutes. Thus, the total amount of time that you will be asked to contribute will be one hour and 15 minutes during a one-time meeting in a specified firehouse.

WHAT ARE YOU ASKED TO DO?

During this focus group you will be asked to do several things. First, you will be asked to complete this informed consent form and a brief demographic survey, which will include information about things like your educational background and gender. This should take approximately 10 minutes. Your name will not be required, and the demographic information will only be reported in cumulative form for descriptive purposes. This information will not be associated with specific feedback that you provide during the focus group, and will not be used to identify you in research reports.

Second, you will be asked a series of questions regarding the current internal communication strategies. These questions will include both broad and specific questions, where your personal opinion will be solicited. Following this, you will be asked further questions on suggesting improvements of the current internal communication practices. Throughout the entire session, you will be asked to openly discuss the strengths and weaknesses of the internal communication strategies. This discussion will take last approximately 60 minutes.

As part of this study, the focus group discussions will be audio recorded to assist the researchers in thoroughly and accurately capturing the information that will benefit the assessment of the internal communication strategies. Your name will not be associated with the focus group information or the demographics that are collected, so your opinions will remain confidential when we share or publish research results.

WHAT ARE THE POSSIBLE RISKS AND DISCOMFORTS?

To the best of our knowledge, the things you will be doing have no more risk of harm than you would experience in everyday life. However, please note that due to the nature of focus groups, confidentiality is always a risk. Therefore, we ask that you please refrain from saying anything that that you feel would affect your job or work environment.

WILL YOU BENEFIT FROM TAKING PART IN THIS STUDY?

There is no guarantee that you will get any benefit from taking part in this study. However, your willingness to take part may help improve overall communication throughout the fire department.

DO YOU HAVE TO TAKE PART IN THE STUDY?

If you decide to take part in the study, it should be because you really want to volunteer. You will not lose any benefits or rights you would normally have if you choose not to volunteer. You can stop at any time during the study and still keep the benefits and rights you had before volunteering.

IF YOU DON'T WANT TO TAKE PART IN THE STUDY, ARE THERE OTHER CHOICES?

If you do not want to be in the study, there are no other choices except not to take part in the study.

WHAT WILL IT COST YOU TO PARTICIPATE?

There are no costs associated with taking part in the study, except for the time you spend to participate.

WILL YOU RECEIVE ANY REWARDS FOR TAKING PART IN THIS STUDY?

There are no tangible rewards for participating in this study.

WHO WILL SEE THE INFORMATION THAT YOU GIVE?

We will make every effort to keep private all research records that identify you to the extent allowed by law.

Your information will be combined with information from other people taking part in the study. When we write about the study to share it with other researchers, we will write about the combined information we have gathered. You will not be personally identified in these written materials. We may publish the results of this study; however, we will keep your name and other identifying information private.

We will make every effort to prevent anyone who is not on the research team from knowing that you gave us information, or what that information is, however, please note that due to the nature of focus group research, we cannot guarantee complete confidentiality. The recordings of focus group discussions will be transcribed using pseudonyms (e.g., Participant A) and will be stored electronically by the primary researcher in password protected computer files.

We will keep private all research records that identify you to the extent allowed by law. However, there are some circumstances in which we may have to show your information to other people. For example, the law may require us to show your information to a court or to tell authorities if you report information about a child being abused or if you pose a danger to yourself or someone else. Also, we may be required to show information which identifies you to people who need to be sure we have done the research correctly; these would be people from such organizations as the University of Kentucky.

CAN YOUR TAKING PART IN THE STUDY END EARLY?

If you decide to take part in the study you still have the right to decide at any time that you no longer want to continue. You will not be treated differently if you decide to stop taking part in the study. There will be no consequences for withdrawing from the study. If you wish to withdraw, please inform the focus group facilitator at any time during the focus group discussion.

WHAT IF YOU HAVE QUESTIONS, SUGGESTIONS, CONCERNS, OR COMPLAINTS?

Before you decide whether to accept this invitation to take part in the study, please ask any questions that might come to mind now. Later, if you have questions, suggestions, concerns, or complaints about the study, you can contact the investigator, Dr. Shari Veil at (859) 257-9470. If you have any questions about your rights as a volunteer in this research, contact the staff in the Office of Research Integrity at the University of Kentucky at 859-257-9428 or toll free at 1-866-400-9428. We will give you a signed copy of this consent form to take with you.

Signature of person agreeing to take part in the study Date

Printed name of person agreeing to take part in the study

Name of [authorized] person obtaining informed consent Date

Appendix D: Focus Group Questioning Route

Introductory Questions

1. Tell us some of the positive aspects of the current processes of internal communication.
2. How do you typically receive information about current job updates, such as upcoming events, promotion information, training information, policy changes, etc.? Are you satisfied with this channel for this information?
3. How much attention do you pay to this information?

Probing Questions

4. The survey asked about trust and filtering of the information you are receiving -- is there information you feel that you are not receiving?
5. The survey also asked about preferred communication channels, what would you consider the best channel to receive information? Why?
6. How would you describe the amount of information you receive daily? Is it too little, too much, just right?
7. Is there a way to distinguish critical emails from every day emails? Is this important to you?
8. How has internal communication changed throughout the fire department in the last 5 years?
9. How would you describe the communication climate? Is it motivating, condescending, encouraging, discouraging, etc.?
10. How would you describe the communication between you and your direct supervisor? Between you and other supervisors, e.g. the chiefs?
11. Do you hear more accurate information through rumors or official information?
12. What specific barriers do you believe exist within your current internal communication process?
13. How satisfied are you with the way city government decisions that directly affect your job are communicated to you?
14. Do you believe there is a 'buddy' system in place where you have to be friends with particular people to get the right information? If so, is this problematic?
15. What part does your Union play in your internal communication? Is the union inhibiting, promoting, encouraging, supportive, etc.?
16. How would you describe the media/social media's role in you internal communication process?
17. How comfortable are you sending information up the chain of command?
18. How do you think the current internal communication strategies can be improved?
Are there any other comments or suggestions about this topic that you would like to add?

Never Daily
 1 2 3 4 5 6 7

9. The fire department uses several channels to send various messages. Please rank, in order of importance, the channels which you rely on most because of the amount of information they contain (1=most important; 8=least important).

_____ Email _____ MasterStream _____ Intranet
 _____ Face-to-Face Rounds _____ Memos _____ Rumors
 _____ Morning Meeting Minutes _____ Other _____

10. Do you believe some information is filtered out before the messages reach you?

Not filtered Completely filtered
 1 2 3 4 5 6 7

11. What communication channel(s) do you believe provides the most trustworthy information? Please rank (1=most trustworthy; 9=least trustworthy) the following channels in regards to how much you trust the accuracy of the information received from each channel.

_____ Email _____ MasterStream _____ Intranet
 _____ Face-to-Face Rounds _____ Memos _____ Rumors
 _____ Morning Meeting Minutes _____ Other _____

12. How satisfied are you overall with the department's current internal communication processes?

Very dissatisfied Very satisfied
 1 2 3 4 5 6 7

13. How satisfied are you with the communication between you and your immediate supervisor?

Very dissatisfied Very satisfied
 1 2 3 4 5 6 7

14. How satisfied are you with the amount of information you receive daily?

Very dissatisfied Very satisfied
 1 2 3 4 5 6 7

Additional Comments: _____

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Vita

Laura E. Young, M. A.

College of Communication and Information
University of Kentucky

EDUCATION

- Doctorate of Philosophy Communication
Degree Expected: May, 2014
Qualifying Exams Defended: June, 2013
Dissertation Proposal Defended: October, 2013
Dissertation Defended: April 17, 2014
University of Kentucky
Advisor: Dr. Shari Veil
Committee: Drs. Derek Lane, Timothy Sellnow, Ellen Usher
Dissertation: *Clearing the smoke: Understanding Organizational Change Communication in High-Risk Contexts*
GPA: 4.0
- Graduate Certificate University of Kentucky, Division of Risk Sciences
Risk and Crisis Communication
Awarded: December, 2013
- Master of Arts Organizational and Multicultural Communication
Awarded: August, 2010
DePaul University
Advisor: Dr. Sean Horan
Reader: Dr. Leah Bryant
Thesis: *Are relational messages fair? An examination of the relationships among classroom justice and relational teaching messages*
GPA: 3.98 – With Distinction
- Bachelor of Arts Communication & Music
Nebraska Wesleyan University
Awarded: May, 2008
GPA: 3.87 – With High Distinction
- Aalborg University (Semester Abroad)
Aalborg, Denmark
January 2007 - June 2007
Integrated Marketing Communication

Academic Appointments

Instructor of Record

University of Kentucky, Lexington, KY

August 2011-present

Undergraduate Apprentice Mentor

University of Kentucky, Department of Communication

May 2013-present

Editorial Assistant

Communication Yearbook, International Communication Association

Dr. Elisia Cohen, Editor

January 2013-present

Graduate Research Assistant

University of Kentucky, College of Communication and Information

Division of Risk Sciences

October 2011 – September 2013

Research Fellow

University of Kentucky, College of Communication and Information

Division of Risk Sciences

August 2011-present

Awards and Honors

2013	Graduate Teaching Excellence Award Recipient, University of Kentucky
2013	National Travel Support, UK College of Communication (\$200)
2013	National Travel Support, UK Graduate School (\$200)
2013	Research Fellowship Recipient, University of Kentucky
2013	Golden Apple Teaching Excellence Award Recipient, UK (\$500)
2012	National Travel Support, UK College of Communication (\$200)
2012	National Travel Support, UK Graduate School (\$200)
2012	Research Fellowship Recipient, University of Kentucky
2010	Golden Key Honor Society Inductee, DePaul University
2009	Phi Kappa Phi Honor Society Inductee, DePaul University
2008	Lambda Pi Eta Honor Society Inductee, Nebraska Wesleyan University
2007	Cardinal Key Honor Society Inductee, Nebraska Wesleyan University
2006	Mu Phi Epsilon Honor Society Inductee, Nebraska Wesleyan University

Publications

Peer Reviewed Journal Articles

Young, L. E., Horan, S. M., & Frisby, B.N. (2013). Fair and Square?: An examination of the relationships among classroom justice and relational teaching messages.

Communication Education, 62, 333-351. doi: 10.1080/03634523.2013.800216

Bennett, K., Frisby, B. N. & **Young, L. E.** (2014). Vitamin D: An examination of physician and patient management of health and uncertainty in qualitative health research.

Qualitative Health Reports, 24. doi: 10.1177/1049732314523681

Technical/Government Reports

- Veil, S. R., & **Young, L. E.** (2013). *Internal communication audit of the Lexington Fire Department*. Lexington, KY: Risk Sciences Division.
- Veil, S. R., & **Young, L. E.** (2013). *External communication analysis for the Lexington Fire Department*. Lexington, KY: Risk Sciences Division.
- Cupp, P., Veil, S. R., Sellnow, T., Anthony, K., **Young, L. E.** & Staricek, N. (2013). *Community engagement and case analysis methods for developing post-incident risk communication guidelines for an intentional biological environmental contamination*. Cincinnati, OH: Environmental Protection Agency.

Manuscripts Under Review

- Young, L. E.** (Under Review). A message worth a thousand lives: Understanding communication satisfaction during organizational change in a high-risk environment. *Communication Studies*.
- Young, L. E.** (Under Review). Grapevine, Rumors, or Gossip? A theory to explain informal organizational communication. *Journal of Business Communication*.
- Young, L. E.** (Under Review). When no one else helps: Community response to an environmental crisis. *Public Relations Journal*.

Manuscripts in Progress

- Young, L. E.** & Staricek, N. (completing revisions). A train, a cloud, a lesson learned: Creating meaning around the train derailment in Minot, ND.
- Young, L. E.** (data analysis). Clearing the smoke: Understanding Organizational Change Communication in High-Risk Contexts.
- Young, L. E.** (data collection). Conflict that ties: Communication conflict management styles influencing organizational identification.
- Wilson, B., **Young, L. E.**, Haarstad, N. (in progress). Examining knowledge capture, management, and transfer: An examination of a failed MOOC.
- Veil, S. R., Sellnow, T. L., Cupp, P., Anthony, K., Staricek, N., & **Young, L. E.** (in progress). Revisiting the best practices in risk communication: A multicase analysis.

Conference Presentations

Peer Reviewed Conference Presentations

- Young, L. E.** (2014, May). *A message worth a thousand lives: Understanding organizational change in high-risk environments*. Paper to be presented at the annual meeting of the International Communication Association, Seattle, WA.
- Wilson, B. A., & **Young, L. E.** (2014, April) *Gestational Testing: Making Sense of a Down Syndrome Diagnosis*. Poster to be presented at the Biennial meeting of Kentucky Communication Health Conference, Lexington, KY.
- Bennett, K., Frisby, B. N. & **Young, L. E.** (2013, November). *Vitamin D. Exploring physician and patient management of health and uncertainty*. Paper presented at the annual meeting of the National Communication Association, Washington, D.C.

- Young, L. E.** (2013, October). *It can save a life: Examining internal communication in high-risk environments*. Poster presented at the annual meeting of the Organizational Communication Mini-Conference, Urbana, IL.
- Veil, S. R., Sellnow, T. L., Cupp, P., Anthony, K., Staricek, N., & **Young, L. E.** (2013, October). *Revisiting the best practices in risk and crisis communication: A multicase analysis*. Paper presented at the annual meeting of the International Crisis Communication Conference, Ilmenau, Germany.
- Wilson, B., **Young, L. E.**, Haarstad, N. (2013, September). *Examining knowledge capture, management, and transfer: An examination of a failed MOOC*. Paper presented at the annual meeting of the Kentucky Communication Association, Carrollton, KY.
- Young, L. E.** (2013, April). *Whispers from a ghost town: Communication choices that lead to serious consequences*. Paper presented at the annual meeting of the Southern States Communication Association, Louisville, KY.
- Young, L. E.** & Staricek, N. (2013, April). *A train, a cloud, a lesson learned: Creating meaning around the train derailment in Minot, ND*. Paper presented at the annual meeting of the Eastern Communication Association, Pittsburgh, PA.
- Cupp, P., Veil, S. R., Sellnow, T. L., **Young, L. E.**, Anyaegbunam, C., & Madinger, C. (2013, March). *Developing post-incident risk communication guidelines for water contamination events*. Panel presented at the Kentucky Water Resources Annual Symposium, Lexington, KY.
- Young, L. E.**, Eickholt, M., Herovic, E., & Frisby, B. N. (2012, November). *Worlds colliding: Maintenance strategies of international students in cross-cultural friendships*. Paper presented at the annual meeting of the National Communication Association, Orlando, FL.
- Young, L. E.** (2012, October). *Understanding internal communication in an urban fire department*. Poster presented at the annual meeting of the Organizational Communication Mini-Conference, Norman, OK.
- Bennett, K., Frisby, B. N. & **Young, L. E.** (2012, March). *Have you heard about Vitamin D?* Paper presented at the annual meeting of the Health Literacy Summit. Lexington, KY.
- Young, L. E.** & Horan, S. M. (2011, April). *Are relational messages fair? An examination of the relationships among classroom justice and relational teaching messages*. Paper presented at the annual meeting of the Eastern Communication Association, Arlington, VA.

Invited Presentations

- Young, L. E.** (2014, January). *Seeing "red" from other sides: Understanding conflict management strategies*. One-hour training session presented to the Bluegrass Academy of Nutrition and Dietetics, Lexington, KY.
- Young, L. E.**, Cohen, E., Veil, S. R., Miller, C., Real, K. (2013, October). *More than fashion: Workplace communication in a global economy*. Panel presented to the College of Communication and Information. University of Kentucky, Lexington, KY.

- Young, L. E.** & Reynolds, M. (2013, August). *Perception and the perception checking process*. Presented to the College of Communication and Information Instructor Orientation. University of Kentucky, Lexington, KY.
- Veil, S. R. & **Young, L. E.** (2013, June). *Best practices in risk and crisis communication and organizational reputation management*. Four-hour training session presented to the Kentucky State Fire and Homeland Security Conference, Lexington, KY.
- Veil, S. R., & **Young, L. E.** (2012, December). *Internal organizational communication*. Presented to the Lexington Fire Department, Lexington, KY.
- Young, L. E.** (2013, March). *Communication theory in action: Understanding translational research with Uncertainty Management Theory*. Presented to upper-level undergraduate communication students. University of Kentucky, Lexington, KY.
- Frisby, B. N. & **Young, L. E.** (2012, September). *Preparing and presenting effective PowerPoint presentations*. Presented to the College of Public Health doctoral students, University of Kentucky, Lexington, KY.
- Frisby, B. N. & **Young, L. E.** (2012, February). *Preparing and presenting effective PowerPoint presentations*. Presented to the College of Public Health doctoral students, University of Kentucky, Lexington, KY.

Sponsored Research

Community Engagement and Case Analysis: (October 2011 – September 2013):
Funded by the Environmental Protection Agency to examine previous contamination cases and provide lessons learned for the development and testing of risk communication strategies during and after the decontamination/ clearance phase of an intentional biological release. \$369,233. (Graduate Research Assistant)