

The Impact of Organizational Leadership on the Mental Wellness of Firefighters

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by
Dena Ali

National Fire Academy

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Abstract

Firefighters experience elevated rates of certain mental health disorders, and while many resources have been identified and implemented to help firefighters who are struggling find recovery, there is limited research identifying those factors that could help prevent them from struggling in the first place. It is well known that social support predicts wellness, but the problem is that fire service leadership practices supporting wellness have been both limited and unknown. This seminal review identified several leadership practices that produce a positive culture in the fire service and, ergo, support mental health. Several recommendations are proposed, including modeling positive behaviors, caring about your team, creating psychological safety, humility, transparent communication, addressing incivility, and fostering belonging cues. The results of this review can inform fire service leadership practices nationally and create a foundation for further quantitative research on improving resilience through measuring the biomarker heart rate variability.

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CHAPTER 1: INTRODUCTION

Due to the nature of their work, firefighters experience stressors such as traumatic exposure, sleep disruption, financial hardship, and familial disruption (Edgelow et al., 2022; Substance Abuse and Mental Health Services Administration [SAMHSA], 2018). These stressors impact mental health, and in the last decade, the research on first responder mental health has grown significantly to recognize that a relationship exists between public safety work and mental health conditions (Edgelow et al., 2022). A 2018 Substance Abuse and Mental Health Services Administration (SAMHSA) report indicated that 30 percent of first responders develop behavioral health conditions compared to just 20 percent in the general population (SAMHSA, 2018). The behavioral health conditions found to affect firefighters include, but are not limited to, anxiety, depression, post-traumatic stress disorder (PTSD), substance use disorder, and thoughts of suicide (SAMHSA, 2018; Stanley et al., 2017).

Despite the increased attention to firefighter mental health, solution-oriented research targeting firefighters is still limited (Van Hasselt et al., 2021). Several explanations exist for the behavioral health conditions that affect firefighters. These include the nature of the work that involves repeated exposure to painful and provocative experiences, sleep disruption, workplace incivility, and barriers to seeking help, such as stigma (Stanley et al., 2017; Van Hasselt et al., 2021). Efforts to improve mental wellness have focused on awareness, destigmatization, building individual resilience, identifying first responders at risk, enhancing post-critical incident support, and developing peer support resources (Stanley et al., 2019; Van Hasselt et al., 2021). Despite the increased research and attention brought to first responder mental health, there is little evidence showing the efficacy of these interventions (Stanley et al., 2017; Van Hasselt et al., 2021). Moreover, these interventions are only effective if firefighters access them.

Historically, the focus of addressing firefighter mental health has surrounded trauma exposure, specifically the repeated exposure to events that pose serious risk of death and injury. Focusing our efforts primarily on the traumatic exposure faced by firefighters, as opposed to additionally addressing sleep disturbance, marital and family stress, harassment, culture, and the other mosaic of stressors impacting firefighters has resulted in overlooking variables that are amenable to intervention (Stanley et al., 2018). While post-critical incident stress response resources are helpful, improving distress tolerance for firefighters and increasing resiliency are also important focus areas in addressing mental wellness. Because of the historical lack of education and resiliency factors available to individuals in the fire service, a large body of literature has discovered alcohol use to be the most common maladaptive coping technique for firefighters (Haddock et al., 2022). Unfortunately, the use of alcohol to cope with stress has also been found to work synergistically with depression, anxiety, and PTSD, further worsening each disorder (Haddock et al., 2022; Walker, 2017).

Despite the additional stressors' firefighters face, an area found to positively impact the mental wellness of first responders is support from coworkers and leadership (Edgelow et al., 2022; SAMHSA, 2018; Stanley et al., 2018; Stanley et al., 2019; Van Hasselt et al., 2021). According to Dr. Edmondson, (as cited in Coyle, 2018) who studies psychological safety, there is a place in our brain that is always worried about what people, especially leaders, think of us, and when we feel rejected, it can lead to a host of adverse outcomes. However, leaders who focus on building safety and belonging within their organizations can support healthy functioning (Coyle, 2018). A healthy support system is the most reliable protective factor that supports resilience (Marks, Callahan, & Grill, 2019; van der Kolk, 2014). This research will

focus on finding leadership practices that can positively impact the mental health of firefighters by creating a healthy workplace culture.

Background

In his keynote at the 2023 Fire Department Instructors Conference, Chief David Rhodes opened with the following,

There has really been little focus on the mental health effects of poor leadership. We tend to talk about PTSD because we can blame that on an incident beyond our control. But we don't want to talk about the root cause of the majority of the stress that causes us issues: organizational vindictiveness, discrimination, favoritism, and exclusion. (FDIC International, 2023)

While harsh, his words resonated with the audience and have been supported by research on the impacts of organizational leadership and mental wellness. A few months after FDIC, at the United States Fire Administrator's Summit on Fire Prevention and Control, Dr Sara Jahnke, who is the director and senior scientist at the Center for Fire, Rescue, and EMS Health Research, explained that workplace culture impacts firefighter health through the acute exposures at work interlaced with stressors from home (United States Fire Administration [USFA], 2023).

Dr. Jahnke shared that while stress has been found to lead to epigenetic changes, it is important to ensure we continue to highlight the value of resilience and post-traumatic growth because those factors can offset the negative impacts of stress. The American Psychological Association (n.d.) defines resilience as "the process and outcome of successfully adapting to difficult or challenging life experiences, especially through mental, emotional, and behavioral flexibility and adjustment to external and internal demands" (pg. 1). The definition explained that resilience can be cultivated and adapted through social resources, coping strategies, and how individuals engage the world. A healthy response to stress requires community and leaders who

understand how daily practices affect resilience have a unique ability to help improve member wellness (Marks et al., 2019; Southwick & Charney, 2018).

Dr. Jahnke shared that progress is being made in the fire service in terms of support from the kitchen table, tailboard conversations, and the brotherhood and sisterhood that come with the job. In her address, she noted that each of these are critical healing resources (USFA, 2023).

However, more research is needed to understand the stress of the job for members who are not part of the majority and how the stress of incivility is related to depression, PTSD, cancer, cardiovascular disease, and other poor health outcomes. Dr. Jahnke closed by sharing that, “workplace incivility is not an HR¹ issue but rather a health and safety issue” (USFA, 2023).

This makes sense upon learning that several of the mental health disorders that negatively affect firefighters are mediated through positive social support and leadership, and this was the single most important finding out of a 2018 study conducted by Florida State University in conjunction with the National Alliance for Suicide Prevention, the National Fallen Firefighters Foundation, the National Volunteer Fire Council, and the International Association of Women in Fire and Emergency Services (Stanley et al., 2019). The study indicated that “supervisors may play a particularly important role in creating a supportive work environment that leads to better outcomes for firefighters exposed to traumatic events” (Stanley et al., 2019, p. 555). This is because, of all the variables examined, supervisor support was the most robust correlate of decreased mental ill effects resulting from traumatic exposure (Stanley et al., 2019).

Responses to traumatic exposure do not occur in a vacuum, meaning an individual's response to trauma is not solely due to the trauma itself but rather the individual's resilience at the time of the traumatic exposure. In his work on polyvagal theory, better known as the science

¹ HR referring to the Human Resources Department

of safety, Porges (2022) explained that stress cannot be viewed only in terms of the stressor and the stress response but additionally, in terms of the vulnerability of the organism at the time of exposure to stress. His work on the polyvagal theory uncovered that feelings of safety support optimal nervous system functioning, leading to improved wellness (Porges, 2022). Adverse responses to trauma and the manifestation of PTSD are more related to a lack of support from community rather than the trauma itself. (Junger, 2016; van der Kolk, 2014). Journalist and author Sebastian Junger stated that PTSD is a disorder of recovery (Junger, 2016). Traumatized people recover in the context of relationships, and while all people experience post-traumatic stress, PTSD only manifests when safety is absent during recovery (van der Kolk, 2014). The fire service has a unique opportunity to improve the resiliency of its members by using the support structures inherent in the profession. Company officers, particularly, have a powerful role in this by helping to create a safe and supportive environment that promotes psychological safety. In her research on psychological safety, Dr. Edmondson discovered a positive relationship between psychologically safe work environments and wellness (Edmondson, 2019).

Significance of the Study

Research indicated that firefighters experience elevated rates of behavioral health disorders associated with traumatic responses and stressors related to a career in the fire service interwoven with those stressors inherent in life. The variables that impact firefighters' mental well-being are not always amendable, but improving workplace culture by addressing organizational factors can improve the wellness of firefighters. The literature suggested that the following factors are attributed to organizational stress: lack of support from colleagues and supervisors, limited resources, interpersonal conflict, shiftwork, sleep disruption, and low job autonomy (Edgeglow et al., 2018). While these factors are organizational stressors, no study to

date outlines the most relevant organizational factors affecting firefighter mental wellness (Edgeglow et al., 2018).

Previous research has primarily focused on identifying external stressors that negatively impact the fire service, maladaptive coping skills, and available resources for struggling members. The research indicated that firefighters experience elevated rates of psychiatric problems, including depression, substance abuse, sleep disturbances, PTSD, and suicidal behavior (Hasselt et al., 2022). Firefighters, specifically minorities and women, experience elevated rates of work discrimination and harassment, which contributes to poor physical and mental wellness (Jahnke et al., 2019). Finally, abundant research indicated that firefighters commonly use alcohol as a maladaptive coping strategy and experience elevated levels of problematic drinking (Haddock et al., 2022; Stanley et al., 2019). Unfortunately, research focusing on upstream tactics to improve the mental wellness of firefighters is currently limited.

This study will contribute to the state of the fire service by addressing both culture and mental wellness. Culture, defined as the “learned behavior patterns of people,” was identified in the Center for Public Safety Excellence (CPSE) white paper as being deeply engrained with traditions that, at times, are counter-intuitive to what is best for the long-term health of the fire service (CPSE, 2020, pg. 11). By understanding how leadership influences both wellness and culture, the results of this research will be able to positively support culture by providing guidance on promoting “an organizational environment that is adaptable, open to change, innovative, and focused on continuous improvement” (CPSE, 2020, pg. 12).

Purpose Statement

The purpose of this generic qualitative inquiry is to determine the leadership factors that produce a healthy culture in the fire service. Research suggested that peer support teams are one

of the most essential resources for helping first responders exposed to trauma and other stressors recover and experience post-traumatic growth (Dreiman, 2017). However, in building robust resources for struggling firefighters, the fire service has failed to focus on preparing firefighters before intervention is needed (Ali, 2023). While resources such as Critical Incident Stress Management (CISM), employee assistance programs (EAP), chaplaincy, peer support, and embedded clinicians are necessary, there is a need for the fire service to focus on moving upstream and protecting the wellness of team members through building resiliency before crisis (Ali, 2023). Caring and deliberate leadership can potentially improve firehouse culture and provide the positive social support necessary for improved mental wellness.

Problem Statement

The specific problem is that leadership factors that create a healthy culture in the fire service have not been determined. It is concerning that firefighters experience elevated rates of mental health disorders considering first responders fall under the healthy worker effect due to the screening process that excludes vulnerable individuals who do not meet hiring criteria (Li & Sung, 1999). Despite abundant research demonstrating the power of community and support on resilience, there has been little focus on bolstering these factors within firehouses through leadership and culture. While the fire service has made great strides in establishing resources to help struggling firefighters find support, there is a dearth of research on upstream strategies that can be incorporated before a firefighter is exposed to stressors (SAMSHA, 2018; Stanley et al., 2018). Fortunately, other fields have leveraged components of psychological safety and positive culture to improve member health and well-being (Coyle, 2018; Edmondson, 2019; Munsey, 2018). Fire service members could benefit from the results of research examining the power of increased psychological safety and a culture that underlies wellness through relationships.

Research Question

The goal of this research will be to learn the significant leadership practices that positively affect fire service culture and lead to improved health and wellness. Based on the earlier discussion, the research question for exploring how leadership practices affect culture and psychological safety is as follows:

RQ: What leadership factors lead to a healthy culture in the fire service?

Key Definitions:

Psychological Safety is a concept that allows people to focus on achieving shared goals rather than on self-protection (Schein & Bennis, 1965).

Team Psychological Safety is a shared belief held by team members that it is okay to take risks, express their ideas and concerns, speak up with questions, and admit mistakes – all without fear of negative consequences (Gallo, 2023).

Polyvagal Theory- “Describes how the nervous system defensively activates in response to perceived threats or downregulates to encourage openness and connection (Ryland, Johnson, Bernards, 2021, pg. 269).”

Culture is derived from the Latin word *cutlas*, which means care (Coyle, 2018). According to Daniel Coyle, the author of *The Culture Code*, “culture is a set of living relationships working toward a shared goal. It’s not something you are. It’s something you do (Coyle, 2018, pg. xviii).

Workplace Bullying occurs through "aggressive behavior where a worker intentionally and repeatedly causes another employee discomfort. The behavior is often perceived as intimidation and may be accompanied by veiled or unveiled threats where the bully exerts control over another person.” (Titan Group, 2017).

Workplace Incivility involves rudeness, exhaustion, violence, and a poor attitude towards work.

Health refers to being sound in body, mind, or spirit.

Wellness refers to the effort one makes to improve or maintain one's health.

Summary

Moving forward, Chapter 2 will provide an overview of the literature surrounding leadership influences on culture and mental wellness. We have established that firefighters experience elevated rates of mental health disorders, and the leadership factors that predict healthy workplace culture are not well known. While research studies on the mental health of firefighters have significantly grown in the last few years, research directed at upstream practices predicting health and wellness is limited. This is partially because psychiatry, as a subsection of medicine, is a young field, and the ability to define and treat mental illness is not yet as precise as physical illness (van der Kolk, 2014). The first manual of psychiatric diagnoses was not created until 1980 when the American Psychiatric Association (APA) Diagnostic and Statistical Manual of Mental Disorders was first published (van der Kolk, 2014). Since 1980, this manual has seen five updates and is currently in its fifth edition.

Leaders have a unique opportunity to improve the wellness of firefighters by creating cultures that promote psychological safety. The following chapter will lay a foundation for the need to expand the literature specific to the fire service regarding leadership's influence on culture and wellness.

CHAPTER 2: LITERATURE REVIEW

Introduction

This literature review will synthesize research and data on the impacts of culture and psychological safety on mental wellness and performance. While there is currently a dearth of population-specific data in this area for the fire service, the literature synthesized will include journal articles, theses, books, and reports that emphasize the impact of organizational factors on employees' mental health. This section will provide an overview of the problems that impact firefighter mental health and then transition into evidence demonstrating the positive impact of deliberate leadership, psychological safety, and a positive culture on employee wellness.

Existing Literature

As established previously, when hired, firefighters are considered healthier than the general population due to screening requirements. However, the numerous stressors inherent within the fire service have been found to lead to certain mental health conditions. Fortunately, the existing literature has found several variables that can lead to post-traumatic growth (PTG) and resilience. Dr. van der Kolk (2014) noted that mental health requires feeling safe with others, and secure connections are the foundation of wellness. Although it is difficult to limit the traumatic exposures firefighters experience, a large body of evidence has demonstrated that “having a good support network constitutes the single most powerful protection against becoming traumatized” (van der Kolk, 2014, pg. 309). One of the preliminary but most influential studies on the power of coregulation was reported by Freud and Burlington (1943) and demonstrated that children who remained with parents during the World War II Blitz fared better than the children who were sent away from their support system to relatively safe locations (van der Kolk, 2014). Potentially traumatic experiences are mitigated through relationships and

reconnecting with others. While horrendous events in life are unavoidable, with appropriate support, long-term impairment is not (Jung, 2016).

Polyvagal Theory

When safety is obstructed, resilience and wellness become elusive. Human biology requires collaboration in social systems to survive and optimize homeostasis (Brown, 2015; Porges, 2022; Ryland et al., 2021; van der Kolk, 2014). Unfortunately, health and well-being strategies do not recognize the biological need for safety that emerges from the autonomic nervous system (Porges, 2022). Human DNA is embedded with a desire to feel safe, and because we are social mammals, this desire for safety cannot be achieved in isolation (Porges, 2022). Safety and terror are incompatible, and safety requires coregulation with other humans (van der Kolk, 2014).

The nervous system autonomically perceives threats based on previous experience through neuroception and often responds without conscious control (Ryland et al., 2021; Porges, 2022). Fight or flight is activated when the amygdala perceives a threat, and the body shifts out of recovery/growth into survival. To optimize health and wellness, humans should spend most of their time in a parasympathetic state instead of fight-or-flight (Porges, 2022). An analogy often used to describe the parasympathetic state is the autonomic vagal brake that adjusts heart rate to match metabolic needs during times of safety (Porges, 2022). However, in the absence of the necessary cues of safety, it is difficult for humans to downregulate autonomic states that support homeostatic functions, which include health, growth, and restoration (Porges, 2022). When safety is absent, the autonomic vagal gas pedal increases the heart rate to match metabolic needs. This dysfunction of the nervous system can lead to an array of mental and physical disorders (Munsey, 2018).

Mammals respond instantly to a continuous flow of safety cues (Coyle, 2018; Porges, 2022). These cues include prosodic voice, welcoming facial expressions, and gestures of openness displayed by downregulating defenses to promote sociality by enabling psychological and physical closeness without fear of injury (Porges, 2022). “The Polyvagal Theory suggests that social connectedness is a core biological imperative for humans, since human survival is dependent on trusted others is wired into our genetics and is expressed throughout the lifespan starting from the moment of birth” (Porges, 2022, pg. 7). Coregulation with trusted individuals is crucial for optimizing resilience in humans (Porges, 2022; van der Kolk, 2014). In his research on extraordinarily successful teams, Coyle found that “safety is not the mere emotional weather, but rather the foundation on which strong culture is built” (Coyle, 2018, pg.6). The teams he studied included military units, schools, movie studios, and restaurants, and the patterns of interactions observed with these groups had a continuous flow of safety cues which consisted of these observations:

- Close physical proximity
- Profuse amounts of eye contact
- Physical touch
- Lots of short, energetic exchanges
- High levels of mixing within the group
- Intensive active listening with few interruptions and lots of questions
- Humor
- Continuous flow of small, attentive courtesies such as “thank you's” (Coyle, 2018, pg. 8).

From the lens of the Polyvagal Theory, stress is a measurable state in which homeostatic functions are disrupted and occurs while the autonomic nervous system supports defense

(Munsee, 2018; Porges, 2022). Resilience depends on an organism's ability to return to an autonomic state that supports feelings of safety (Porges, 2022). Prolonged states of acute stress without recovery periods are associated with disease and reduced resilience (Munsee, 2018; Porges, 2022). Working for uncaring leaders is a key contributor to releasing the stress hormone cortisol and low-grade activation of the sympathetic nervous system, leading to illness (Sinek, 2019; Munsey, 2018). Polyvagal theory informs us that resilience that functionally supports homeostatic functions requires an active social engagement system that moves an individual out of the self-oriented focus of threat and into an other-oriented focus of safety, sociality, and compassion (Porges, 2022).

Resilience can be measured through a biomarker, Heart Rate Variability (HRV), which measures the balance between the sympathetic and parasympathetic nervous systems (Munsee, 2018). The more balanced these systems are, the higher the individual's HRV and the more able the individual can withstand additional stressors (Munsey, 2018; van der Kolk, 2014; Porges, 2022). Dr. van der Kolk conducted several studies of traumatized individuals and made two significant discoveries: higher HRVs predicted lower rates of PTSD, and a practice of mindfulness led to increased HRV (van der Kolk, 2014). Increasing resiliency requires expanding an individual's capacity to withstand additional stress, which requires creating supportive environments characterized by trust (Sinek, 2019). This understanding is the essence of the polyvagal theory and the relationship between the vagal brake and the gas pedal (Porges, 2022).

Psychological Safety

Psychologically safe environments, too, can improve HRV by creating safety and allowing the vagus nerve to relax (Munsey, 2018). According to Dr. Edmondson (as cited in

Coyle, 2018), a leading researcher on the concept of psychological safety, while humans are particularly good at reading cues, there is always a part of the brain that is deeply obsessed with what people think, especially higher-ups, and if our social system rejects us, we are as good as dead. To feel psychologically safe, we must receive belonging cues which have three essential qualities:

- Energy (another's investment in the exchange)
- Individualization (unique and valued)
- Future orientation (the cue must signal that the relationship will continue (Coyle, 2018)).

Psychological safety is fragile because it requires continuous renewal of these cues to remain present (Edmondson, 2019). The fragility is due to the autonomic forces of the human condition that signal the need for silence and self-protection over self-expression (Edmondson, 2019). Psychological safety is a condition “in which one feels included, safe to learn, safe to contribute, and safe to challenge the status quo without fear of being embarrassed, marginalized, or punished in some way” (Mitterer & Mitterer, 2023, pg. 30). While the definition is individually focused, the research has found that when people feel psychologically safe, performance at both the individual and team level increases (Coyle, 2018; Edmondson, 2019; Mitterer & Mitterer, 2023).

Psychological safety requires trust, a fundamental element of leadership, and is critical between employees and direct supervisors for creating positive employee attitudes (Mitterer & Mitterer, 2023). Trust is optimized when reciprocal and often requires leaders to extend trust first (Willink, 2023). When individuals trust that their leaders have their best interests in mind, these individuals feel empowered to take ownership of work, which leads to an increase in employee well-being and a reduction in self-interest (Mitterer & Mitterer, 2023; Willink, 2023). A culture

of trust requires commitment from the leadership and is most easily destroyed by hypocrisy from the top (Mitterer & Mitterer, 2023; Willink, 2023). An essential requirement for maintaining trust comes in the form of reliability from leadership (Mitterer & Mitterer, 2023). While abundant research is available on trust and leadership within organizations, limited data is available on applying trust and leadership within the fire service (Fleagle, 2023).

Psychological safety is not about relaxing standards and being nice; it's ensuring a climate of respect and trust where people can raise concerns and offer suggestions without fear; as a result, psychological safety is the foundation of learning (Grant, 2021). The opposite of a learning culture is a performance culture where people see others criticized for mistakes and failure, and as a result, individual focus shifts to self-protection (Edmondson, 2019; Grant, 2021). The following is a chart helps to identify the presence of a psychologically safe environment:

Table 1

Psychological Safety	Psychological Safety Lacking
See mistakes as opportunities to learn	See mistakes as threats to your career
Willing to takes risks and fail	Unwilling to rock the boat
Speaking your mind in meetings	Keeping your ideas to yourself
Openly sharing your struggles	Only touting your strengths
Trust in your teammates and supervisors	Fear of your teammates and supervisors
Sticking your neck out	Having your head chopped off

(Grant, 2021, pg. 210)

Leader Humility

Of all leadership qualities, humility is one of the most robust predictors of psychological safety. Because of the fear of rejection, psychologically unsafe environments are often characterized by silence and gossip, contributing to lower performance and increased errors (Edmondson, 2019). The fear of being viewed or labeled negatively leads to silence, and this silence prevents growth and learning (Edmondson, 2019). This silence was attributed to NASA's Space Shuttle Columbia disaster in 2003, when an employee recognized a potential problem but

felt he could not speak up (Edmondson, 2019; Grant, 2021). The silence derived out of self-protection was found to be deadly for NASA. Since the Columbia disaster, NASA has revamped its culture from one characterized by performance at all costs to a learning culture that encourages speaking up at all levels (Edmondson, 2019; Grant, 2021). This transition towards learning and psychological safety has reduced errors, increased innovation, and led to greater performance outcomes (Edmondson, 2019; Grant, 2021).

While humility has been associated with a lack of authority or command presence, leaders with humility bring the best out of others by viewing problems and mistakes as opportunities for learning and growth (Edmondson, 2019; Grant, 2021; Hu, 2018; Wang et al., 2022). Humility from leaders facilitates team psychological safety in three critical ways:

- It signals that risk-taking and mistakes are acceptable by demonstrating openness to facing one's limitations.
- It builds confidence by recognizing the contributions of members.
- Humble leaders prioritize team growth by embracing a learning attitude (Hu, 2018).

When vulnerability and humility coexist, psychological safety is maximized, and gossip is minimized (Edmondson, 2019). Vulnerability, historically, has been thought of as weakness. However, in her book *Daring Greatly*, Dr. Brown described vulnerability as the opposite of weakness by explaining the etymology of the word vulnerable. She explained that the root of the word vulnerable means capable of being wounded, while the word weakness means “inability to withstand attack or wounding” (Brown, pg. 39, 2015). According to Jacob Morgan (2023), vulnerable leaders take ownership of personal shortcomings and commit to learning and growing through leading from a place of connection instead of compliance. The following chart demonstrates a leader's movement to leading with vulnerability.

Table 2

Vulnerable	Vulnerable Leader
Admitting to a Mistake	Admitting to a mistake and sharing what was learned.
Asking for help	Asking for help and committing to learning what you need help with.
Showing emotion	Showing emotion but practicing self-awareness to be conscientious of how that emotion comes across and the impact it can have.
Saying “I don’t know”	Saying “I don’t know” but having an idea or plan for how to figure it out.
Talking about personal challenges or struggles	Talking about personal challenges or struggles for the purpose of connecting and creating trust as opposed to a therapy session.
Being unsure	Being unsure but having a vision for where you want to end up.

(Morgan, 2023, pg. 39)

Without a norm of humility, gossip proliferates and is the mark of an organization that lacks psychological safety (Edmondson, 2019). When criticism occurs behind people's backs, those who are absent cannot learn from what is said (Dalio, 2017; Edmondson, 2019). Candor is a leadership quality that replaces gossip and allows growth and learning opportunities. Through an environment characterized by candor, leaders who eliminate gossip can create more psychologically safe environments (Dalio 2017; Edmondson, 2019). In his book, *Principles*, Ray Dalio explained that winning arguments should never be a goal; instead, the goal should be recognizing how valuable finding out you are wrong is for learning (Dalio, 2017). This is why conflict is more productive than gossip and can help move teams forward (Dalio, 2017; Edmondson, 2019).

Leaders can instill speaking up and candor through modeling the behaviors. Historically, leaders led by demonstrating knowledge and power. More recently, it has been identified that leaders who model not knowing and humility empower others to share what they know, and these leaders promote the practice of admitting to not knowing, which leads to learning and error reduction (Edmondson, 2019). This mindset recognizes that there is always more to learn. Humility is not false modesty or the opposite of confidence (Edmondson, 2019). Leaders who

model humility allow their teams to engage in learning, which is foundational for psychological safety (Edmondson, 2019, Hu et al., 2018; Wang et al., 2023). A superficial understanding of psychological safety has led many to believe it is weak leadership free of consequences. Instead, its presence leads to fewer errors, greater opportunities for growth, and more innovation (Edmondson, 2019; Grant, 2021).

Workplace Incivility

Fire Service leaders have a unique opportunity to build psychological safety within firehouses through deliberate leadership and fostering a culture of belonging. However, a review of the literature has revealed disturbing rates of incivility, harassment, and discrimination in the fire service. A synthesis of literature on the impacts of workplace discrimination, harassment, and bullying revealed that these behaviors affect not only mental and physical health, but also job-related outcomes and family well-being (Jahnke et al., 2019). Though rarely discussed, workplace incivility has become a significant issue affecting all work environments (Singh et al., 2023). Unfortunately, incivility significantly impacts workers' mental and physical health, leading to lower employee engagement and poor job performance (Singh et al., 2023).

While bullying has long been overlooked in adults, recent foundational research has found it to be a significant issue negatively affecting the fire service (Koeppel et al., 2022). The most recent research on fire service bullying has discovered that over 40% of female firefighters experience bullying, and 37% of all first responders, regardless of race or gender, have witnessed bullying (Koeppel et al., 2022). Bullying in the fire service is most often found to include exclusion, isolation, lack of support, hostility, verbal harassment, sexual advances, and assault (Jahnke et al., 2019; Marques, 2022).

The presence of bullying for both the victim and witness has significant health impacts, including more poor health days, depression, anxiety, post-traumatic stress, higher alcohol consumption, and sleep disruption (Koeppel et al., 2022). Bullying not only negatively impacts health, but it is also related to job stress, burnout, turnover, and poor work performance (Koeppel et al., 2022). An outcome of bullying is disconnection, and in her book *Daring Greatly*, Dr. Brown described the dangers of disconnection by quoting Miller and Stiver of Wellesley College with the following.

We believe that the most terrifying and destructive feeling that a person can experience is psychological isolation. This is not the same as being alone. It is a feeling that one is locked out of the possibility of human connection and of being powerless to change the situation. In the extreme, psychological isolation can lead to a sense of hopelessness and desperation. People will do almost anything to escape this combination of condemned isolation and powerlessness. (Miller & Stiver, as cited in Brown, pg. 140)

The behaviors people engage in to escape psychological isolation include addiction, violence, bullying others, self-injury, and suicide (Brown, 2015). Sadly, these are all behaviors observed in the fire service. And, many often report that direct complaints of bullying, discrimination, and harassment are often met with dismissal, retaliation, and alienation (Marques, 2022). It is posited that a cultural change must start from the top, with leadership investing in training and addressing bullying (Koeppel et al., 2022). Leaders must model speaking up and addressing this behavior, which is accomplished in organizations that have fostered psychological safety and the elimination of gossip (Edmondson, 2019; Dalio, 2017).

A meta-analysis of workplace incivility discovered that leadership behaviors can foster a sense of trust, increased engagement, and reduced turnover by addressing incivility and modeling positive leadership behaviors that encourage open communication and engagement (Singh et al., 2023). Effective leadership behaviors include promoting teamwork inside the firehouse, engaging in training that addresses incivility, and encouraging members to take ownership of

their department (Koeppel et al., 2022). Transformational leadership was specifically recognized for having these characteristics, which include setting high goals, modeling high-level behaviors, and inspiring others. Furthermore, a 2023 EFO Research study found that trust in direct leadership predicted resilience and positive mental health when firefighters face the need to endure challenges (Fleagle, 2023).

Humor is another essential leadership characteristic that has long been used in the fire service. Humor increases bonding and helps alleviate the stress of trauma exposure (Marks et al., 2018; Moran & Roth, 2013; Marques, 2022). Humor is also a way to show humility and vulnerability in an environment of imperviousness and predicts in-group affiliation and success (Marques, 2022). Unfortunately, in efforts to reduce harassment in the workplace, poorly trained leaders often eliminate humor. However, well-trained officers who focus on creating a culture of inclusion through intention can maintain humor without crossing lines into incivility (Moran & Roth, 2013). In her FDIC class, *Death by a Thousand Cuts: Bullying, Discrimination, and Harassment*, Dr. Jahnke (2022) explained that there is a grey area existing between a sterile environment characterized as lacking humor, trust and bonding, and an environment consisting of harassment, discrimination, and incivility. Both ends of the grey are dangerous for the mental wellness of firefighters, and this is precisely why leadership must be intentional in modeling the behavior necessary for our members to thrive (Jahnke, 2022).

Leadership and Mental Wellness

Leadership plays a pivotal role in the health and wellness of firefighters (Fleagle, 2023). For example, the SAMSHA review on firefighter behavioral health suggested that a cooperative effort between organizational leadership and members is necessary to ensure firefighters are supported and protected from excessive stress and burnout (SAMSHA, 2018). Psychological

safety is the most significant leadership element that improves workplace efficacy, performance, and team cohesion (Edmondson, 2019; Fleagle, 2023; Grant, 2021). Effective and attentive listening was the leadership characteristic found to be most critical for developing the kind of trust that predicted wellness (Fleagle, 2023). Conversely, poor relationships with supervisors were found to be associated with more instances of burnout, PTSD, and depression (Brooks, Dunn, & Amlôt, 2016; Stanley et al., 2018).

A study conducted on mental health and performance of 302 employees during the Covid-19 pandemic discovered that high levels of servant leadership were associated with increased performance and positively influencing employee mental health (Daniel et al., 2023). The same study also indicated that low levels of servant leadership coupled with high job demands had the inverse effect by reducing performance and decreasing mental health. While this study was not specific to the fire service, its implications could be beneficial for the fire service. Servant leadership is characterized as going beyond self-interest in a style that focuses on serving, interacting, and helping others through listening, communication, building community and a commitment to the growth of people. (Daniel et al., 2023). While this is thought of as a weaker leadership style, the benefits are profound regarding reduced healthcare costs, increased productivity, and reduced turnover. The following principles were recommended for boosting culture:

1. Active listening (without judgment)
2. Authenticity
3. Building Community (through expressions of appreciation and social gatherings)
4. Share Power (delegate meaningful tasks)
5. Develop people through mentorship (Daniel et al., 2023)

While the previously mentioned study focused on servant leadership, the authors explained that servant leadership was not the only style that could be adopted during difficult times to produce positive results. The components of building community and empowerment are the most robust factors that predict positive mental wellness.

Synthesis of the Existing Literature

The literature indicated that firefighters experience higher rates of certain mental health disorders compared to the general population (SAMSHA, 2018). There are several explanations for these elevated rates of mental health disorders, including the stressors inherent with the profession, sleep disruption, personal factors, workplace incivility, poor leadership, and reliance on alcohol as a coping mechanism. The fire service has worked to address the mental wellness of members with reactionary resources such as chaplaincy, CISM, EAP programs, peer support, and embedded clinicians. However, the fire service should learn methods to increase members' capacity to withstand stress and implement protective factors that prevent firefighters from finding themselves in crisis. Currently, the literature surrounding firefighter mental health is limited to awareness of behavioral health disorders, reactionary resources, and explaining broad methods for developing a healthier workforce. However, based on previously mentioned literature, improved relationships derived from intentional leadership could serve as a buffer to protect the mental wellness of firefighters. Of particular interest to improving relationships is understanding the role leaders play in creating a positive culture and improving distress tolerance of members.

Research on polyvagal theory explained the value of increased heart rate variability in producing homeostasis and increasing resilience. The research identified the strongest predictor of homeostasis was the value of meaningful relationships. Based on current research, deliberate

leadership emphasizing strong culture and relationships could improve the mental wellness of firefighters, preventing the need for reactionary resources. Organizations interested in improving member resilience should leverage leadership practices that enhance psychological safety. These behaviors include humility, openness to learning, elimination of gossip, and zero tolerance for workplace incivility. Psychological safety must be persistent because it requires a continuous delivery of safety cues received by the autonomic nervous system (Coyle, 2018). Although these cues are subtle, they communicate that the relationship is valued, there is future orientation, and when present, safety cues activate the vagal brake, which allows for recovery.

Numerous sources have discovered the impact of leadership behaviors on mental wellness; however, research surrounding the development of more resilient firefighters is limited. While the previous literature described the positive benefits of both transformational and servant leadership styles, the research suggested that other leadership styles could, too, predict mental wellness. These leadership styles and characteristics have yet to be identified for fire service members. Furthermore, there is currently a gap in the research on understanding the leadership practices that could improve culture and lead to healthier members within the fire service.

Summary

This review of the literature examined factors that contribute to mental health disorders among firefighters while also focusing on the protective factors that predict resilience. The literature discovered that firefighters are generally healthy at the time of hire but experience stressors over time that negatively affect mental health. However, the research identified the value of leveraging the biomarker, heart rate variability, to increase resilience and reduce mental health disorders among firefighters. A common variable that led to increased heart rate

variability was the effect of relationships on vagal tone. Although research on the impact of leadership practices on vagal tone and resilience in the fire service is limited, this research will help identify those factors that positively impact the psychological safety of members within the fire service. Going forward, this research will examine those cultural and leadership behaviors that signal safety cues and create an environment of team psychological safety.

CHAPTER 3: METHODOLOGY

This generic qualitative inquiry is focused on understanding how positive leadership behaviors influence culture and wellness within a fire department. The intent is to determine what leadership behaviors lead to a positive culture and can contribute to wellness. This chapter will explain the specific research design and methodology, the population and sample size of those surveyed and interviewed, and the processes that will be utilized to research the question, *what leadership factors lead to a healthy culture in the fire service?* This chapter will also guide ethical considerations for this generic qualitative inquiry.

Given the increased focus on relationships and psychological safety as constructs that are important for wellness, it follows that there needs to be more research on the role of leadership behaviors that affect healthy cultures in the fire service. Even more pressing is the need for more representation in studies to better understand the organizational factors of the fire service that impact both culture and mental wellness. Preliminary research indicates a need to enhance psychological safety in the fire service by increasing trust, candor, humility, and vigilance on the part of leadership to ensure workplace incivility is addressed (Jahnke, 2022). Research seeking to understand the importance of leadership behaviors that impact wellness remains a relatively understudied area. How deliberate leadership ensures psychological safety, trust, candor, leader humility, and a positive culture has yet to be addressed. The goal of this inquiry is to understand better whether psychological safety impacts the culture of the fire service in a manner that will predict increased wellness.

Research Design

The problem is that leadership factors that lead to a healthy culture in the fire service have yet to be determined. This generic qualitative inquiry aims to determine the leadership

factors that lead to a healthy culture in the fire service. This will be accomplished by asking, what leadership factors lead to a healthy culture in the fire service? Given the exploratory nature of this work, a qualitative approach was chosen to understand and describe the experiences of a particular subgroup of American fire service leaders in relation to supervisory and work group interactions. The proposed inquiry will leverage data from departments that have implemented methods to create positive cultures defined by high levels of team psychological safety.

Purposive sampling will be used to identify participants as those with insights derived from application into this topic are limited. Considering the personal perception of culture and psychological safety, there are better approaches than quantitative research, which requires numerical data and inputs to learn how leader behavior influences a positive culture (Fleagle, 2023).

The inductive nature of qualitative research will bring flexibility and a dynamic aspect to the research. As the information is gathered, themes will emerge to discover what characteristics of leadership and group dynamics affect this subgroup, healthy cultures are in the fire service, and in what way. Information revealed can shift the line of questioning and, therefore, challenge and change emerging theories (Fleagle, 2023). This study's primary objective is to understand how leaders in healthy cultures characterized by team psychological safety improve workplace conditions to inspire wellness. This will be accomplished by conducting in-depth interviews with a national sample of fire service leaders to elucidate perspectives on healthy cultures and team psychological safety.

Population and Sample Size

To collect data about participants' experiences, this study will use purposive sampling to identify participants as those with insights into this topic are limited. Participants for the national

perspective of positive culture will be recruited with the help of known fire service thought leaders with knowledge and experience surrounding leadership, wellness, and healthy culture. Those nominated will be invited for an interview, with a choice to decline. Of those willing to be interviewed, a minimum sample size of six to eight participants will be selected, and each person interviewed will be asked to nominate another individual for an interview. The population will include career and volunteer members of the National Fire Service, with at least half of the sample size derived from career fire service leaders. The interview parameters will include the rank of chief officer with a minimum of five years of fire service experience. Chief Officers will then be asked to select a company officer with at least five years of experience to interview.

Methodology

Interview participants will receive an information sheet before the scheduled interview time. Each session will be recorded and transcribed. Protocols will be established for the interview questions and process. The questions are designed to engage the participants and to assist in answering the research question and focus of this study while removing bias and distractions. These questions and protocols were peer-reviewed, and feedback was provided before being administered to participants in the study. The peer review group included a chief officer who previously graduated from the Executive Fire Officer program and completed research on psychological safety, a national fire service research director focusing on mental wellness and incivility, and a nationally known fire service leader interested in psychological safety. The feedback received was used to improve the quality and focus of the questions. A form was created to collect consent from participants before they participated in answering questions for the interview. The form identifies and introduces them to the research process and the researcher. Additionally, the form provides the participants with the qualifications to

participate, explains what kind of research is being conducted, the methodology, and the name of the institution the researcher represents. It also ensures the participant is comfortable answering the questions and is aware of the confidentiality form. Finally, emphasis will be expressed on the ethical standards under which this research was conducted. At any point, those nominated will have the opportunity to decline participation.

Research Process

Analysis was used through qualitative methodology, utilizing a precise set of interview questions for a recorded face-to-face internet platform interview and data collection through transcribing notes, video, and audio recordings. Before starting questions, the consent form was read and digitally provided to the participants to sign (Creswell & Creswell, 2018). This form includes what kind of information is being collected, how it will be collected, what the researcher will do with it during and after the research is conducted, and when it is completed. During the research interviews, after the introduction of the purpose and the signing of the consent form, the meeting was recorded. Additionally, the researcher used a notepad to note immediate thoughts and important information as it arose for reflexive thinking. After the interviews, all audio files were transcribed. A focused analysis was then performed, coding data to produce sub-categories to discover themes that will be used to identify patterns and trends for the research question surrounding associations with a healthy culture. The sample size is anticipated, and the data may provide potential areas for further research. Initial themes will be identified by using key questions concerning culture and psychological safety, including the following:

1. How do you establish a positive culture in your organization?
2. How is humility viewed within your organization or for you personally?
3. What leadership styles dominate your leadership team?

4. Workplace Incivility is defined as rudeness, exhaustion, violence, and poor attitude towards work. How is incivility managed in your organization?
5. Psychological Safety is a concept that allows people to focus on achieving shared goals rather than self-protection. In teams, Psychological Safety is defined as a shared belief held by team members that it's okay to take risks, express ideas and concerns, speak up with questions, and admit mistakes – all without fear of negative consequences. How does your organization nurture psychological safety?
6. Describe the culture of trust within your organization.
7. What level of gossip exists in your department? How do you manage gossip?
8. Research on successful teams has identified the continuous flow of belonging cues as a secret ingredient to increasing psychological safety and improving team cohesion/ performance. Belonging cues include the following behaviors: close physical proximity, profuse amounts of eye contact, lots of short energetic exchanges, intensive active listening with few interruptions and lots of questions, humor, and a continuous flow of small attentive courtesies such as “thank you’s.” Can you describe your experience with these cues and their impact on your leadership?

The process utilized by the researcher to analyze the data collected from all participants will include the following checklist.

6. Organize data for analysis.
7. Read all notes, transcription, and documentation from the research to identify all important words, phrases, and sentences that are meaningful to the research question.
8. Crosscheck codes and ensure there is no drift.
9. Winnow the data by focusing on the data applicable to the research question.
10. Create a labeling system to sort and code data with similar themes and relevance quickly.
11. Seek patterns and describe the research findings through representing themes (Creswell & Creswell, 2018).

Ethical Considerations

Before conducting the research, the researcher reviewed and studied the ethical considerations that are required to be practiced for any research study. This study was approved by Columbia Southern University (CSU) advisors as appropriate before soliciting participation. All participants provided informed consent before participation. The main threats to human subjects are breach of confidentiality and discomfort related to talking about leadership practices. The researcher ensured transcripts for qualitative data will be stored by codes rather than names. After the screener survey responses were collected, names were removed from the dataset, and identification numbers were assigned. Identification numbers were connected to names and contact information in a separate document to protect confidentiality. To protect the participants' data, personal information, and demographics were limited to name, rank, contact information, experience in a leadership role, department size, and region in the United States in which the department is located. Social security numbers, zip codes, and other personal identifiers were not recorded. To respect confidentiality, any comments that included unique identifying information were not admissible in the research.

The interviewee was informed of all data collection devices and activities as the research progressed. In addition, interview recordings, transcriptions, written interpretations, and reports were made available to the informant. Any decision regarding anonymity rested with the informant. In addition, researcher bias was considered. Questions were carefully constructed to avoid leading or being subjective to the researcher's biases or opinions. The validity of this research was dependent on the considerations to reduce bias. One step that attempted to minimize research bias was to use discrepant information, including questions that were contrary to the theme of this study (Creswell & Creswell, 2018).

Summary

This generic qualitative inquiry consisted of purposive sampling to recruit leaders in organizations with high levels of psychological safety. The methodology consisted of the interviewer and interview script in individual one-on-one interviews over a recorded Internet meeting platform. The results were analyzed to develop conclusions and recommendations for further study. Ethical considerations addressed potential bias and protected participants' personal information.

CHAPTER 4: STUDY RESULTS

Introduction – Demographics of Participants

Thirteen participants were nominated by industry thought leaders as leaders who exhibit traits that foster a positive culture. A total of 13 participants were recruited, and 12 were interviewed. Though a small sample size, an attempt was made to mirror fire service demographics with 16% being African American, 16% female, and 75% white male. The interviews were conducted via the Internet meeting platform Zoom, and the principal investigator completed transcription. Each interview averaged 60 minutes. Participants were able to detail personal leadership experiences and practices with each interview question. All interviews took place from January 2024 to February 2024.

Table 3 Demographics of Participantsⁱ:

Interview ID	Duration (minutes)	Years Experience	Gender	Race	Rank	Department Size
1	34	15-19	Male	Biracial	Captain	Small Midwest
2	56	20-24	Male	White	Division Chief	Large Central
3	43	25-29	Male	White	Division Chief	Large Southeast
4	59	30-plus	Male	White	Deputy Chief	Large Northeast

5	51	25-29	Male	White	Assistant Chief	Large Northeast
6	66	30-plus	Female	White	Battalion Chief	Large Central
7	54	25-29	Male	White	Fire Chief	Small Midwest
8	72	30-34	Male	White	Fire Chief (ret)	Medium Northeast
9	94	25-29	Male	White	Division Chief	Small South East
11 ²	36	20-24	Female	African American	Deputy Chief	Large North East
12	107	30 plus	Male	White	Battalion Chief (ret)	Large South East
13	51	25-29	Male	African American	Fire Chief	Large North East

The research study was conducted to determine what leadership practices lead to a positive fire service culture, foster resilience, and contribute to mental wellness. Considering that social support has been found in previous research to be a pivotal contributor to mental wellness,

² The interview for ID#10 was not completed due to cancellation.

this research focused on understanding the leadership practices that fostered psychological safety and, therefore, positively impacted heart rate variability. Each participant was asked eight questions about positive leadership, psychological safety, and belonging to determine leadership practices that would constitute better practices and should be applied nationally to fire service leadership.

During the interviews, notes were taken regarding key themes and commonalities. After completing all 12 interviews, each interview was transcribed, data was winnowed, and common themes were listed. The participants were asked eight research questions without leading statements, and each was encouraged to be as detailed as possible in responses related to personal experiences with the leadership behaviors and the concepts explored. Five themes surfaced from these questions and the participant responses that form the conclusion for this research. The themes included servant leadership, mission-driven culture, modeling positive behaviors, overcommunicating, and caring about your team. Many of the themes that emerged from the research and follow-up questions were not exclusive to just one interview question but were found to overlap with several of the interview questions or in part. Themes discovered within each interview question are described in the following table.

<i>How do you establish a positive culture in your organization?</i>	11 out of 12 participants expressed that a positive culture starts with them, the leader. 1/ It starts with me. Through giving of myself, I am able to set the tone of a positive culture. 3/ I am going to treat you the same way I would my family. When you don't treat everybody with respect, it hurts the culture while hurting others. You create a positive culture by modeling positivity. 4/ Recognize as a leader, you must set the example. You create a positive culture by being positive.
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	5/ Go out there and do it. You have to be reliable. I am a perpetual optimist, because like Colin Powell said, 'it's a force multiplier'. And I know that being an optimist will move my goals forward and contribute to the positive culture. 6/ I avoid negativity. I understand what an incredible impact I have as a Battalion Chief. now, when I go out, I don't participate in throwing each other under the bus, I can redirect the conversation, subtlety. If I have an officer who is not building a positive culture, then I will work with them. 9/ First step is to have an optimistic view, from the top. It's your behavior as a leader that trickles down. Good leaders at the top become insulators to the outside influences. 10/ I try to lead with love, and when I lead it is do unto others as they would to me. 11/ You have to care about people, learn who everybody is as an individual and you have to want to see their success. Knowing your people and caring about them builds trust. You let them see how much you care in everything you do. 12/ When you create safety, people can be their authentic selves. Creating safety inside the organization requires that we consistently display respect both internally and externally.
<i>How is humility viewed within your organization or for you personally?</i>	12 out of 12 leaders interviewed expressed that humility is a positive trait, and over half the respondents reported that humility must start with leadership. 1/ It must be modeled and nurtured within an organization. It's not intuitive. It has to come from age and experience. 2/ Humility is necessary, welcomed, and creates an inverse reaction. The more I demonstrated humility, the more they did it too. 3/ Nobody knows everything. I know I will screw up, and as a leader, I must model the behavior I expect. When I tell people I don't know something, they become empowered to help me and help our organization. By asking for help, people feel included, respect you more, and know it's ok to do the same.

	4/ Leaders with humility become more relatable and approachable. 5/ We lead people, so we must create a culture of humility. When we do this, it permeates throughout everything we do. As leaders, we must show that we are willing to course correct. It's not about us or our ego, it's about learning. The minute others know this, they will become more decisive, knowing that even wrong decisions won't have them crucified. 6/ If we don't have humility as bosses, we are going to scare our people, and it's going to become a dictatorship where our people will not make decisions because they're afraid of getting in trouble. 7/ Humility must be displayed from the top. And when awarding outcomes, make sure to recognize all involved, not just the one individual. 8/ Like Chief Brunacini said, 'Egos Eat Brains.' As a chief, you have to create an openness to where people can tell you if you're wrong or making a mistake. 9/ When you make mistakes, take ownership, share with them, and fix it. Humility must be role modeled. 10/ We all have strengths and weaknesses that combined make a strength. It's ok to say, 'I don't know, can you help me?' As a department, we must know rank does not equate to knowledge. 11/ If you build a team where you are the dumbest person in the room and capitalize on people's talents, you will be more successful. 12/ Being humble means you create space for others to contribute and you move from 'I' to 'We,' where all feel valued, and are able to achieve our goals more effectively."
<i>What leadership styles dominate your leadership team?</i>	All respondents expressed constructs of servant leadership, while 9 of 12 shared situational leadership in addition. 2/ It's not about me. It doesn't have a name, but you know it when you see it. 3/ I try to lead completely by example. I mean that by every means I can think of. What I ask of you is what I will do myself. There is no favoritism. While I might veer out of my lane, I will stay on the highway and avoid the ditches.

	4/ In our organization, our leaders learn the styles based on our personalities and individual traits. Most people don't fit neatly into one box. However, when you lead with trust and understanding, your leadership style will create space for them to succeed, and they will do anything for you. 5/ 100% servant leadership. There is no other word for it. If they see a leader who is invested in what they are, then it will push them to keep doing right. 6/ You have to have a bucket of styles to create solutions for the individual you are working with. While overwhelmingly, servant leadership is effective, you must know when to turn it off and on. 7/ A leadership style that supports our move towards a mission driven culture. 8/ Leadership that has the ability to leverage the talent of everybody in the organization. 9/ Democratic style where I seek the input and perspective of all levels before making a decision, unless in an emergency scenario, then I have to be autocratic. 10/ Servant leadership, transformational, and lead with love. 11/ A spirit of cooperation and unity on purpose. 12/ Inclusive and trust based.
<i>How is incivility managed in your organization?</i>	2 of 12 respondents misunderstood the word incivility. Their responses were removed. 10/10 responded that they would act directly. In addition, 5/10 shared the importance of finding the root causes of negative behaviors. 2/ This behavior is not okay anymore, but it doesn't change overnight. It's one person, one behavior at a time that leads to change. As a leader, you are direct, and you must let your people know their behavior is not acceptable. 3/ You have to have zero tolerance. People engage in workplace incivility when there are no consequences. 4/ We tend to struggle with this when we fail to find the root cause. We have to have the courage to search for root causes and

	find solutions. As the boss goes, so does the company. At the end of the day, leadership always matters, and our words matter. 5/ While the organization does not tolerate incivility, we are human beings who live with each other for 24 hours and things happen. We have to work to invest in helping to find the root causes and help people feel heard, and help people find solutions. 6/ There are two things in my battalion that I don't tolerate: being an asshole and drama. If I know about it I will extinguish it by addressing it immediately. You have to treat people with respect. I will give people a mulligan before I call them in to address it formally. 7/ This behavior is a reflection of the accepted culture of an organization. I have established expectations from the top that we will not accept this behavior, and it is made clear that we have internal customers as well as external customers. 8/ While finding the root cause is critical, I have found that patterns of workplace incivility occur because they have never been addressed. You must be direct and address this sort of behavior. 9/ Leadership fails when incivility is allowed. I address this directly and expect the same from others. 10/ You have to set a foundation for what you will not tolerate or allow, because as Chief Tiffany Wesley teaches, 'what you permit, you promote, what you promote becomes your standard.' When you set the standard, you will get buy in. The little things go a long way, and people realize that as a leader you have to model teamwork and respect. 12/ My experience listening to fire chiefs across the country has taught me that they just haven't made the paper yet. This behavior must be addressed by the individual witnessing it. We have officer development academies that focus on our values which include predictable discipline/reward. We spend a lot of time learning about root causes and alternative dispute resolution.
<i>How does your organization nurture psychological safety?</i>	9/12 respondents referred to their response for humility, sharing that the processes are similar. 1/ By creating environments that make it ok to make mistakes. In addition, I try to create an environment where people feel

	comfortable coming to anybody on the team and asking for help or admitting to making mistakes. 2/ It has to be embedded into everything we do, so when necessary, people have the courage to speak up. 3/ Same principle as my response to humility. People must be able to speak up, know there are no stupid questions, and understand a team can only grow when psychological safety is present. As leaders, we encourage speaking up by demonstrating gratitude when people ask questions or admit to making mistakes. 4/ To get others to admit their mistakes, I lead with my own. During after action reviews (AARs), I start by letting people know what I wish I had done better or what I wish I knew before. 5/ It comes from the culture you build through trust. And while the definition of culture has ebbed and flowed, you know a good culture when you see it. A good culture is similar to the 1964 Supreme Court definition of porn, while not always easy to define, "I know it when I see it." 6/ This is challenging and requires building trust one person at a time. Effective communication and crucial conversations are the key to creating psychological safety. 7/ Psychological safety is created through a mission driven culture. When people in the organization act in the best interest of the organization by speaking up and asking questions without shame, you have an environment of learning. 8/ When you know your bosses are competent and will take care of you, you feel that you are a part of a tribe, and you can show up, be yourself and feel supported. 9/ I am the first to admit that I will make a mistake because it's human nature. But when I do, I am humble enough to sit back, own it, learn from it, fix it, and then share what I learned. 11/ I always went first in training to show vulnerability, and during our AARs, we wouldn't attack decisions but rather sought to learn why decisions were made to help discover root causes and solutions.
<i>Describe the culture of trust within your organization.</i>	12 of 12 respondents discussed not only the value of trust, but also the requirement of leaders to extend trust, first. In addition, five respondents mentioned the necessity of value-based decision

	making over a culture of compliance. Finally, half of the responses mentioned that trust is a practice rather than a destination. 3/ I try to make sure people trust me, and I start by showing them a conditional trust, or that I trust them, first. For me, trust comes from my example and my behaviors. On the fireground, trust comes from my level of competence and consistency. Trust is a two-way street. I foster trust through my behaviors and by demonstrating understanding when mistakes are made. Trust is then straightened brick by brick through our behaviors, and bricks are added through my example, so that trust continues to grow. 5/ Trust is a process that you must always care for and reinforce by your words and actions. Trust is a practice. When you get to these positions (certifications and degrees don't matter). It's whether they can trust you. That is crucial and leads to productivity. 6/ You build trust through the traits you exhibit as a human being. These traits are displayed through face-to-face communication. When they see that you are a good person who is reliable, they trust you, and that leads to respect. If your people trust and respect you, they can't have enough facetime with you. If they don't trust or respect you, they could care less if they ever see you. Low trust leads to toxic environments. It's a grind. It's not easy. It's work, day in and day out. Leadership is not a destination that you will ever reach, it's a grind every single day, with how you show up every single day. You have to just be the best person you can be every single day. 7/ Spirit of trust comes from reliability. And over time reliability creates trust. While this takes time to build, it is easily lost. Personally, I recognized they were fine without me, so to build trust I had to show up, lean in, and listen to them. 8/ By your actions following your words. If you say inclusion is important, but you shun people, nobody will trust you. It's in everything you do. Credibility matters, so our leaders must consistently lead by example. People watch, so you have to consistently demonstrate trustworthiness. 9/ Integrity is everything. It must be seen in your actions, you must live it, and you must know that you will falter, but we have to own our mistakes. While there is zero tolerance for intentional breaches of trust, sometimes people unintentionally break trust, and this becomes a learning moment. When people know they will be held
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	accountable, and where the line is, they generally won't breach trust. But a lack of follow through causes you to lose trust. 11/ You have to care and you have to be competent in order to gain trust. You have to be competent in your skillset in your position to be able to lead them with any kind of trust. 12/ A healthy organization is one that trusts each other and trusts the leadership. I am not checking boxes or making decisions for accreditation. An equitable and inclusive culture will breed trust, and trust breeds equity and inclusivity. We have decentralized and created an organization based on small units with decentralized command. Climate of face-to-face conversations goes a long way for building trust. I encourage small unit decision making.
<i>What level of gossip exists in your department? How do you manage gossip?</i>	This question was broken down into individual level gossip and organizational gossip. 11 of 12 respondents expressed that they rarely experience individual gossip because they refuse to express individual gossip. 100% of respondents indicated that organizational gossip is managed through transparent and deliberate communication. 1/ I don't like talking about people who are not there to tell their side of their story or defend themselves. 2/ As a leader, I recognize it's a concern, and it's addressed through one-on-one counseling and explanation of expectations. Basically, "thou shall not gossip." People respond well when given expectations and are held accountable. I use what I call the Dr. Brene Brown Test: 'Is it true, is it helpful, is it kind.' 3/ It's been my experience that when people don't have all the information, they make up stuff. This is why transparency and communication are important. When I hear it, I ask for the source, and if they can't give the source, I shut it down. 5/ Gossip comes from not having all the facts. The way we address it is #1 transparency and #2 communication. 6/ There is a lot that quiets when I walk into the room, because they know I don't like to hear it. They know I will get up and walk away. One of my challenges is to get the 90% to walk away from the 10% that waste time on gossip.

	7/ The root of organizational gossip comes from trying to know what's going on. In terms of talking about people, it can be damaging. Especially when we spread rumors about people. For me, I learned that sometimes, the best thing you can do to dispel rumors is to go to the source and just be transparent. 8/ You defeat gossip by being conversational and intentional. Transparency in communication is key. In times of critical change, be deliberate. Rumor mongering is like an Olympic sport for the fire service. A steady stream of open communication is the way to nip it in the bud. In terms of gossip about people, be direct and ask questions. Mean people suck, they aren't fun to be around, they are miserable humans. 11/ Good communication from the leadership can nip most firehouse gossip. When you allow it, it shows you accept it. You are what you accept and have endorsed as a leader. 12/ The more you communicate, the less there will be gossip. You cannot communicate too much. We have a quarterly newsletter, health and wellness newsletter, peer support newsletter, BC roundtable, senior leadership meetings, fire chief's officer council, Fire Chiefs equity council, monthly station visits, we do podcasts, of course there are General orders, SOP's, information bulletins, social media, daily information, a master calendar. We have about a dozen things we use for information sharing. When I visit, I ask if there are any rumors that the rumor dragons need to slay. Back to trust and accountably, there has yet to be a rumor or question that doesn't get answered right there. All meeting minutes are posted to the department. The more you put out there, you can graft the increase in information and the decrease in gossip. You can't overcommunicate.
<i>Can you describe your experience with belonging cues and their impact on your leadership?</i>	2/ Behavior is contagious. Saying thank you is easy and free. People remember how you make them feel. It has to be a part of everything you do. It has to be woven in the fabric of yourself. 3/ I try to express gratitude and give praise when it's called for. People have to feel wanted and needed, and they have to feel like they're doing a great job. 4/ If you care for your people, I believe it shows. You have to be competent but when you show people you care, and you engage, they will do anything for you. It's simply doing the right thing by your people and valuing them. While I don't recognize that I do these things, I have had people tell me that I do. While I don't make an effort to do these things, I am mindful of behaviors. For

	example, I don't ever yell at people at work. If you're mindful and truly love your team it shows in your words and actions with your team. I don't micromanage my team, but I let them know they have skin in the game, and they are valued. Leadership matters and bleeds into everything that we do. As the leader goes, so does our organization. Because so many people are chameleons, they will rise or fall to the level of the leader. The higher your standard the higher your bar, the better they will perform. As long as you show them that you care for them and that you love them, they will do anything for you. 5/ First, listen to them and learn from them. If you give someone your time, that means so much, especially when you're in a higher rank and you show them that you will make time for them. I have seen how valuable a sense of humor is. Never forget what each position was like. I always make a point to thank my firefighters. It's really important that they hear a sincere "thank you" and it's reinforced with face-to-face gratitude. 6/ It's about connecting with people on a personal level by communicating to connect. This is why active listening is so critical. High performance comes from synergistic goals. Everything we do requires team. Yet there is no team training in the fire service. Yet performance comes from high performance teams, which comes from communication, listening to people and getting to know them. 8/ Please and thank you is the currency of leadership otherwise you have malicious obedience and that's not productive. 9/ You see a lot of these cues in the successful small teams. These cues have to be led by a leader. Likeminded people are attracted to those just like them. Humor is a big part of making it fun, and that makes you want to be in these groups and keep showing up. High expectations, mutual failures, and understanding the importance of getting better from our failures. And understanding that learning from failure will make you better, and it's a good thing. 11/ First you must care. Then, you must create that subculture, of 'earned not given' in your firehouse. A lot of my behaviors are natural from deep desire to care about people and having ownership of my work. 12/ I learned the value of belonging cues from my time in the marine corps. I learned the value of small unit leadership,
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	decentralized command, and the behaviors that made us effective such as energy, close physical proximity, eye to eye contact. We had to know each other's job. You must listen really well. We used humor quite a bit. Belonging is everything. Belonging is building the intimacy of the small group where we will fight together, sacrifice for each other, come back high five, cook a meal, and shoot the breeze.
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Table 2: Themes Related to Individual Research Questions

The findings were consistent with the previously discussed research regarding the impact of leadership behaviors on wellness and culture. In addition to the themes discovered and discussed regarding individual research questions, the following themes were identified: servant leadership, mission-driven culture, modeling positive behaviors, transparent communication, and caring about your team. In addition to the consistency of response to the interview questions, the themes that emerged serve to demonstrate leadership factors that lead to a healthy culture in the fire service. Each of these themes further supports psychological safety, a variable known for its ability to increase an individual's heart rate variability (HRV), which is associated with improved resilience and decreased instances of PTSD (Munsey, 2018; van der Kolk, 2014; Porges, 2022).

Theme 1: Servant Leadership.

Servant leadership along with any style of leadership that includes the components of building community and empowerment, was previously found in the literature to improve mental wellness (Daniels et al., 2023). All 12 leaders interviewed discussed the importance of servant leadership for creating a positive organizational culture. Participant #1 shared that setting the tone for a positive culture is built from the principles of servant leadership. Participant #10 explained that when you “care about your people, love your people, and practice servant leadership, you create a positive environment.” Participant #11 described his effort to get to know his people so that he could better serve them. For example, he kept a book with a picture of

every battalion member, and on their specific page, he would keep notes regarding their goals and wants so that when opportunities arose that matched their needs, he was better prepared to serve them. When discussing personal leadership styles, participant #5 shared, “100% servant leadership; there is no other word for it. Everything we do is focused on the citizens and our people. If they see the leader is invested in what they are, then it will push them to keep doing right”. While participant #6 did not specifically name servant leadership, this participant shared that “you have to have a bucket of leadership styles to create solutions for the individual you are working with.” Participant #12 described what he termed, “Inclusive Leadership” by sharing that leaders must operate with an equity and inclusive centered focus and ask themselves, “what makes people feel included in organizations and what makes people valued?” While this style was not termed servant leadership, his description recounted many servant leadership traits, focusing on creating a sense of belonging for each member of his organization. As illustrated by participant #12, inclusive leaders share a cluster of six traits:

- Visible commitment: Articulating an authentic commitment to diversity, challenging the status quo, holding others accountable, and making diversity and inclusion a personal priority.
- Humility: Being modest about capabilities, admitting mistakes, and creating the space for others to contribute.
- Awareness of bias: Showing awareness of personal blind spots and flaws in the system.
- Curiosity about others: Demonstrating an open mindset and deep curiosity about others, listening without judgment, and seeking empathy to understand those around them.
- Cultural intelligence: Being Attentive to others' cultures and adapting as required.

- Effective collaboration: Empowering others, paying attention to diversity of thinking and psychological safety, and focusing on team cohesion.

Theme 2: Mission Driven Culture

The theme “Mission-Driven Culture” (MDC) produces more favorable outcomes for organizations by focusing more on organizational values, principles, and mission instead of checking the box for strict policy adherence. According to Chief Kristopher Blume,

This leadership strategy differs from traditional emergency management strategies in which subordinates must obey commands and follow strict policies/procedures or face consequences despite the potential for improved outcomes obtained by deviating from the rules. Therefore, Mission Driven Culture (MDC) focuses on each mission and allows subordinates more freedom to make life-or-death decisions in face of unforeseen and unfamiliar circumstances (Blume, 2022).

This author's first experience learning about a Mission-Driven Culture came from participant #7. He shared, “People need to move forward without fear of reprisal. A mission-driven culture disrupts the hierarchy by allowing all parts to make critical life and death decisions based on individual understanding and commitment to the mission, visions, and organizational values.” He went on to explain that because firefighters make decisions in compressed time with limited information, “we as leaders must focus on reviewing the task, the purpose, and the end state when a decision is made.” Leaders must ask, “what are we doing, why are we doing it, and what is the desired outcome.” An example shared was a story of an officer who decided to damage a community’s security gate to reach a cardiac arrest victim. At the time, the organization had a strict policy regarding apparatus accidents, specifically striking stationary objects. However, reviewing the situation from the lens of a mission-driven culture, the task (to damage the gate) for the purpose (to reach a cardiac arrest victim) created conditions for the end state (a successful resuscitation). Participant #7 shared that under a policy-driven culture, the

decision to damage the gate would have been punished; however, under the mission-driven culture, “we reward this decision by understanding the task, purpose, and end state.” Based on the MDC’s focus on mission over fear, the application of an MDC would support resilience based on the polyvagal theory’s assertion that resilience requires an active social engagement system that moves an individual out of self-oriented focus of threat and into an other-oriented focus of safety, sociality, and compassion (Porges, 2022).

Participant #10 brought up the value of having a mission-driven culture when discussing the role of trust in their organization. This participant highlights the essence of trust within an organization, emphasizing the importance of a mission-driven culture and the assurance that members will prioritize taking care of the families who reside within their district. Participant #10 shared that “if people have not bought into the mission, slamming policy down their throat won’t mean a thing. Because while it’s impossible to remember every policy, you can remember the mission and act decisively based on your understanding of the mission.” While participant #12 did not specifically use the term mission-driven culture, he explained that “a healthy organization trusts each other and the leadership, and I am not checking boxes for accreditation. I am leading my organization through equity and inclusivity which breeds trust.” Participant #4 went so far as to explain that “as a chief, you should push back on policies. You give up hard-earned capital with your people when you enforce ridiculous policies.” He continued, “Be careful about enforcing policies to the letter of the law. I will not give up my hard-earned credibility and the trust I have earned with my people on nonsense. Sound practices have sound reasoning. I can justify bad policies if they make sense from a safety standpoint. But the relationships you have with your subordinates are so critically important in the fire service.” He explained that while he works hard to follow the rules and policies, he does not hesitate to let his

people know that if it is a nonsense policy, “we have to play by the rules, but I am trying to change this policy.”

Theme 3: Modeling Positive Behaviors

The leaders interviewed emphasized the significance of leading by example, highlighting the importance of modeling behaviors desired within their team and the organization. It was powerful to learn that none of the 12 leaders participated in gossip, so none of the 12 found themselves exposed to gossip. When discussing positive culture, participant #9 explained, “It’s your behavior as a leader that trickles down.” When talking about humility, participant #1 expressed that “it must be modeled and nurtured within an organization. Because it is not intuitive, it must come from age, experience, and modeling.” Participant #10 shared that “The little things go a long way; you as a leader have to model teamwork and respect because when you set the standard, you will get buy-in.” In discussing creating psychological safety, participant #9 shared,

“When I make a mistake, I will be humble enough to own it, learn from it, share it, and fix it. This is through example. I look for opportunities where I did not make the best decision to say, you know what guys, I screwed up, let's talk about what will work better. This modeling behavior helps people drop their guard so they can be open to making both decisions and mistakes.”

Regarding gossip, participant #3 shared, “gossip does not build good teams. It goes back to leading by example; if they see that I feed into it, it will continue to grow.” Finally, when asked about trust, participant #9 explained that leaders must consistently lead by example. This means actions must match and follow words. For example, “if you say inclusion is important, but you shun people, nobody will trust you.”

Theme 4: Transparent Communication

Previous literature identified gossip as being a key feature of unhealthy cultures with low levels of psychological safety. In this study, each participant discussed the importance of communication to eliminate gossip, create a vision for the future, express expectations, and be more inclusive. Several leaders prioritized candor and communication and discussed the value of utilizing various means to ensure that messaging reached all members. Respondent #9 shared, “we don’t have a lot of problems with gossip because we schedule regular meetings with our officers and try to be proactive in our communication.” Respondent #8 explained that leaders must be conversational and intentional, “transparency in communication is key; in times of change, you must be deliberate with your messaging.”

Four respondents shared that their leadership utilizes a variety of means to deliver a steady stream of open communication from meeting notes, social media, face-to-face meetings, newsletters, internet platforms, and a variety of committees. When discussing trust, respondent #4 explained the importance of utilizing face-to-face communication to exhibit the traits that build trust. She explained, “when they see that you are a good person who is reliable, they trust you, and that leads to respect. Interpersonal relationships are critical and require both verbal and nonverbal communication.” She shared, “leadership is a grind; it’s not easy. It’s work. Day in and day out. Leadership is not a destination you will ever reach; it’s a grind every day, with how you show up every single day.” Communication is a crucial feature of showing up. The commitment of each leader interviewed to discuss the importance of communication was consistent with findings in the literature review, that modeling positive leadership behaviors encouraging open communication and engagement is key to fostering trust, increased engagement, and reduced turnover (Singh et al., 2023).

Theme 5: Caring about Your Team

Four of the respondents expressed love for their members, while five of the respondents mentioned caring for their team. Eight out of twelve respondents expressed a love for their members or the value of caring for them. Two of the twelve respondents expressed love and the need to care for their members. When discussing leadership styles, respondent #10 shared, “I try to lead with love, and when I lead, it is to do unto others as they would to me. If you love your people, it makes a better work environment, and while everyone won't always agree, we can care about them.” When discussing accountability, respondent #6 said, “When you have issues that require addressing, you have to have crucial conversations. At times, these appear harsh, but they are out of love.” Respondent #4 shared, “If you’re mindful and truly love your team it shows in your words and actions with your team. The higher your standard, the higher your bar, the better they will perform as long as you show them that you care for them and that you love them, they will do anything for you.” When asked about the value of belonging cues and those utilized, respondent #1 shared, “I let them know I love them. And this creates emotional safety, which to me is very similar to psychological safety.”

There were 35 expressions of caring throughout the 12 interviews, and each respondent who discussed care explained that caring about your members was a fundamental requirement for developing a positive culture. Respondent #1 succinctly asserted, “you have to care about your people, learn who everybody is as an individual, and you have to want to see their success.” Respondent #2 explained that humility starts with genuine care and concern for others and is then reciprocated. Respondent #9 shared that during difficult conversations, sometimes he must draw information out of people by letting them know that he cares about them as a person. This respondent found he could get more commitment and ownership from people who felt genuinely

cared for. Respondent #4 and respondent #11 expressed that while they don't deliberately focus on individual belonging cues, through genuinely caring about people, these cues naturally emerge. These respondents expressed a deep desire to care about leadership, translating into stronger relationships and higher performance.

Summary

Thirteen fire service leaders from across the United States were purposely selected to be interviewed based on their reputation for developing a positive organizational culture. These fire service leaders were nominated by a cohort of fire service thought leaders. As a result of the research study, several themes emerged as key findings contributing to a positive fire service culture. The interview questions were deliberately chosen to seek specific and in-depth answers related to leadership behaviors contributing to a positive fire service culture. Additional themes were discovered during the interviews, including the value of servant leadership, mission-driven culture, modeling positive behaviors, transparent communication, and caring about your team. In addition, all eight interview questions yielded a consensus of responses consistent with the previous research displaying the importance of leader humility, trust, psychological safety, and belonging cues for developing a positive culture in the fire service. In chapter 5, the themes and responses will be used to offer conclusions about how these responses answer the research question.

CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS

Summary of the Results

This research evaluated the impact of leadership behaviors on the mental wellness of members by establishing a positive culture. The problem identified was that leadership practices that contribute to a positive culture for the fire service have not yet been determined. Firefighters experience elevated rates of certain mental health disorders that are associated with a wide variety of both personal and professional factors. Historically, research on first responder mental wellness focused primarily on adverse outcomes and limited solutions to post-trauma psychological support. In addition, the literature review identified organizational factors that negatively impact first responder mental health, such as workplace incivility, negative workplace culture, sleep disruption, trauma exposure, and lack of a supportive community. The literature review found a gap in empirical evidence on the effectiveness of the prevention of mental health disorders for firefighters. Although the value of community on mental wellness and resilience is well established, a gap exists in research surrounding those fire service leadership behaviors that leverage community as a protective factor.

This research focused primarily on upstream strategies for supporting mental wellness by answering the research question, “what leadership factors lead to a healthy culture in the fire service.” As a result, this seminal research on positive leadership factors discovered practices that can be implemented by fire service leadership to support a positive culture and potentially produce a more resilient workforce. The significant themes identified by the participants were prioritizing psychological safety, a servant leadership style, modeling positivity, humility, deliberate expressions of belonging cues, addressing incivility, transparent communication, and supporting a mission-driven culture.

Psychological safety is a critical component of positive leadership because of its direct impact on heart rate variability and resilience. Previous research determined that humans should receive belonging cues from others, especially high-ups, to feel psychologically safe.

Psychological safety is nurtured through environments that allow mistakes, encourage speaking up with concerns, and allow questions from all levels – all without fear of negative consequences. For firefighters, one of the best ways leaders can model these behaviors and nurture psychological safety is during after-action reviews (AARs). Several leaders interviewed during the research study highlighted the importance of AARs as a tool for modeling humility, admitting what was not known, learning from experiences, and demonstrating the value of asking questions. By engaging in AARs, these leaders create a culture of continuous improvement, where reflection and open dialogue are encouraged. In his interview³, Assistant Chief Dan Shaw, Fairfax County Fire Department, explained that during AARs, he would always lead with his mistakes and went so far as to share that the four most important words a leader could say are, “I screwed that up” (January 18th, 2024). This is because mistakes become great learning opportunities, especially when the focus is on understanding why certain decisions are made. When establishing psychological safety, leaders must recognize that accountability and competence go hand in hand with learning from mistakes. Psychological safety does not replace accountability but rather, supports accountability and high performance by encouraging decisiveness and continuous learning. This underscores the critical importance of candor in organizational culture. Leaders at all levels should prioritize asking questions with the intent of gaining understanding.

³ All interviewees consented to sharing helpful quotes and being identified.

The findings from this study are consistent with other research, which indicates that leadership styles focusing on building community and empowering employees are most effective for developing a positive culture. These leaders emphasized the value of active listening, candor, authenticity, expressions of appreciation, delegation, and mentorship rather than self-interest to increase productivity and improve mental wellness (Daniel et al., 2023). No matter the leadership style, once one is entrusted with leadership, it is no longer about them, but the people serve within the organization. Leaders increase effectiveness through leading by example, being inclusive, and extending trust. FDNY Deputy Chief Frank Leeb says, “when you lead with trust and understanding, your leadership style will create space for them to succeed, and they will do anything for you” (January 16th, 2024). Leaders should indeed possess a diverse toolbox of individualized styles to effectively support the individuals they serve. Furthermore, leaders best foster a culture of trust by extending trust first and consistency in words and actions.

The importance of modeling positive behaviors to develop a positive culture cannot be overstated. Humans emulate what is observed and heard through mirror neurons; because of their leadership roles, those in leadership positions are uniquely positioned to develop a positive culture through modeling positive behaviors. This is why leadership matters and why those who take on the responsibility of leadership should focus on modeling valued behaviors. These behaviors include reliability, actions matching words, caring about people, and avoiding negativity and gossip. Furthermore, leaders should express care through verbal and nonverbal behaviors. Each positive leadership trait identified and discussed was simple and common sense, yet not always practiced. This study suggests that positive leaders are authentic, communicate with candor, and have the courage to lead through love and caring. Leaders should express care by ensuring their actions consistently match their words. Many of these behaviors appeared to

come naturally to the leaders interviewed; however, the line of questioning revealed that these behaviors became natural after consistent practice.

While competence is crucial for effective leadership, it's equally important for leaders to acknowledge that they don't need to have all the answers or be the best at everything. Humble leaders empower members to step up and contribute to the team by creating necessary space. Through humility, leaders also signal that risk-taking and mistakes are acceptable, especially when one is open to learning and growing. As shared by Chief Preston Gaster,

“Nobody knows everything. I know I will screw up, and as a leader, I must model the behavior I expect. When I tell people I don’t know something, they become empowered to help me and help our organization. By asking for help, people feel included, respect you more, and know it’s ok to do the same” (January 15th, 2024).

Beyond being a positive trait of leadership, the findings from this study uncovered humility’s relationship with encouraging decisiveness. When leaders model humility and a growth mindset, members of the organization will be less fearful of being chastised for making the wrong decision. By removing fear from decision-making, humility supports heart rate variability and homeostasis and limits unnecessary time in fight of flight. When first responders redirect focus away from perceived threats originating from a negative work environment, they can effectively downregulate and transition into a state of homeostasis. Individuals are better positioned to cultivate growth, empathy, and innovation in this balanced state. These attributes support high performance especially when they coexist with a growth and a learning culture. When leaders model humility and a growth mindset, members of the organization can be less fearful of being punished for making the wrong decision.

Ensuring members receive a continuous flow of belonging cues remained a dominant theme throughout this research. Many participants intuitively delivered these cues as byproducts

of expressions of caring. And, while many belonging cues are intuitive, some require practice. Humor and active listening are critical to positive fire service leadership, but both require more awareness and practice than the others. Humor supports high energy and processing of unimaginable traumas, but, at times, humor is suppressed as leaders rise through the ranks. Interestingly, each leader interviewed for this research maintained humor and expressed its value in creating connection and a positive environment for the organization. Active listening is another belonging cue that requires consistent effort and practice. However, the benefit of active listening in establishing a healthy culture is tremendous. Leaders who demonstrate active listening gift subordinates the ability to contribute and share experiences. This is why coupling active listening with candor is so essential. Leaders can use candor to learn about their members and the decision-making processes of their members.

Another requirement of a healthy fire service culture is ensuring workplace incivility is consistently addressed. Workplace incivility is a significant issue affecting the health and wellness of both victims and witnesses through epigenetic changes. Although workplace incivility is a considerable concern for the fire service, each of the leaders interviewed addressed it by speaking up and having zero tolerance for the behaviors that contribute to incivility. Zero tolerance does not equate to severe punishment; it can mean taking time to uncover the root cause of the behavior. It is critically important that all levels of leadership are trained and empowered to address workplace incivility by speaking up and ensuring a standard of civility. Cultivating an environment where mistakes are not disproportionately punished but instead open doors for understanding and learning is crucial. The interviews found that many leaders overlook incivility because these leaders fear ruining an individual's livelihood over a mistake. When zero tolerance for incivility is viewed as always yielding severe punishment, it can prevent some

leaders from taking appropriate action. A key finding in addressing incivility was ensuring workplaces nurtured authenticity and inclusivity early as relationships form. When the workplace is too sterile, people develop superficial relationships, and a lack of trust that can lead to incivility.

If one bit of secret sauce was identified from this research study for creating a healthy workplace culture, it is the value of transparent communication at all levels. The interviewees emphasized that effective communication is paramount for leaders who recognize the value of keeping all members informed. While gossip was identified as a critical feature of unhealthy organizations, those interviewed for this research reported that gossip was easily eliminated through transparent communication. Intentional and conversational leaders can deliver expectations, communicate changes, and help ensure the delivery of consistent messaging across the agency. Moreover, guaranteeing multiple avenues of information distribution serves to share both information and valuable resources for members in need, such as peer support and other wellness resources. While it is easy to get caught-up in gossip, it is essential to remember how harmful gossip is, ensure leaders avoid it, and shut it down when necessary. This is done by only talking about people who are present to defend themselves, and ensuring our communication is helpful. One interviewee shared a test for gossip by quoting Dr. Brené Brown, “is it true? Is it helpful? Is it kind” (Michael Warmuth, January 9th, 2024)?

All the findings from this research revolve around the concept of supporting a mission-driven culture. In mission-driven cultures, the goal is to support sound decision-making by eliminating a requirement for strict policy adherence. Embracing a mission-driven culture over strict policy adherence supports decisiveness when employees are faced with critical and time-compressed decisions. Employees are evaluated based on how intent aligns with the

organization's mission. This means, at times, leaders must have the courage to assess the time-compressed nature of decision-making and support decisiveness. Leaders further improve member engagement by replacing fear of punitive action with supporting decisiveness.

Conclusions

This research supports the conclusion that leadership has the power to create a healthy fire department culture that supports resilience. “As William Penn noted, buildings that lie so exposed to the weather need a good foundation” (Holiday, 2016, pg.6). First responders are exposed to tremendous stressors, including familial disruption, sleep disturbance, workplace incivility, and trauma exposure (both acute and chronic) all of which are interlaced with stressors from home. As a result, first responders experience elevated rates of mental health disorders. Results from this study point to the potential of leadership to positively impact these rates and prevent mental health disorders. The research suggests that leaders who are deliberate in their communication and behaviors may serve as protective factors that predict post-traumatic growth and greater resilience. The opposite is also true; negative leadership behaviors can erode our members' resilience. Leaders should be inclusive and ensure their behaviors support all members, not just those in the majority.

The research indicated the value of deliberate and caring leadership behaviors in producing a healthy workplace culture. While the research uncovered numerous positive leadership traits and practices, it also found that for several leaders interviewed, exposure to positive behaviors began early in their careers. Some shared that they modeled behaviors based on the positive leaders who mentored them, while others had to seek out positive mentors to escape negative environments. Regardless, positive leadership behaviors should start early in a career. In her interview, Dr. Candace Ashby shared, “I was a part of the negative culture for

years, the bottom 10%, where you stab others in the back, sit around and blame administration, but now I have matured a lot, and recognize what an incredible impact I have” (January 19th, 2024).

Leaders have an incredible influence on workplace culture and, as a result, the wellness and resiliency of members within the organization. However, leadership requires a daily practice of modeling positive behaviors and focusing on serving and empowering all members of the organization. While this research discussed numerous positive leadership behaviors, each leader interviewed cultivated their style based on a foundation of caring, empowerment, humility, candor, and service to others. As a practice, leadership requires showing up every single day understanding there is no destination, but rather consistent work to support all organization members. Fire service members who feel supported and connected within the organization are better equipped to cultivate resilience and experience post-traumatic growth. While there is no way to prevent the exposure to traumas that firefighters will face, our organizations have the power to cultivate environments that bolster resilience through caring leadership.

Limitations

This study contained several limitations, primarily due to the low sample size inherent with qualitative research. While the 12 leaders interviewed closely mirrored the fire service, the sample size is not representative of the entire U.S. Fire Service. The research was also limited in that it specifically focused on thought leaders recognized for demonstrating positive leadership skills. Peer nomination was used to ensure a less biased sample than relying solely on identification by the author. Purposely selecting positive leaders identified desired positive leadership characteristics, but future research should focus on all types of leaders. A more

diverse sample of fire service leadership and comparison to the level of psychological safety, gossip, and rates of mental health disorders may produce different results.

In addition, the Heart Rate Variability (HRV) biomarker has been identified as a biomarker that measures resilience. Measuring HRV response to leadership practice would yield causal predictors of those leadership practices that influence culture and mental wellness.

Despite the limitations of this seminal research, the results are consistent with previous research from other fields and should be disseminated.

Implications and Recommendations to the Field

Results point to several recommendations for fire service organizations to support both a positive culture and the mental wellness of members. It is no longer acceptable to rely exclusively on postvention resources for members struggling while neglecting the contributing factors associated with leadership behaviors. Leadership matters. All fire service members are responsible for practicing behaviors that support a positive culture. The following recommendations from this research support the CPSE's recommendation for the fire service to provide an adaptable and innovative organizational environment focused on continuous improvement. These recommendations combat deeply engrained traditions that have been counter-intuitive to what is best for the long-term health of the fire service.

1. Organizations should nurture psychological safety by adopting a learning culture where members are encouraged to take risks, express ideas and concerns, speak up with questions, and admit mistakes without fear of negative consequences.
2. Organizations should adopt a mission-driven culture that encourages decisiveness that focuses on the end state of the mission instead of a policy-driven culture.

3. Organizations should prioritize consistent communication through various mediums to effectively reach and engage members. In times of change, leadership must be transparent and deliberate in communication.
4. Organizations should encourage caring within teams and ensure the environment does not become so sterile that authentic relationships are hindered. Leaders need to know that it is okay to both love their team members and express this love.
5. Organizations should offer regular and consistent training on leadership soft skills and the value of belonging cues to include active listening, a continuous flow of small attentive courtesies, high levels of mixing, few interruptions, lots of questions, and humor.
6. There shall be zero tolerance for workplace incivility, and members at all levels must be encouraged to speak up. Organizations shall implement training on addressing incivility and bystander intervention. Leaders should be trained in identifying and addressing root causes while understanding that zero tolerance for the behavior may or may not equate to severe consequences. The focus shall be on behavior change and learning as opposed to punishment.
7. Negative gossip about people should be discouraged. Members should be aware that speaking harmfully about others or sharing information they wouldn't express in person is unacceptable behavior.
8. Leaders should foster an inclusive environment for all organization members by ensuring opportunities for growth, objective and transparent promotional opportunities, and a clear expectation that organizational leaders are allies to all.

9. Leaders should demonstrate a visible commitment to developing a positive culture by ensuring authentic and reliable practices. Leaders should consistently model positive behaviors.
10. Leaders shall foster trust by extending trust, modeling reliability, and speaking with candor.
11. To create space for others to contribute, leaders should be humble about their capabilities and knowledge, admit mistakes, and commit to learning from mistakes.
12. Leaders should demonstrate curiosity about others by speaking with candor and maintaining awareness of biases. This means asking questions, learning the why behind decisions, and practicing diligent active listening.
13. Leaders should adopt a flexible leadership style focusing on building community and empowering members. Fire service leaders should recognize when to shift into an autocratic leadership style.

The recommendations mentioned above should be implemented and practiced at all organizational levels to improve culture and ensure these behaviors become the norm. From day one of the academy, recruits should be immersed in an environment that prioritizes psychological safety, emphasizes their value, and encourages authenticity. This foundation ensures that recruits feel supported, respected, and empowered to bring their authentic selves to the organization. This change will take time for some organizations, but it must be viewed as a seedling. If the environment is cultivated, nurtured, and cared for, that seedling will eventually grow and prosper for the next generation. These behaviors cannot just be written down and taught in a single one-off leadership class. The behaviors must be practiced daily, and accountability must become the norm when organizations fall short.

Recommendations for Future Research

As with all research, the findings lead to several future empirical questions. Given the relationship previously established between heart rate variability and resilience through the polyvagal theory, one promising research approach should examine the relationship between leadership behaviors and HRV of both leaders and subordinates. In addition, future quantitative research can focus on the relationship between leadership behaviors, organizational factors, culture, and the individual mental wellness of leaders and personnel, taking into account structural variations. Many of the leaders interviewed for this study shared the perception that their positive leadership traits came naturally. As a result, future research should determine what qualities to seek in potential new applicants that support a healthy culture. While this research focused on positive leaders, future research should evaluate the impact of both positive and negative leaders to determine the effect of independent leadership behaviors on employee wellness and culture.

Conclusion

Tremendous attention has been brought to first responder mental health and, as a result, the fire service has responded by developing resources to support members in need. Today, it is well understood that leaders and organizations can implement strategies, early, that support wellness, thereby preventing the need for reactionary resources. As the late Archbishop Desmond Tutu has been quoted as saying, “there comes a point where we need to stop just pulling people out of the river. We need to go upstream and find out why they’re falling in” (Keller, 2020, pg. 1; Hanson, 2020, pg. 1). Increasing evidence on the relationship between social support and leadership point to these key factors in promoting mental wellness of members. This evidence should be leveraged to promote more resilient organizations and

members. Adequate support allows firefighters to better withstand the stressors inherent in the job. This preliminary evidence requires an increased focus on leadership behaviors as central to health promotion. This research uncovered several organizational and individual leadership practices that are perceived to contribute to a healthy culture in the fire service. Fire service members must be exposed to positive leaders who model psychological safety, humility, reliability, extending trust, servant leadership, transparent communication, caring, and the courage to speak up when incivility occurs. By modeling these behaviors, the fire service can increase the resilience of its members by supporting homeostatic functions. Given the elevated rates of mental health disorders among first responders, this seminal research will contribute to the field by providing organizations with the foundation necessary to promote a positive organizational culture that supports mental wellness.

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Appendix A

Interview Protocol and Questions

Following the standards set forth from the National Fire Academy and best practices provided by the National Commission for the Protection of Human subjects, the researcher will ask questions directly related to and documented for the specific research topic. Follow-up questions may be asked based on participants' responses and will be documented. Interviews are anticipated to be approximately 45 minutes in length, but not to exceed 90 minutes (about 1 and a half hours). Each interview will include that the participant states their name, confirm eligibility for this research project, and ensure they understand and have signed the consent form.

Appendix B

Consent Form for Interviewees

Consent Form

The influence of leadership on culture.

I am asking you to participate in a research study titled “The influence of Organizational Leadership on wellness”. I will describe this study to you and answer any of your questions. This study is being led by Dena Ali PI, National Fire Academy EFO candidate. The Faculty Advisor for this study is Dr. Elwin Jones, Department of Business, at Columbia Southern University.

What the study is about

The purpose of this research is to determine the leadership factors that lead to a healthy culture in the fire service. Research suggests that caring and deliberate leadership can improve firehouse culture and provide the positive social support necessary for improved wellness.

What we will ask you to do

I will ask you to consent to an interview consisting of seven open-ended questions concerning culture and psychological safety within your organization. The interview will be conducted and recorded over an internet platform. The interview should last 30-45 minutes.

Risks and discomforts

I do not foresee any risks. However, it is possible that the interview could expose poor leadership practices within your organization, creating emotional discomfort as you think through the responses.

Benefits

Your organization was recognized as being an organization with a positive culture. The benefits of this research to your organization are to highlight the positive leadership within your organization and for your culture to serve as a roadmap for other organizations.

Audio/Video Recording

Please consent below if you are willing to have this interview recorded. You can only participate in this study if you are willing for our interview to be recorded (so that I can transcribe the data).

Privacy/Confidentiality/Data Security

The survey will be completely anonymous, and all responses will be coded by letter with no identifying information. You will have an option for your responses to be shared later if you are interested in having your or your organizational practices highlighted.

Taking part is voluntary.

Your involvement is voluntary, and you may refuse to participate before the study begins, discontinue at any time, or skip any questions that may make you feel uncomfortable, with no penalty.

If you have questions, you can email me, Dena Ali, at dma1096@gmail.com or call (919)524-5394.

Question 1:

1. Name

First name

Last name

Question 2:

2. Email Address

Sample Terms — Enter your own terms here

By submitting this form, I understand that:

Question 3:

3. I consent to this interview

Yes, I consent.

Question 4:

4. Enter date

Date

Date

Question 5:

5. I consent to being recorded via ZOOM.

Yes, I consent.

Appendix C

Interview Questions

The following questions were asked to understand how a positive culture is established:

1. How do you establish a positive culture in your organization?
2. How is humility viewed within your organization or for you personally?
3. What leadership styles dominate your leadership team?
4. Workplace Incivility is defined as rudeness, exhaustion, violence, and poor attitude towards work. How is incivility managed in your organization?
5. Psychological Safety is a concept that allows people to focus on achieving shared goals rather than self-protection. In teams, Psychological Safety is defined as a shared belief held by team members that it is okay to take risks, express ideas and concerns, speak up with questions and admit mistakes – all without fear of negative consequences. How does your organization nurture psychological safety?
6. Describe the culture of trust within your organization.
7. What level of gossip exists in your department? How do you manage gossip?
8. Research on successful teams has identified the continuous flow of belonging cues as a secret ingredient to increasing psychological safety and improving team cohesion/performance. Belonging cues include the following behaviors: close physical proximity, profuse amounts of eye contact, lots of short energetic exchanges, intensive active listening with few interruptions and lots of questions, humor, and a continuous flow of small attentive courtesies such as “thank you’s.” Can you describe your experience with these cues and their impact on your leadership?

Appendix D

Key Definitions

Psychological Safety is a concept that allows people to focus on achieving shared goals rather than on self-protection (Schein & Bennis, 1965).

Team Psychological Safety is defined as a shared belief held by team members that it is okay to take risks, express their ideas and concerns, speak up with questions, and admit mistakes – all without fear of negative consequences (Gallo, 2023).

Polyvagal Theory- “Describes how the nervous system defensively activates in response to perceived threats or downregulates to encourage openness and connection (Ryland, Johnson, Bernards, 2021, pg. 269).”

Culture is derived from the Latin word *cutlas* which translates to care (Coyle, 2018). According to Daniel Coyle, the author of the *Culture Code*, “culture is a set of living relationships working toward a shared goal. It’s not something you are. It’s something you do (Coyle, 2018, pg. xviii.).

Workplace Bullying occurs through "aggressive behavior" where a worker intentionally and repeatedly causes another employee discomfort. The behavior is often perceived as intimidation and may be accompanied by veiled or unveiled threats where the bully exerts control over another person. (Titan Group, 2017).”

Workplace Incivility involves rudeness, exhaustion, violence, and a poor attitude towards work.

Health refers to being sound in body, mind, or spirit.

Wellness refers to the effort one makes to improve or maintain their health.
