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Editor's Note: Gregory L Walterhouse Editor-in-Chief

Thank you for your interest in the Ninth Edition of the *IPSA Journal*. This is my first edition of the *IPSA Journal* after assuming the duties of Editor-in-Chief from Heather Cotter. I would like to thank Heather, IPSA Executive Director/CEO, Founder, and former Editor-in-Chief for her leadership in developing and bringing to print the first eight editions of the *IPSA Journal*.

The *IPSA Journal* is a scholarly resource available to all public safety professionals. The *IPSA Journal* was fortunate to have several public safety authors and peer reviewers contribute to this executive-level, double blind peer-reviewed publication. The *IPSA Journal* is an opportunity to publish manuscripts about leadership issues and best practices applicable to all facets of public safety, and to provide the public safety community with timely access to pertinent information that impacts decision-making, policy, administration, and operations. Our readers represent the entire public safety community: law enforcement, fire service, EMS, 911 telecommunications, public works (water, sanitation, and transportation), public health, hospitals, security, private sector, and emergency management. In this issue, readers will see the following peer-reviewed manuscripts:

1. No Accountability by Howard: A Dialogical Book Review by Rodger Broomé, Ph.D., Utah Valley University.

2. The Influence of a Firefighter Recruit Candidate Academy Experience: A Case Study by Eric Russell, Rodger Broomé, Andy Byrnes, Amy Eddington, and Christian Lindquist, Utah Valley University

3. Building a Common Operating Picture via a Community Task Force During the COVID-19 Pandemic by Jeffery W. Harvey, DEL, CEM, Calvin A. Lathan, III, Ed.D., University of Charleston, and Henry T. McDonald, Jr., AEM, CHEP, JH Consulting, LLC.

The *IPSA Journal* has a systematic process in place for approval, rejection, and resubmissions of manuscripts. The *IPSA Journal* enlists peer reviewers made up of public safety practitioners and academicians with experience in scholarly writing to review all manuscripts.

It is the vision of the *IPSA Journal* to continually accept manuscripts and to release future editions of the *IPSA Journal*. We seek high-quality manuscripts from all public safety professionals, academia, researchers, and scholars. I encourage you to download and review the IPSA Manuscript Guidelines, use the *IPSA Journal* Template, and submit a manuscript to us for publication consideration. There is so much knowledge to share within and between each public safety discipline, and I invite you to be a part of it.

Stay safe,

Gregory L. Walterhouse



No Accountability by Howard: A Dialogical Book Review

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No Accountability by Howard: A Book Review
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Abstract

This article aims to provide a qualitative dialogical review of Dr. Philip K. Howard's book, *No Accountability: Rethinking the Constitutionality of Public Employee Unions*. This qualitative dialogical review analyses and evaluates the thesis that public employee unions, particularly public safety unions, have gone beyond their purpose to protect employees and encroach upon constitutionally granted executive power and privileges. Educators in criminal justice, fire administration, emergency services management, and other governmental-focused disciplines could find this book valuable in discussions about labor relations, employee discipline, leadership, and public service ethics. This book could be read from various public service, legal, and educational perspectives. The book was found to be a conversation starter rather than the author's vision for precise reforms about public employee labor rights and issues.

Key Words: Unions, Labor Relations, Executive Power, Constitutional, Leadership, Public Employees

Introduction

The nation's founders did not likely imagine the Public Employee Labor Organization in the United States as a formidable political entity within the government. Rather than constitutionally declared, the public employee unions were established as policymakers via legislation without a constitutional amendment. Howard (2023) argues that public employee unions achieved political power by exchanging support in elections for collective bargaining power against the public interests. Today, government executive branch officials have constitutionally granted powers and responsibilities restricted by union contracts and public policies generated by union lobbying in legislatures. The unions can say that collective bargaining, legal protections, and benefits packages were democratically acquired through legal mechanisms (Howard, 2023). These legal protections result in the *retention of underperforming* employees, and collective bargaining has inflated the paid compensation for workers' services against the public's interests. Howard (2023) opines that public employee unions have become so powerful that they function as if they were a fourth branch of government in themselves. Therefore, Howard (2023) entreats the reader to consider the constitutionality of organized public labor.

The public interest and executive responsibilities and authority to carry them out are two main principles upon which all the arguments rest. This book review is conducted from the perspective of public safety organizational contexts and work. While much of Howard's (2023) work involves critiquing teachers' unions and public works service delivery, he begins his work by using the murder of George Floyd as an illustration of his position. Howard (2023) posits that all public employee unions, including public safety labor organizations, aimed at the same end

that the private sector unions did, but without labor market competition moderating factor. As a result, public employee unions (including public safety unions) have only accomplished handcuffing duly elected executives and management at every level and increased their remuneration for services to unreasonable levels. Perhaps there is another story to tell in the evolution of current affairs. Howard does not consider how importing business management perspectives into the public sector might have dragged private sector labor concerns with it. Howard (2023) identifies the issue with terms like service delivery, efficiency, and accountability. He also parallels how business administrative officers handle poor performance and employee problems.

One might wonder why police officers, firefighters, and emergency medical service workers would want labor organizations. Public Safety employees work in a context of ambiguity, uncertainty, and personal danger. One of the aspects of public safety employment that is important to the employee is job security. Moreover, stability in one's income also provides psychological support for those who put their lives on the line as a matter of oath. Finally, having a secure and stable retirement to look forward to is another aspect of remuneration that is important to the rank and file. On the other hand, organizational stressors are the most significant source of occupational stress in public safety work (Kirschman, 2018). As envisioned by Howard's revisionist constitutional perspective, executive power does not consider the public safety employee's political difficulties with public relations and even inside the agencies in which they work. Police, Fire, and EMS workers work in existentially high-stakes contexts, and their support is often sacrificed for political expediency.

Methodology

The method used in this review was a qualitative dialogical interpretation of the text. Interpreting text as data, reaching what is meant through the speech act, involves consideration of aesthetics, perspective, and arrives at the “aboutness” (i.e., meaning) of what was said (Polkinghorne, 1984; Sullivan, 2012). Perspective taking is considered by the researcher considering the author’s identity and background, including academic training, which carries with it its own aesthetic form. It analyzes the key points of the arguments presented from the author’s point of view and academic identity. The dialogical analysis considers counterpoints and tensions presented in the theoretical problem. The theoretical problem for Howard is that public employee unions have evolved into a political power that subverts constitutional executive powers. The counter perspective used for dialogical purposes used in the analysis is from the public employee’s perspective as “labor” and “citizen.” The aesthetic employed by the author is founded upon Enlightenment Morality as understood in a strict constructionist’s interpretation of the U.S. Constitution supplemented by case law support (Sullivan, 2012). Because the author takes a top-down perspective on governance and authority, the dialogical analysis presents a bottom-up, empathetic perspective of the employee and a critical theoretical view of the democratic process. The goal is to arrive at a synthesis regarding what the author intends in the text and discover hidden premises that lend to clarifying subject values used to motivate the generation of the text (Sullivan, 2012). The results of the analysis provide a perspective on the book’s value to the problem presented therein and practical uses in academia and public policy debates about the constitutionality of labor relations by executive officers and their agents.

The researcher conducting this dialogical analysis conducts the review through the lens of phenomenological psychology as an empathetic theory of seeing the lived experience of others. That subjective psychological processes lend primarily to the meaning-making people do in navigating their Lifeworlds. Moreover, the reviewer draws upon 22 years of public safety service (non-union), and 13 years as an emergency services and public administration educator in higher education. This reviewer's role is to educate aspiring public safety workers, current public safety workers, and those aspiring to be public administrators in the care and treatment of those in their charge. I provide this information as a disclosure for transparency on my positions in dialog with the author in his text.

Moral Rationality

Resting the legitimacy of any government structure or function presupposes an Enlightenment version of reality and morality. It is uncontroversial to point out that the Constitution of the United States is a product of Enlightenment values and perspectives. While many of the signers of the U.S. Constitution were people of faith, the language of the original document presupposes Natural Law as morality and rationality as part of the nature of humanity. Therefore, when Howard (2023) calls us to be evaluate public employee unions through the lens of constitutionality, he is simultaneously asking us to place reason at the principal place of our moral framework. Presupposed is the notion that the composers and ratifiers of the U.S. Constitution were rational men (sic.) that were founding a nation upon a natural morality. The law is regulatory and functions as an expression of the people's will

(Dodd, 2009). Therefore, the morality baked into appeals to constitutional authority is assumed as what is good, right, and just for America and expresses the duty of all citizens to adhere.

More so in the case of peace officers and other public safety employees that take an oath that involves protecting and defending the constitution. Therefore, the primary argument that public employees and police are used repeatedly as an example of collective bargaining against the public interest is contrary to the intent of the document of U.S. sovereignty; It is illogical and politically immoral, according to the author. Public employee unions' political activity undermines executive powers granted by the Constitution, legislation they lobby for, and contracts that govern the decision-making of the executive branch of government, federal, state, and local. This means that mayors, state governors, and the U.S. president have their powers regulated by unions using legislation as the check and balance. Howard (2023), however, characterizes this as "...legislatures are not authorized to pass laws that gut executive power. Nor do governors and mayors have authority to abdicate or delegate their executive power, even when they want to for political gain" (p.21). One might ask why a government executive might want to abdicate or delegate executive power for political gain. It is because public employee labor organizations have become a lobbying and voting block to the extent that many corporations and special interest organizations are in their ability to "buy" politicians (Howard, 2023). Additionally, public employee unions are the largest source of campaign workforce in the nation, on top of the largest sources of campaign donations (Howard, 2023). People of wealth have been buying politicians to have them do their bidding in government, seemingly, since the beginning of time. What makes this situation wrong is that it is public servants activating political leverage against the interests of the public. Howard (2023) says,

“But unions (public employees) have gone too far. All these controls and restrictions have disabled basic principles of constitutional government” (p. 20). The restrictions enumerated are the executive power to (a) punish (even fire) public employees without due process, (b) restrict executive prerogatives through collective bargaining agreements, and (c) restrict executive authority unconstitutionally (Howard, 2023).

In the early pages of *Not Accountable*, two claims are made that posits executives nationwide (horizontally). At all levels: local, state, and federal (vertically) are disabled, and those restrictions are put in place by legislation and past executive orders such as President John F. Kennedy’s Executive Order 10988 authorizing federal employees to make collective bargaining agreements in their departments and agencies. Howard (2023) explains that the JFK Order was an informal and retroactive purchase of public labor unions’ support. Political support by public employees evolved into a severe tour de force for those selling their time, labor, and expertise to the government. Public employees sell themselves to the government for monetary compensation, benefits, and campaign work. However, Howard (2023) points out that public employees do not have the market forces that private sector unions have as a consideration. Public employees have a functional monopoly on their services with no competition or threat of being outsourced. Yet, it is still common for the government to use private contractors to do governance, even when it is clearly the government's purpose. Privatization of Prisons is one example where the governmental duty is sold to corporations for

profit. Such companies are the most significant lobbying force for mass incarceration and convict supervision in the Prison Industrial Complex (Davis, 2003).

The question one might ask is, are private contracts with companies to punish wrongdoing and enforce the law constitutional? This is one example, but for public safety interests, private prisons hire security guards for cheaper, do minimal training to save costs, and subsequently create more hazardous environments for prison employees and inmates (Davis, 2003). Howard (2023) already pointed out that governors do not have the (constitutional) authority to abdicate their powers for political gain. However, privatized prisons were sold to the public as efficient because corporate employees do not enjoy the same job protections as correction officers in local jails, state penitentiaries, and federal prisons. Efficiency is defined as the most service for the least cost. For Howard (2023), having no restrictions on firing bad employees is the constitutional prerogative of mayors, governors, and the president. Without the check and balances of legislated controls, governing executives might be functional monarchies. In this context, the public employee serves at the pleasure of the executive and not out of a desire to serve (Russell, 2019).

Business Ethos in Governance

The American consumer was created by private company marketing in the Mid-Twentieth Century, and one crucial dimension was the notion that the customer is always right. Well-meaning leaders in public services started preaching customer service (instead of citizen service), which transformed the focus of public service into giving the taxpayers what they paid for. The beloved former fire chief, Alan Brunacini, aka “Bruno”, of Phoenix Fire Department training manual called: *The Essentials of Fire Department Customer Service*, published by the

International Fire Service Training Association (IFSTA). “Bruno” brought the perspective to the fire service that citizen support was vital to the funding and operational success of the fire department mission (Brunacini, 1997). Bruno leveraged the “customer” politically through his public relations campaign and taught that the fire department employees were internal customers of the administration and staff. This way of doing business focused on quality leadership rather than management and control of financial, material, and human resources. The business ethos spread in the fire service and made its way, to the extent it could, into law enforcement, emergency medical service (EMS), and beyond. The limitation of the taxpayer as a customer is that many of those served by public services are not taxpayers or citizens. The 14th Amendment’s Equal Protection Clause entitles all persons, regardless of citizenship, equal rights to life, liberty, and the pursuit of happiness and equal protection under the law.

The taxpayer as the customer, and the customer is always right, is so pervasive that it is not unusual for a homeless person or one living on unemployment to tell the local police officer, “I pay your wages” and “I’ll have your badge!” The police and citizenry have always had an ambivalent relationship (Bonifacio, 1991). Because of the constitutional presumption that suspects are innocent until proven guilty, police encounters with violators happens between the sociolegal tensions of restricting personal liberty while being required to honor their civil rights. The exercise of police discretion in the performance of their duties has always been a point of contention for citizens who believe they were mistreated or underserved. In police work, the customer cannot always be correct.

The cry for increased governmental efficiency and accountability were vital constituent themes in the rise of populism that got Donald J. Trump elected president. Howard (2023) cites

these themes as the deleterious effects of public employee union power in politics. While *efficiency* and *accountability* are not words appearing in the U.S. Constitution, they are embedded in the reasoning for making unions “the bad guys.” It is essentially the bureaucratic inefficiencies and diffused responsibilities that collective bargaining can bake into public safety agency policies. Most are policies and processes to protect the public employee from unfair and malicious discipline. Indeed, elected officials are accountable to their constituents regardless of party affiliation. In a representative democracy, the elected officials get their constitutional powers and privileges from We the People. But the public employees are not elected; their labor is purchased by elected officials who are accountable to the citizenry. Fiscal responsibility is the duty of elected officials, but not necessarily maximal efficiency. Instead, too much efficiency occurs when ever-increasing work tasks are piled onto employees without adequate support to do them proficiently. Howard (2023) points out that market forces will moderate the efficiency and proficiency issue by affecting the bottom line measured by quarterly reports. Activities like firefighting, emergency medical care, and criminal investigations require proficiency – a combination of quick actions done right. There is no line on a spreadsheet that can express proficiency. Therefore, managing by statistics is how public safety services have had to justify their existence and public support, at least in part.

Two-Headed Government

Public services agencies are designed bureaucracies to regulate public resources for the community’s common good. Bureaucracy is a human organization regarded as rational or grounded in reason. Before the invention of the bureaucracy, businesses and government organizations operated on patrimonial loyalties and relationships. Public Safety agencies are

hierarchical in nature to focus power and authority at the top. That is, public safety services are paramilitary in structure, function, and culture. As a part of the government, they are bureaucratic in using policy and procedure documents and budgets and measure success via statistics. Efficiency and efficacy are determined via statistical analyses to justify the existence and continuance of services (Manning, 2008). Crime rates, frequencies, and expense sheets are used to show employee productivity. This allows governmental bureaucrats the ability to report to their elected officials that the services are working. Most top law enforcement and public safety administrators are at-will appointees of the politicians. Therefore, patrimonial loyalty runs top-down through these organizations (Manning, 2008). An exception in law enforcement is elected sheriffs and constables. An *indirect* service police union can provide for their at-will chiefs to restrict their disciplinary power through legislation and labor contracts. Such disciplinary restrictions can protect police chiefs from their mayors' or city administrators' politically motivated tendency to try to run the police department through their at-will appointees. While the examples of police union abuses in the book are large city departments, police unions are often a safeguard from mayoral tyranny for small and medium-sized department officers. But this is at the heart of the book's opening illustrative vignette of the George Floyd murder by police. Howard (2023) uses Floyd's murder to illustrate a handcuffed city administration and police administration due to union protections of "bad cops."

The U.S. police service is a decentralized model of law enforcement. The idea is to keep policing under the local control of the citizenry and provide customized services for them according to their unique demographics. Ames (1981) studied police in Japan and found that before World War I, they had a national police force like European countries. However, post-

World War II, Japan was under reconstruction with assistance from the U.S. and restructured by adopting our decentralized model. The sociopolitical dynamics in communities across Japan changed with this decentralization. Officers were now under local public policy, not operating on national rules and regulations (Ames, 1981). As such, local community leaders, business owners, and other groups had more direct access to and influence upon local law enforcement. Howard (2023) says that the U.S. remedy to public employee union power-mongering is to restore Article II of the U.S. Constitution, which says, “the executive Power shall be vested in the President.” Should this be limited to federal executive power, that would mean, all public employee labor purchased by the executive branch would serve the President's pleasure.

Of the last six U.S. presidents, the one who had the highest rate of turnover in his staff was Donald J. Trump (Tenpas, 2020). Tenpas (2020) points out that,

Personnel can be a president’s number one asset and this president has done little to recruit and retain the best and the brightest. Though the 10 A Team staff members remaining have demonstrated skills enviable of “Survivor” contestants, their small number tells you all you need to know about the chaos and instability in this administration.

The voters decided they wanted a shrewd businessman in the White House due to the reputation of governmental inefficiency and partisan political gridlock. This is precisely Howard’s (2023) point that the federal government is full of underperforming or misbehaving workers that cannot be terminated due to union-won protections. He makes a persuasive case citing anecdotes of malpractice across many federal departments and agencies. In the cases he provides, if the only thing keeping those employees in place is union protections, perhaps

unions have gone too far in some respects. However, in the first chapter, he claims that the executive branch cannot do its constitutional duties. And Howard (2023) also points out that the nondelegation doctrine extends such executive privilege and power to the state and local governments. This is in the Guarantee Clause in Article IV of the U.S. Constitution.

Patrimonial Loyalty is the motivation for many cases of abuse against public employees who do not fall in line with the boss. The government is supposed to be a rational institution, but informally it involves cronyism and pecking orders that can be brutal on those who do not fit in. President Trump exemplified this with his executive staff members and illustrated it on his reality television series *The Apprentice*. Public Safety employees working in paramilitary organizations have patrimonial loyalties that lead to organizational stressors. For example, organizational stressors common in policing include but are not limited to, unfair assignments, unfair access to training, favoritism in promotions, and more (Kirschman, 2018). Top Cops reward and punish personnel in their charge by leveraging promotion processes, specialty assignments that involve prestige and/or pay differentials, work schedules, and other perks. On the other hand, punishments ranging in terms of formality and severity can be doled out by a Top Cop or high-ranking officer utilizing the policy and procedure manual as a cover story (Castle et al., 2020). Of course, there is documentation of progressive discipline that is constructed to show that the officer was not responding to well-meaning correction and is, therefore, underperforming or breaking too many rules. The degree of internal politicking against the target officer, hyper-awareness of simple mistakes, and turning the other officers against the one in the crosshairs of the administrator with a vendetta is done to render the

victim officer psychosocially defeated, helpless, and isolated (Castle et al., 2020). Some officers will read the signs and resign rather than be terminated “for cause.”

The governmental agency's bureaucratic structure and official functioning were transformed with scientific management's emergence. The professionalization of public safety services was pursued through the ethos of evidence-based practices founded upon scientific management. The Principles of Scientific Management proliferated in the early Twentieth Century and were regarded as productivity-increasing managerial procedures (Taylor, 1911/1998). Extending the perspective that companies could be run rationally and efficiently, administrators began using data collection and analysis to make objective decisions and evaluate employee worth. This logically took a quantitatively abstract course toward employee time management such that even the notion of “time theft” was a policy violation when employees used the restroom, telephone, etc., while “on the clock” (Ehrenreich, 2021). While time theft was an idea born in the private sector, there were reports of micromanagement happening in workplaces like the U.S. Postal Service (USPS). The abuses by managers in the USPS included time-restricted bathroom use that the manager timed with a stopwatch and many other dehumanizing practices that were intended to increase productivity, efficiency, and accountability (Lewis, 2017). The boss-tyrant can always boast about “running a tight ship,” but it tends to be at the expense of his or her “human resources” in a way that does not get tracked on spreadsheets. The call to return a literal unmoderated power to government executives is

something that cannot be done without calculating the Machiavellian nature of power's ability to corrupt and be abused.

Unions in the private sector are a response to abusive managers. One might wonder if the nation's authors of the U.S. Constitution imagined a federal government as large and complex as it is. From the expansion of 13 original colonies to a global superpower, it seems like the power's ability to corrupt politicians led to a parallel response to what happened when businesses became complex bureaucratic corporations. As scientific management became the way to run a business, it was not without the idea of fostering and maintaining "friendly contact with his workmen (sic.) which comes only from a genuine kindly interest in the welfare of those under him" (Taylor, 1998, p.14). Consequently, as private, and public sector organizations grew to sizes where management lost touch with the worker and ran solely on its outcomes metrics (i.e., measured productivity), the abstraction of the human being as a human resource resulted. Even the reality television program *Undercover Boss* illustrated that most Chief Executive Officers (CEOs) are out of touch with the workers at the lower levels of the organization (Lambert et al., 1992). The program also illustrated that miscommunication was one of the fundamental problems up and down the chain of command. However, the illustrations of federal workers that Howard (2023) provides do not include managers and executives that bully those in their charge. Anyone who has worked in government knows that it is not uncommon for politicians to abuse their authority to advance their political agendas and serve their own sense of importance. But it is not the purpose of this review to counter the arguments presented by the author. Instead, it is to provide another perspective not addressed in the book

and point out that this volume provides a fruitful topic for public service administration discussion about governmental reforms.

Public Administration education programs could use this book as a foundation for government reform discussions in the classroom. Many graduate students in such programs are already experienced in the public sector. Howard (2023) points out the crucial differences between business management and public service management, like the lack of competition enjoyed by the latter. But for many in lower levels of government, there can be competition to some extent. An example of competition in government is when a city council and mayor decide to contract with country services rather than provide them. And as mentioned above, private prison corporations serve as competitors in the market for punishing wrongdoing. Yet, one might ask, is the abrogation of this responsibility of government to a for-profit organization ethical? As I read the book, as a professor of emergency services management, psychology, and public administration, I recognized that the author takes a position of optimism about government executives and elected politicians. Moreover, he appeals to the founders' authority as constitutional framers in a way that presupposes a wisdom that might now be beyond its original context. The Prince by Machiavelli (came to mind, as he presented governance as it "is" rather than it "ought to be" in some philosophical ideal (Powell, 2010). The founders amended the constitution to protect the rights of individuals from government tyranny, and I believe that public employee unions were formed for this exact purpose.

Conclusion

In conclusion, the book is unique and takes us back to the beginning in the spirit of revisionism. One gets a sense that Howard (2023) calls us to go back to the good ol' days of the

nation's origins. This was a time when Enlightenment values were imported from Europe and the intentions of the founders are expressed in the five objectives of the Preamble, "in Order to form a more perfect Union, establish Justice, ensure domestic Tranquility, provide for the common defense, promote the general Welfare, and secure the Blessings of Liberty to ourselves and our Posterity" (U.S. Constitution, 2022). When Howard (2023) says that public employee unions collectively bargain against the interests of the public, it seems it is about financial interests and promptness in service delivery. Let's consider revising legislation to limit the powers of public employee unions. We must remember that doing so ignores the fact that public employees are also citizens. Their rights as employees are not surrendered simply by being employed in the public sector. Additionally, discussions about how abusive managers throughout the organization will be held accountable for weaponizing policy and procedure against the employees. The purpose of a "Union Rep" and legal representation by union attorneys is to afford the employee experts at hand to help them navigate disciplinary actions and not fall prey to them, especially when disciplinary situations are politically and personally driven and not for the lack of adequate performance. On the other hand, when union protections become excessive, not necessarily by their policy content but by their applications, employee misconduct can be facilitated and, in some senses, rewarded. Employees have a right to be treated well, and it is in the interest of the public that they are. Howard asks, "have public employee unions gone too far?" Let us discuss this in our public safety scholarly community.

Recommendations

I recommend this book for use in higher education in public services and administration disciplines. From my perspective, this book would not serve well in legal studies, even though

many of the arguments are based on legal premises. Union Leaders and officers would also benefit from studying Howard's presentation on the issues because labor relations law is always subject to legislative reforms. Public Administration education programs could use this book for labor relations discussions in the classroom. Many graduate students in such programs are already experienced, public employees and union members. Future research might also aim at more inquiries regarding the public safety employee's experience of relevant issues, such as the disciplinary experience, promotional/assignment equity, and "quiet hiring," rewarding employees that go above and beyond their job description. As legislation and policy changes are pursued in the political sphere, public employees and their union representatives must be part of those debates and processes. This book provides a fruitful point of departure for further analysis and dialog about the relationship between executive power and labor relations.

References

- Ames, W.L. (1981). *Police and Community in Japan*. University of California
- Bonifacio, P. (1991). *The psychological effects of police work: A psychodynamic approach*.
Springer.
- Brunacini, A. (1997). *The essentials of fire department customer service*. International Fire
Service Training Association (IFSTA).
- Castle, B.J., Russell, E.J., & Broomé, R.E. (2020). The nature of disciplinary processes in police
organizations: The Disciplinary Continuum. *International Journal of Public Safety*, 5, 69-
106. Retrieved:
- Davis, A. (2003). Chapter 113: Masked racism: Reflections on the Prison Industrial Complex. In
P.S. Rothenberg (Ed.). *Race, class, and gender in the United States: An integrated study*,
6th ed. Worth.
- Dodd, J. (2009). *Violence and phenomenology*, 1st ed. Routledge.
- Ehrenreich, B. (2021). *Nicked and dimed: On (not) getting by in America*, 20th Anniversary ed.
Picador Paper
- Howard, P.K. (2023). *Not accountable: Rethinking the constitutionality of the public employee
unions*. Rodin Books.
- Kirschman, E. (2018). *I love a cop: What police families need to know*, 3rd ed. Gulliford.
- Lambert, S., Burgess, J., Cotton, M, & Bloomfield, R. (Producers). (1992). *Undercover boss*
[Television series]. Los Angeles, CA: Columbia Broadcasting Company.

- Lewis, G.D. (2017). *The truth behind going postal: Surviving the torture in the United States Postal Service*. CreateSpace.
- Manning, P.K. (2008). *The technology of policing: Crime mapping, information technology, and the rationality of crime control*. New York University.
- Polkinghorne, D. (1984). *Methodology for the Human Sciences Systems of Inquiry*. Syracuse University New York.
- Powell, *The new Machiavelli: How to wield power in the modern world*. Random House.
- Russell, E.J. (2019). *In command of guardians: Executive Servant Leadership for the community of responders, 2nd ed*. Springer.
- Sullivan, P. (2012). Using dialogue to explore subjectivity. SAGE Publications Ltd,
<https://dx.doi.org/10.4135/9781446268391>
- Taylor, F.W. (1911/1998). *The principles of scientific management*. Dover.
- Tenpas, K.D. (2020, Apr. 13). And then there were ten: With 85% turnover in President Trump's A Team, who remains? *Brookings* [online]. Retrieved:
<https://www.brookings.edu/blog/fixgov/2020/04/13/and-then-there-were-ten-with-85-turnover-across-president-trumps-a-team-who-remains/>
- United States Constitution. (2022, September 21). The preamble of the United States Constitution. *The U.S. National Archives and Records Administration* [online]. Retrieved:
<https://www.archives.gov/founding-docs/constitution>

Author Biography

Dr. Rodger Broomé, Ph.D., is an associate professor of emergency services and public administration at Utah Valley University. He served as a Utah city police officer and firefighter/EMT for 22 years and as a reserve police officer for 13 more years after he retired from full-time service. His graduate studies were in existential-humanistic psychology with a clinical specialization. Dr. Broomé's research is on the phenomenological experiences of public safety officials' work. He has also published on public safety leadership and presented public safety perspectives in psychology, both clinical and theoretical.



The Influence of a Firefighter Recruit Candidate Academy Experience: A Case Study

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Abstract

This qualitative exploratory case study involved discovering the influence a Firefighter Recruit Candidate Academy has on firefighter recruits. The site used for the study is housed within the Utah Valley University's College of Health and Public Services, home to the Department of Emergency Services and the Utah Firefighter certification and standard agency known as the Utah Fire and Rescue Academy. The study involved researchers working with archival data in the form of recruit journals, a reflective work each recruit would write in every week of the 15-week academy. The study's sample size was $n = 37$ participants who successfully completed, certified, and graduated from the Firefighter Recruit Candidate Academy. Five themes emerged from the coding of the data in the areas of (1) Crew Bonding - Esprit de Corps, (2) Mental Toughness Development, (3) Realization of Physicality, (4) Self-Becoming through Overcoming, and (5) Reflective Self-Critique. The data analysis revealed metacognitive affect within the words of the participants that seemed to go beyond gaining the knowledge, skills, and abilities to certify as a firefighter to develop a better awareness of self.

Key Words: Firefighter Training, Well-Being, Awareness, Personal Development, Metacognition

Introduction

In the United States, before becoming a uniformed sworn firefighter, the individual must attend formal training, commonly called the Recruit Candidate Academy, to become a certified firefighter (NFPA, 2019). This type of training takes place in a para-military academy and is sponsored by fire-rescue organizations seeking to hire candidates upon graduation, statewide fire-training centers, and institutions of higher learning. Successful completion of the initial firefighter recruit candidate training and the passing of the written and skills exams, based on national standards, results in becoming a certified firefighter. The candidate is then either appointed and sworn in as a cadet with a professional fire department at graduation or is now eligible to compete for an appointment with a fire department as a qualified candidate.

It is common throughout the United States that graduates of a Recruit Candidate Academy receive the basic qualifications to become a professional firefighter, including Firefighter I, Firefighter II, Hazardous Materials Awareness, and Hazardous Materials Operations certifications (NFPA, 2019). In addition, candidates also attend and certify in basic and advanced emergency medical technician courses, including paramedic licensure and other advanced life support qualifications. An academy experience is the first step to becoming a firefighter (Desmond, 2006). However, though this pipeline is a commonly shared experience of all professionally uniformed and sworn firefighters, it is still unknown how the academy experience influences the individual, nor how it shapes the recruit for a service career within the fire-rescue profession.

This qualitative exploratory case study set forth to understand the influence a firefighter Recruit Candidate Academy has on recruits. The central question guiding the study asked, how

does the experience of attending a firefighter recruit candidate academy influence an individual recruit? In the revised Bloom's Taxonomy, the once Affective Domain has been subsumed into Metacognition with the idea that there is no affect without cognitive content (Anderson & Krathwohl, 2000). The academy historically focuses on knowledge and physical skills but has not ventured much into how recruits develop an integrated understanding of the sociocultural dimensions of the training. The research sought to appreciate the academy experience beyond initial job training and certification, seeking to understand whether the academy influences an individual's ability to find meaning, grow as a person, inspire inward reflection, and discover purpose. The study took place at Utah Valley University, where the Department of Emergency Services facilitates the academy. The statewide body for certifications and standards, The Utah Fire and Rescue Academy, is jointly located at Utah Valley University with the Department of Emergency Services within the College of Health and Public Services.

This work aims to create a springboard for future studies involving the training and education of first responders. Specifically, to understand such experiences as more than learning job skills, to more about what it is like to become a firefighter (Desmond, 2006). The uniformed and sworn first responder professions, such as fire and emergency services and law enforcement, become an identifying aspect of the individual (Desmond, 2006; Russell, 2015; Russell et al., 2015; Russell, 2019; Schuth, 2022). Individuals create an identity around their chosen occupation, with the profession becoming a large part of what defines them as persons (Russell, 2019; Schuth, 2022). This sense of being and identity matters since the nature of the profession and what the work entails, i.e., traumatic high-stress situations, loss, danger, heroism, and the responsibility for the lives of strangers, will have positive and negative

physical and psychological impacts on the responder (Desmond, 2006; Russell, 2019). The first responder must therefore become the person that desires to navigate such realities and, in doing so, has the ability and community to remain physically and mentally healthy throughout their career. The individual becoming a firefighter begins in the academy; therefore, the academy becomes the place where the foundations of responder physical and mental wellness need to be forged (Blumberg et al., 2022; Park et al., 2022; Wohlgemuth, 2021).

About the Recruit Candidate Academy

The Firefighter Recruit Candidate Academy (RCA) at Utah Valley University (UVU) graduated its first class in April 1998. Since then, more than 86 classes have graduated from the RCA, totaling more than 1,800 firefighter recruit candidates. Since its inception, the RCA has incorporated individual and fire company skills-based training into live fire evolutions. The philosophy being that the recruit who has seen and knows fire behavior will be better prepared to enjoy a rewarding and safe career. During the academy experience, recruits are trained to drive fire apparatus, operate the pump, and act as the Incident Commander during live fire training evolutions. Each new task brings with it more high-stakes training. It needs to be noted that these more advanced tasks are not normally taught to recruits. The academy experience is commonly set up where fire instructors normally drive, pump, and manage the training evolution. The UVU academy experience is formulated so that all live fire training evolutions are being executed by students, with instructors playing the part of ignition and safety officers and dispatching student engine companies. The RCA at UVU is set up in a way where recruits operate as if they are serving in a fully functioning fire department with a simulated mission.

It became the culture of the RCA at UVU to require more student-based learning and student-centered operations and leadership experiences. The new philosophy being that a more well-rounded, complete candidate made for a more marketable and, more importantly, a safer recruit. This has been borne out in the latest RCA graduate survey conducted in 2022 by UVU staff of 104 recruits who had graduated from the program from Spring 2017 to Fall 2019. The survey revealed that 82% ($n = 85$) of all graduates worked full-time or part-time in Emergency Services related jobs.

To graduate and be considered certified at the operational level of competency, RCA students must certify in four areas: Firefighter I, Firefighter II, Hazardous Materials Awareness, and Hazardous Materials Operations (NFPA, 2019). Adhering to National Fire Protection Association (NFPA) and State Certification Standards and requirements, the culminating high-stakes cognitive exams and psychomotor skills testing take place. Students are given three attempts at each cognitive and psychomotor exam for each of the four certification levels. Failure to pass any of the four levels by failing a third attempt results in the requirement to repeat the training program. Training encompasses over 400 hours spanning 15 weeks. The RCA at UVU documents a certification pass rate for recruits who finish the program at 99.25%.

The RCA instructor cadre consists of 24 uniformed and sworn fire service professionals, typically leaders within their own uniformed and sworn departments. They are certified and qualified as fire service instructors to teach fire recruits. Most have specialist-level training in wildland, heavy-rescue, hazardous materials, high-rise, aircraft rescue, technical rescue, and advanced emergency medicine. Many instructors are alumni of the RCA program at UVU. The RCA program at UVU has gained and maintains a fleet of six fire engines, dedicated classrooms,

a state-of-the-art strength and fitness facility, a four-story training tower, a four-level Self-Contained Breathing Apparatus (SCBA)/Confined Space maze, live fire training props, and a massive 4,680 square foot live fire laboratory. The program is supported by a full-time director, logistical staff, and a course coordinator.

Literature Review

The purpose of an academy format training is to provide a holistic model for the student so that they acquire the knowledge, skills, abilities, acculturation, and mental skills through the experience. As Blumberg et al. (2022) note, academy training must consider developing responders' physical and mental wellness. The argument for developing wellness means the RCA experience needs to go beyond the knowledge and skills of firefighting (Blumberg et al., 2022). This view moves the RCA experience toward the concept of becoming, where the individual begins to identify as a professional, growing into a role that will become personally defining (Russell et al. 2015). The growth and identifying aspects associated with becoming a responder relate to individual posttraumatic growth (Russell, 2019). One's posttraumatic growth involves becoming stronger and developing resilience in the face of trauma and loss (Kates, 2008; Paton, 2005). Posttraumatic growth is a way of holistically protecting the responder from posttraumatic stress disorder by learning to put situations into perspective, finding relief in physical and mental health, and having a community to belong (Ogińska-Bulik & Kobylarczyk 2016; Russell, 2019).

The fire academy is a program in which the students form mutual social support through personal and collective psychophysical challenges in the context of firefighting training. Heydari et al. (2022) found that a firefighter's attitude, physical fitness, and mental fitness affect their

resilience. Such a finding seems to add to the recruitment screening of candidates before the academy experience (Heydari et al., 2022). Psychophysical challenges that are personally impacting and accompanied by a socially supportive context are predictive of posttraumatic growth formation (Paton, 2005). Moreover, the academy experience needs to be a time where candidates are not only assessed and selected for certification and possible employment but also instilled with positive habits associated with physical well-being, mental health, personal growth, and the capacity to engage in mutual social support with their crew members. Meaning as Heydari et al. (2022) identified, the academy experience needs to be where the future responder develops habits, practices, and ways of being that lead to strengthening resilience and fostering personal growth.

Firefighter Physical Fitness

The academy's goal is to consider different levels of fitness and ability and work towards developing strength and stamina (Lockie et al., 2022). This growth goes beyond job skills, such as using tools and deploying hose lines, into an overall physical fitness lifestyle that fosters career-long strength conditioning and aerobic stamina. As Lan et al. (2020) note, recruit academies positively impact the health and fitness of firefighters; however, health and fitness practices need to be instilled in a way that becomes habitual after academy graduation and practiced throughout one's career.

Giuliani-Dewig et al. (2022) argue that firefighting work can be compared to athletics. There needs to be an approach toward firefighter fitness and health monitoring as it is in athletics (Giuliani-Dewig et al., 2022). Firefighter physical training and conditioning habits need to be developed so that responders know the importance of peak fitness levels and their

relation to having a positive career (Chizewski et al., 2021). Intensity and duration of training intervals impacts firefighter health and performance (Horn et al., 2019). Because of the physical stresses associated with firefighting, there needs to be both a focus on firefighter physical fitness as well as positive habits established (Cho et al., 2022).

For example, firefighter fitness is intricate in reducing cardiac events and other negative physical outcomes associated with the work (Gold et al., 2022). The profession takes its toll on sleep health, creating fatigue - a state of being that responders need to learn to function in (Thomas & Collen, 2022). However, there needs to be a balance associated with healthy sleeping habits when the responder is off duty. Good sleep off duty and wellness, including physical fitness, are important to the well-being of the responder (Thomas & Collen, 2022). The academy is where these practices need to be instilled as it is with mastery of skills (Heydari et al., 2022).

Firefighter Psychological Well-Being

Firefighters regularly face high-stakes threats to their physical and psychological well-being while operating in one of the most dangerous professions. To successfully navigate the potential and real life-threatening experiences salient in their duties, firefighters' physical and psychological wellness is imperative (Williams-Bell & McGregor, 2022). Realistic yet controlled, scenario-based training is standard across fire-rescue organizations, and it works for readiness, capability, and wellness. This means firefighters gain confidence through the calls and the ongoing, demanding, realistic training that seemingly gives them a sense of their ability to perform tasks under stress. These simulated traumatic events and their stressors can lead to

strengthened coping skills involving repeated training exposure to approximate the existential realities of fire and rescue work (Mitchell et al. 2022).

On the other hand, firefighting and emergency work can negatively affect the mental well-being of firefighters when the aftermath recovery period is insufficient (Van Hasselt et al., 2022). Learning emotional regulation and flexible attitudes prepare firefighters to impact their psychological well-being, again reducing posttraumatic stress disorder (Leonard & Vujanovic, 2022) and strengthening posttraumatic growth (Ogińska-Bulik & Kobylarczyk 2016).

Those desiring a firefighting career were less likely to have symptoms associated with posttraumatic stress disorder at the start of the academy (Wagner et al., 2016). Meaning, identifying those with a deep desire to serve as a professional firefighter in the pre-academy phase, i.e., the recruitment and screening process, increases the chances that those accepted into the recruit candidate program will be more likely to grow into their goals of becoming a professional firefighter and thrive in the dangerous career field. The academy seems to be a time where personalities that relate to stress-coping abilities, again, initially identified in the initial screening of recruits, are to be fostered in the academy experience in a way that goes with them into their careers (Moran, 2001). For example, identifying a recruit's sense of humor, or lack thereof, is a sign of a crew or individual firefighters' well-being (Dangermond et al., 2022). Therefore, the academy experience allows for instilling aspects of posttraumatic growth and psychological wellness at the beginning of the recruit's journey (Wagner et al., 2016).

Literature Summary

As noted, identity is made by being a firefighter (Schuth, 2022). The profession becomes a part of the individual's being. Wolgemuth (2021) notes that the academy experience can

positively affect the health and fitness of the responder. Part of the positive effect needs to focus on the growth and well-being of the individual. The concept of growth relates to the individual becoming stronger and more resilient. Growth, be it physical, mental, or professional, strengthens the responder, staving off posttraumatic stress and burnout (Leonard & Vujanovic, 2022). For example, Hagerman (2022), highlighted a significant empirical finding noting a correlation between firefighter personal accomplishment and self-efficacy (Hagerman, 2022). Self-efficacy is a trait relating to healthy followers within uniformed professions (Russell, 2019).

It is argued that high quality training of firefighters leads to professional success (Niemann & Thielsch, 2020). Such training needs to be in a state of quality improvement and continuously measuring effectiveness (Niemann & Thielsch, 2020). Such habits of personal quality improvement with firefighters begins in the academy, where the practice is instilled from at the beginning of the future responder's journey (Blumberg et al, 2022). Jones (2022) discovered that firefighters realize success and growth when given the time for professional development and encouraged to develop by their leadership. Again, such encouragement needs to start with the cadre of academy instructors. Firefighter safety relates to the development of good habits earlier in their career, instilling such habits and behaviors need to be embedded into the overall academy experience (Park et al, 2022).

Methodology

The researchers set forth to understand how the experience of a firefighter Recruit Candidate Academy influenced individual recruits. Prior to conducting the study, the researchers received University IRB approval. The study utilized a qualitative methodology with an exploratory case study design (Seawright & Gerring, 2008; Stake, 1995; Yin, 2018). The

reason an exploratory case study was chosen over other qualitative designs is its strength when looking at unique, uncontrollable situations in a manner that can reveal theoretical propositions (Yin, 2018). The researchers used a non-probability purposive sampling technique (Corbin & Strauss, 2008; Patton, 2002). The justification for using the sampling strategy was that sampling from a pre-selected specific group allows for theoretical discovery in certain cases where specific experiences matter (Patton, 2002; Yin, 2018). In the case of this research, personal experience, including the affective domain of learning, which has been enveloped within Metacognition of the revised Bloom's Taxonomy, was the focus of this study (Anderson & Krathwohl, 2000). This contradicts the typical end-of-course *survey* regarding students' experience of course delivery. Rather, this portion of the training was designed to initiate the recruits' personal reflections on what they were experiencing and its personal impact on them throughout the training to become a firefighter. Data collection involved archival data of $n = 37$ participants in the form of weekly reflective journal assignments. The participants kept weekly reflective journals throughout the 15-week academy. Each week the recruits would reflect on their experiences, what they gleaned, any *ah-ha* moments, and personal insights.

The researchers followed a systematic case study approach for thematic data analysis. The researchers used data saturation to determine the study's sample size; saturation was reached when analysis of the archival data no longer revealed anything novel (Mason, 2010). The study began with an initial sample size of $n = 47$ participants; all firefighter recruit candidates seeking to become certified firefighters. Data saturation was reached at $n = 37$. The participants' ages ranged between 20-35 years of age, with $n = 34$ identifying as male and $n = 3$

identifying as female. All n = 37 participants successfully completed, certified, and graduated from the recruit candidate academy.

Data collection consisted of archival data from n = 37 participants. The archival data consisted of 1,443 data points resulting from 194 pages of reflective writings totaling 100,284 words. The reflective writings produced by the students were initially intended to engage them in an affective domain-oriented meaning-making process of learning (Anderson & Krathwohl, 2000). Each recruit academy student wrote about their perspectives and a felt sense of transformation toward becoming a firefighter through taking on the simulated roles, responsibilities, and work of professional firefighters.

To protect the study participants, the researchers removed any personal identifiers from the archival data to include names, student identification numbers, or class numbers. The amount of data collected allowed the researchers to triangulate data sources from the archival data creating a convergent line of inquiry (Yin, 2018). To ensure trustworthiness, the researchers each conducted an analysis for theme comparison, presenting the data in tables as well as in-depth rich thematic descriptions in the results section (Yin, 2018). The researchers followed a specific, systematic case study approach to collect and analyze the data, establishing a secure data collection and storage database to ensure data reliability (Patton, 2002; Yin, 2018).

The researchers developed case descriptions to analyze the data using a systematic, hierarchical approach (Stake, 1995; Yin, 2018). The data analysis began with the researchers organizing and preparing the archival data for analysis, removing any personal identifiers of

each participant to protect their anonymity, and then reading the data to become familiar with it. Each participant was assigned a “P” and then a corresponding number.

In the results section, the researchers developed narrative case descriptions to present the themes, subthemes, and codes, along with the corresponding reflections of the participants (Yin, 2018). To formulate narrative case descriptions, a hand-coding process involving color-coding the data was used (Basit, 2003). The hand-coding process allowed researchers to spend a lot of time reading and rereading the data, color-coding different attributes, and writing notes and ideas down (Basit, 2003; Corbin & Strauss, 2008). Theoretical propositions were generated from the thematic analysis of the themes and are presented in the discussion section of this article (Stake, 1995; Yin, 2018).

Results

The following presents the thematic results of the data analysis and coding. The section utilizes brief thematic description and tables that display the subthemes and codes that converged to form the five identified themes. Each table also presents examples from the words of participants. A discussion of the themes takes place in a later section of the article.

Crew Bonding - Esprit de Corps

The first identified theme, *Crew Bonding - Esprit de Corps*, emerged from the words of the participants, see Table 1. Subthemes and codes formulating this theme included words such as “team”, “us/we”, “family”, and “crew”. The finding highlights how the RCA experience causes one to consider and place value on others. Moreover, metacognitive self-knowledge

In contrast to the social concept of *othering*, wherein one’s self-knowledge is based on the unlikeness he or she has with *the other*, recruits in the academy align themselves with

likenesses with each other. The emergent quality of esprit de corps generated group moral support and confidence as a composite whole oneness among recruits. The comradery serves as a psychosocial buffer to the challenges of the work and the basis for morale among the crew members.

Mental Toughness Development

The second identified theme, *Mental Toughness Development*, emerged from the words of the participants, see Table 2. Subthemes and codes formulating this theme included words such as “mindset” and “mentality”, as well as phrases such as “positive thoughts” and “in control of”. The finding highlights how the academy experience seemingly creates an awareness towards one’s mental integrity or toughness in the face of psychophysical adversity.

Getting through emotionally and physically overwhelming exercises was accomplished by recruits thinking incrementally. Moreover, getting through a challenge was in the context of an experiential “end-in-sight” which was understood that pushing oneself a little further would result in a “breakthrough.” Upon reflection, the recruits found that their capacity to hang in there was greater than they imagined. As such, successfully pushing through a challenge while psychophysically exhausted and emotionally overwhelmed served as empirical evidence upon which the recruits could come to a fresh understanding of their own capacities. Therefore, the successful experience of overcoming a formidable situation was both subjectively and objectively self-confirming. Mental toughness is developed with repeated experiences of pushing through what seems, at some point, to be nearly impossible to achieve. It is important for one working in the fire and emergency services field to enter the career with enough of this mental toughness developed through training simulations.

Realization of Physicality

The third identified theme, *Realization of Physicality*, emerged from the words of the participants, see Table 3. Subthemes and codes formulating this theme included words such as “strength”, “tired”, “pain”, and “stamina. The finding highlights how the academy experience seemingly creates an awareness of one’s physical health, physical capabilities, and the ability to carry on tasks even though one is tired and experiencing pain.

A colloquial expression often used in firefighting and other similar physical occupations is the notion of giving 110%. Mathematically, we know that 100% means full capacity, but the recruits describe that they could go beyond what they would have thought was their maximum capacity. The data revealed, that upon reflection, recruits realized they had gone further than what they believed was their limits before being challenged; experientially, 110%. The data showed that one’s realization that physical strength is important, increasable, and a source of mental negotiation is vital to *concomitantly* developing mental toughness. The recruits use self-talk to push through a challenging situation, take themselves beyond what they would have imagined, and use the success as *self-evident facticity* of their psychophysical strength. Without such physical experiences, the personal beliefs that one could be a firefighter would not be as reality-based. The actual fireground simulations and skills exercises build stronger, more capable, and more athletic abilities for entering a firefighting career.

Self-Becoming through Overcoming

The fourth identified theme, *Self-Becoming through Overcoming*, emerged from the words of the participants, see Table 4. Subthemes and codes formulating this theme included words such as “perseverance”, and phrases such as “I can do hard things” and “learn from

mistakes”. The finding highlights how the academy experience seemingly creates an opportunity for recruits to discover things about themselves, such as their capabilities and areas where they improve.

When asked what one does for a living, a career firefighter will say, “I am a firefighter” rather than “I work for the fire department.” It is even culturally established that firefighters are those that have responded to a *call* to the work, and he or she finds oneself as seemingly *fitted* to serving others in this vocation. However, there is also the accepted meritocratic notion that one must work hard and earn their position in the fire department. The recruits spoke about how their willingness to work hard and go the extra mile proved to be effective in their becoming graduates of the academy. They achieved their successful completion of the individual drills and simulations, but also the academy program in its entirety. Through the academy process, the recruits were able to create and become a step closer to realizing their identity as a firefighter. Graduating from the academy is a step that is institutionalized via the graduation ceremony as a public recognition that all the challenges were overcome by each one of them. Moreover, the recruits realized that their ability to co-constitute themselves as firefighters in the academy environment would have carryover into their careers and personal lives.

Reflective Self-Critique

The fifth identified theme, *Reflective Self-Critique*, emerged from the words of the participants, see Table 5. Subthemes and codes formulating this theme included words such as “communication” and “attitude”, and phrases such as “valuing criticism”, “thick skin”, and “believe in my abilities”. The finding highlights how the academy experience seemingly creates

an opportunity for recruits to discover avenues for personal improvement, highlighting areas of weakness that can be improved. The self-judgment and critiques involved in these reflections involved a variety of personal deficits.

Firefighting is inherently risky, and the recruits recognized that in many ways there are points of vulnerability that need attention. Missing in the data were expressions of desired perfection or perfectionism. While some expressed being *hard on themselves* in some way, there was no level of gratuitous negativity in their self-reflections of places to improve. This might be understood as a distinction between self-critique and *self-criticizing* or *nitpicking* oneself. Recognizing one's own limitations, weakness, and mistakes for the purposes of improving is qualitatively different from self-punishing. Overall, the ability to self-critique in terms of *reality testing* was a part of emotional regulation and optimistically turning failures into lessons learned.

Discussion

The following discussion offers a dialogue between the literature and the thematic findings of the research. The overarching finding of the study is that the academy experience goes beyond meeting professional and physical fitness standards, inspiring self-discovery of strengths and weaknesses, and the importance of belonging to a community and self-improvement. The discussion addresses the five thematic findings of (1) Crew Bonding - Esprit de Corps, (2) Mental Toughness Development, (3) Realization of Physicality, (4) Self-Becoming through Overcoming, and (5) Reflective Self-Critique.

Crew Bonding - Esprit de Corps

The paramilitary culture of the fire and emergency services invariably is constituted as an esprit de corps or spirit of the crew. As a constituent part of the firefighting crew, one has a traditional social support system that enables them to embark on high-stakes missions. Interdependence grows and becomes a salient value among recruits in the academy. However, it is not simply instrumental to doing the job well; psychological meanings with moral content emerge in terms like, *trust, family, and looking out for (protecting) others*. These psychological values are so foundational, that they are consistent with the *virtues* in the first four of the eight stages of psychosocial development, (a) Trust, (b) Autonomy, (c), Initiative, and (d) Industry (Erikson, 1993). These amount to the formation of a personal identity, which is the concomitant self-sameness and continuity through time, while recognizing others acknowledge these in the person, too (Erikson, 1994). There is a co-valuing of trust which is fostered by taking the initiative to help one another, which is the metacognitive self-knowledge developed through interaction with and affirmation from one's peers (Anderson & Krathwohl, 2000). Initially, recruits focused on their *autonomous* performance, but once they were satisfied with their own abilities, they were more oriented toward their *industriousness* (getting the job done well) in the context of the crew. The social feedback loop from others on the crew generated the team members experience of self and one another as a trustworthy "we" that was constituted by demonstrating psychophysical and social competence with sufficient regularity.

When considering the last four of the eight stages of psychosocial development, (e) Identity, (f) Intimacy, (g), Generativity, and (h) Integrity are left for later in the firefighting career (Erikson, 1993). The recruits in an academy are in a temporary social situation in which

they simulate the role and work of a firefighter. Therefore, academy participation does not “make one a firefighter” but prepares one to *become* a firefighter once hired on the job. Moreover, forming intimate relationships with a real crew is likely rare in this academy format. First, firefighters develop significant bonds when they have experienced critical incidents together (Broomé & Russell, 2018). Recruits are in temporary work-like relationships that involve simulated critical incidents and emergencies. And being generative is more along the lines of what we would say academy instructors have achieved. Academy instructors are at a time in their work-lives where they want to pass-on their expertise to the next generation. And integrity in firefighting identity is being self-recognized and publicly acknowledged as having done one’s honorable duty over the years (Erikson, 1994).

Crew bonding begins and real relationships are formed in the academy. This process is one that the recruits will need to begin anew when given an assignment on a real fire crew. This theme shows that the psychosocial development of the individual firefighter is intertwined with the bonding they do with other firefighters. As such, the crew bonding seems to be more than a simulation but may not guarantee life-long relationships every time. Nonetheless, the value for becoming part of *we* in a firefighting collective is achieved and lays the foundational *social support* that promotes posttraumatic growth (Broomé & Russell, 2019; Paton, 2005). Crew bonding does more than serve the utility of better firefighting success.

Mental Toughness Development

Mental Toughness is developed through trials and successes. But particularly, it is important to note the subjective regard of everyone’s concept of success in the context of the trial. Formidable challenges are those that the recruits assess as over their ability level. Recruits

succeeded by atomizing the entire challenge into steps or phases so that they could self-talk their way part by part to the end when their emotional capacities were challenged. This is well illustrated in a participant's comment:

"[h]ow capable I am when I put my mind to a task. I couldn't remember ever being that exhausted, dehydrated or burnt out mentally, but I knew that it had to be done. So, I found a way to do something that my mind was telling me was impossible" and even when I am fully panicking and feel out of control, I can still have enough mental discipline to follow the instructions...I guess I discovered a weakness and strength at the same time."

The self-talk was solution-focused and not problem-focused (Selk, 2008). Negative self-deprecating self-talk did not appear in the data, which might be characterized as "being hard on oneself" or "self-punishing". One recruit expressed, "[h]ow fast negativity can ruin things...I need to just stay positive" was a key metacognitive strategy, along with another's view that "I am totally in control of my mind and how I deal with stress. I noticed that if I chose to be scared and stressed out, that would be the outcome in any activity".

Mental Toughness should not be considered apart from the Self-Realization of Physicality and Self-Becoming through Overcoming. Rather, the recruits' development of mental strength was a foundational attribution of their *becoming a firefighter* terminal objective. But also, mental toughness is not separable from the physicality experienced in the various challenges.

Realization of Physicality

The Realization of Physicality theme relates not only to the strength and stamina of the individual but also, one's ability to keep going or push through fatigue. The basic understanding is that the academy experience needs to be one of improving health and fitness (Lan et al., 2020; Wohlgemuth, 2021). However, the data seems to spotlight that the experience goes beyond physical fitness, whereas the simulated environment provides the recruit an ah-ha moment where they learn personal physical capacity. For instance, one participant noted, "[m]y body will give me more if I truly want it and ask for more". The emergency scene physically pushes the responder, where the individual must operate while wearing heavy personal protective equipment, both deploying and utilizing hefty equipment, appliances, and hose lines weighing, at times, hundreds of pounds (Giuliani-Dewig et al., 2022; Schuth, 2022; William-Bell & McGregor, 2022). A thematic expression discovered in the words of the study participants is that the affect of the academy's drills and scenarios takes the learner beyond a minimum physical testing standard (Cho et al., 2022) to a state of self-discovery and understanding regarding how much more they can push themselves. This thematic discovery seems to be summed up in a participant's statement, "I can do hard things even when I'm feeling like I'm at my worst".

The firefighting recruits are subject to objective measures of physical task performance abilities. Embedded in the task performance test required is a reasonable degree of physical preparedness by normative standards of the fire service (International Association of Fire Fighters [IAFF], 2019). So, while it is given that all the participants of this academy were up to the standard, the subjective experience of exertion was described as 110%, overwhelming, and

beyond what one might expect (at first blush.) From an instructional standpoint, the academy staff aim at having the physicality be significantly beyond minimum physical standards. Some recruits expressed “I am not physically where I want to be...I should have done more to prepare for the fire academy” and “[m]y physical health needs much improvement”. In a real-life emergency, where the stakes and the pressures of time and consequence is high, the firefighter’s physical abilities cannot be ever too much. This is the subjective perspective that the academy staff wants the recruits to develop: there is only one level of effort and performance, and that is *the best one can do*. In sport/performance psychology, quitting is defined as when the imagined reward is no longer worth the experienced strain of the effort (Friel, 2015). The degree of engagement the staff seeks to achieve with every candidate is that they learn to push themselves significantly beyond the urge to give up.

Self-Becoming through Overcoming

The theme Self-Becoming through Overcoming emerged from the participants’ reflecting on how they can overcome mental and physical challenges. Again, this affective discovery came about through simulated and controlled efforts of the academy. The academy allowed for experiences where participants were able to discover their own capabilities. For instance, one participant noted, “I am a very capable person. Often, I doubt this fact, but the progress I am making and the results of my efforts have proved to me that I am much more capable than I realize”. The academy scenarios spark self-learning, inspiring the recruits to become what they desire to be, not only in certification but as persons. A participant stated, “I realized that I’m not fully achieving my potential, I am trying to figure out how to do that, and I

am looking forward to trying harder and different things". Such reflection goes beyond earning professional credentials and gaining skill sets, into who one desires to become as a person. Again, such discovery is in a controlled setting where recruits never leave the supervision of the instructors (NFPA 1001; 2019). The realistic-simulated fireground of the academy creates self-awareness of both the individual on the path to becoming a firefighter and what they need to overcome and work on to eventually be a professional firefighter (Anderson & Krathwol, 2000). Within this finding were discoveries of vulnerability, and the importance of being willing to fail and learn (Ogińska-Bulik & Kobylarczyk, 2016; Wagner et al., 2016).

Reflective Self-Critique

The fifth identified theme, *Reflective Self-Critique*, involved learners gaining awareness of personal improvement and responsibility. Within this theme came a recognition of wanting to give up in the moment, yet pushing through the negative feeling and overcoming. As Horn et al. (2019) note, firefighter training is strenuous because the work is strenuous. That strain offers individuals a chance to learn about themselves, to see who they are when they are being tested as persons. In the experience, participants noted the desire to quit, to give up; however, the thought of failure motivated them to press on. For instance, "I was mad at myself...I just want to relax and recoup...if I don't figure my stuff out quickly, I won't be around much longer". This is a realization that they as individuals are in control. That success, failure, and growth all come down to them as persons. That their attitudes and drive, not outside forces, determines success. In this theme, aspects such as time management, calming down, digging deep, and

awareness continued to appear. For example, one participant noted, “[t]oo many times I rely on the other students to know what’s going on around me when I feel like I should know what to do”. In this instance, the individual became aware that they were avoiding personal responsibility, a key element to being a good team member. Building on this, a participant noted, “I need to ask questions about what I do not understand”. Meaning, if one desires to be a firefighter, one must be personally accountable to learn and know; that it is not up to others, but rather, self. Another thematic aspect was the idea of needing to do better. A participant noted they were not measuring up and growing in their abilities, “I have been sort of a ‘gray man’...I am not doing anything blatantly detrimental; I am not achieving anything at an exceptionally high level”, in this case, the academy experience allowed the participant to see that they can go further, grow, and give more. Such a realization goes to aspects of post-traumatic growth, putting one’s abilities and limitations into perspective and actively working towards overcoming weaknesses (Mitchell et al., 2022; Moran, 2001; Paton, 2002; Van Hasselt et al. 2022).

Limitations

The data collected in this study was captured as a reflective (metacognitive domain) assignment to encourage self-evaluation by the recruits. What mindset drove the reflections is unknown – a sense of duty, points toward grades, etc. But the data analyzed appears to have the characteristics of forthrightness and genuine reflection. Interviews of the recruits would have allowed researchers to probe into key issues further but also might have created a vulnerability to a social desirability response bias. Many expressions in the data address the

recruits' value for doing things right or doing a good job. Therefore, we assume that the recruits were conscientiously truthful and forthright in their reflective utterances.

A key limitation of this study is that the data from recruits terminated for performance or dropped out of the program were not collected and analyzed. As such, the results of this study need to be understood in the context of successful academy participation and lack the inclusion of failure experiences and perspectives by those who did not finish. Therefore, this study's results are optimistic and do not reflect the range of experiences that involve negative ones.

Recommendations

Future research might take qualitative inquiry into fire and police academy training further and more in-depth. Moreover, different research designs might provide new insights and profiles of learning the way academy recruits navigate this phase of the journey toward working the streets. Academy training drills and simulations do not create firefighters by graduation, but rather, the academy recruit candidate does acquire their *basic training* that must be extended by on-the-job training. Future research might aim at the firefighter's rookie year or apprenticeship period to explore and examine insights gained under supervision and mentorship in the real world. It might be anticipated that performing interventions in real emergency situations further the confirmatory nature of the experience of becoming a firefighter or first responder. Simulations and acting out role-play scenarios can only approximate the real work. Finally, it appears that some level of mental toughness or psychological resilience might be developed in RCA training. Therefore, measures of

psychological resilience, posttraumatic growth, mental toughness, or the like might verify that the knowledge, skills, and abilities acquired in basic training go deeper than “know-how.”

The fire academy is a kind of *total institution* context contrived to immerse the recruits in the vocational culture and training. Goffman (1961) describes total institutions and complex regimented and controlled environments that change the people within them. As such, the academy instructors that supervise, teach, and look out for the students play an important role in the contrived simulated firefighting world. Future research might explore the perspectives of the academy instructors to gain insights from their experience and praxis. Academy instructors are the first teachers and mentors these men and women will officially engage in pursuing a career in emergency services. How instructors manufacture, maintain, and promote the kind of development we found expressed in this study is likely as much an art as a science.

Conclusion

Firefighters are community leaders in times of crisis, emergency, disaster, and safety education. The fire academy programs are intended to develop one from a *person with the desire to serve* the community to a professional firefighter capable of doing so. From a modern technocratic viewpoint, firefighters are people with the requisite knowledge, skills, and abilities that perform a protective and rescue function in society. However, being a professional means that one takes on an affective domain of understanding and valuing what the work means to the community as well. Therefore, fire academy programs benefit programmatically and produce better outcomes for molding emerging professionals through engaging them in affective reflections on their experiences. The affective domain is difficult to operationalize and quantify for evaluation purposes, but when a qualitative analysis is used, the affective domain

or metacognition is illuminated descriptively for consideration by academy administrators and staff.

This study shows how recruit academy candidates learn and develop when things go as planned by academy staff. Roles, responsibilities, and simulated emergencies are occupied and played out to approximate those which these future firefighters will fill in society. The recruits express the value of performing individual roles well within the context of a team. Reliability and trustworthiness are characteristics that one must fulfill individually and collectively. Finally, the basis of this study in the reflective assignment might be refined and examined as an evaluation of metacognition in recruits and potentially reveal more about its role in successfully graduating from the academy program.

References

- Anderson, L., & Krathwohl, D. (Eds.). (2000). *Taxonomy for learning, teaching, and assessing: A revision of Bloom's Taxonomy of educational objectives, Abridged Ed.* Pearson Education.
- Basit, T. (2003). Manual or electronic? The role of coding in qualitative data analysis. *Educational research, 45*(2), 143-154.
- Blumberg, D. M., Papazoglou, K., Creighton, S., & Kaye, C. (2022). Incorporating psychological skills in police academy training. In *Police Psychology* (pp. 47-62). Academic Press.
- Broomé, R. E., & Russell, E. J. (2019). What is it like to self-rescue from a building collapse as a firefighter: a Phenomenological Inquiry. *Journal of Phenomenological Psychology 50*(2), 225-248. DOI: 10.1163/15691624-12341363
- Chizewski, A., Box, A., Kesler, R., & Petruzzello, S. J. (2021). Fitness fights fires: exploring the relationship between physical fitness and firefighter ability. *International journal of environmental research and public health, 18*(22), 11733.
- Cho, E. H., Nam, J. H., Shin, S. A., & Lee, J. B. (2022). A study on the preliminary validity analysis of Korean firefighter job-related physical fitness test. *International Journal of Environmental Research and Public Health, 19*(5), 2587.
- Corbin, J., & Strauss, A. (2008). *The basics of qualitative research* (3rd ed.). Sage.
- Dangermond, K., Weewer, R., Duyndam, J., & Machielse, A. (2022). "If it stops, then I'll start worrying." Humor as part of the fire service culture, specifically as part of coping with critical incidents. *HUMOR, 35*(1), 31-50.
- de Barros, T. R., Salerno, V. P., Ponce, T., & Mainenti, M. R. M. (2022). Body composition modifications due to the "search, rescue and survival training" in male military firefighter cadets. *Military Medicine, 187*(1-2), e160-e166.
- Dennison, K. J., Mullineaux, D. R., Yates, J. W., & Abel, M. G. (2012). The effect of fatigue and training status on firefighter performance. *The Journal of Strength & Conditioning Research, 26*(4), 1101-1109.
- Desmond, M. (2006). Becoming a firefighter. *Ethnography, 7*(4), 387-421.
- Erikson, E. (1993). *Childhood and society*. W.W. Norton.
- Erikson, E. (1994). *Identity and the life cycle*. W.W. Norton.

- Friel, J. (2015). *Fast after 50: How to race strong for the rest of your life*. Velo Press.
- Giuliani-Dewig, H. K., Gerstner, G. R., Mota, J. A., & Ryan, E. D. (2022). Examining the usability of workload monitoring in firefighter recruits. *Journal of Occupational and Environmental Medicine*, 10-1097.
- Goffman, E. (1961). *Asylums: Essays on the social situation of mental patients and other inmates*. Anchor Books.
- Gold, J., Panesar-Aguilar, S., & Aguilar, E. (2022). Educational and mandatory fitness standards in the firefighting profession. *International Journal of Multidisciplinary Research and Analysis*, 5, 185-193.
- Hageman, D. M. (2022). *The Relationship between burnout and self-efficacy in professional firefighters* (Doctoral dissertation, Grand Canyon University).
- Heydari, A., Ostadtaghizadeh, A., Ardalan, A., Ebadi, A., Mohammadfam, I., & Khorasani-Zavareh, D. (2022). Exploring the criteria and factors affecting firefighters' resilience: A qualitative study. *Chinese Journal of Traumatology*, 25(02), 107-114.
- Horn, G. P., Stewart, J. W., Kesler, R. M., DeBlois, J. P., Kerber, S., Fent, K. W., ... & Smith, D. L. (2019). Firefighter and fire instructor's physiological responses and safety in various training fire environments. *Safety science*, 116, 287-294.
- International Association of Fire Fighters (IAFF). (2019). The candidate physical ability test (CPAT), 2nd Edition. Retrieved from: <https://www.iaff.org/wp-content/uploads/2019/04/CPAT-2nd-Edition.pdf>
- Jones, B. S. (2022). *Professional development in the fire service—what's missing?* (Doctoral dissertation, University of Dayton).
- Kates, A. (2008). *CopShock: Surviving posttraumatic stress disorder (PTSD)*. Cortaro, AZ: Holbrook Street Press
- Lan, F. Y., Yiannakou, I., Scheibler, C., Hershey, M. S., Cabrera, J. L. R., Gaviola, G., ... & Kales, S. N. (2020). The effects of fire academy training and probationary firefighter status on select basic health and fitness measurements. *Medicine and Science in Sports and Exercise*, 53(4), 740-748.
- Leonard, S. J., & Vujanovic, A. A. (2022). Thwarted belongingness and PTSD symptom severity among firefighters: The role of emotion regulation difficulties. *Behavior Modification*, 46(2), 352-373.

- Lockie, R. G., Orr, R. M., Montes, F., Ruvalcaba, T. J., & Dawes, J. J. (2022). Differences in fitness between firefighter trainee academy classes and normative percentile rankings. *Sustainability*, *14*(11), 6548.
- Mason, M. (2010). Sample size and saturation in PhD studies using qualitative interviews. *Qualitative Social Research*, *11*(3), Art 8.
- Mitchell, B. J., Balikos, Y., Seah, T. H., Delahanty, D. L., & Coifman, K. G. (2022). Does past military experience impact fear reactivity in active-duty firefighters? Well, it is complicated. *Psychological Trauma: Theory, Research, Practice, and Policy*.
- Moran, C. C. (2001). Personal predictions of stress and stress reactions in firefighter recruits. *Disaster Prevention and Management: An International Journal*, *10*(5), 356-365.
- NFPA 1001. (2019). *Standard for firefighter professional qualifications*. National Fire Protection Association.
- Niemann, L., & Thielsch, M. T. (2020). Evaluation of basic trainings for rescue forces. *Journal of Homeland Security and Emergency Management*, *17*(3).
- Ogińska-Bulik, N., & Kobylarczyk, M. (2016). Association between resiliency and posttraumatic growth in firefighters: the role of stress appraisal. *International Journal of Occupational Safety and Ergonomics*, *22*(1), 40-48.
- Park, H. S., Ham, S., Jeong, J. H., Kim, S. J., & Woo, H. (2022). Examination of factors influencing SCBA washing behavior among firefighters in Metropolitan. *International Journal of Environmental Research and Public Health*, *19*(4), 2240.
- Paton, D. (2005). Posttraumatic growth in protective services professional: Individual, cognitive, and organizational influences. *Traumatology*, *11*, 335-346
- Patton, M. Q. (2002). *Qualitative research and evaluation methods (3 ed.)*. Sage.
- Russell, E. J. (2019). *In command of guardians: Executive servant leadership for the community of responders, 2nd Ed.* Springer Nature. ISBN: 978-3-0301249-2-2
- Russell, E. J. (2015). *The desire to serve: Servant leadership for fire and emergency services, Revised*. The Greenleaf Center for Servant Leadership. ISBN: 978-0-9828825-8-0
- Russell, E. J., Broomé, R. E., & Prince, R. (2015). Discovering the servant in fire and emergency services leaders. *Servant Leadership: Theory & Practice*, *2*(2), 57-75.
- Schuth, M. (2022). *Performance under fire: A study of rhetorical firefighter identities* (Doctoral dissertation, Texas Women's University).

- Seawright, J., & Gerring, J. (2008). Case selection techniques in case study research: A menu of qualitative and quantitative options. *Political Research Quarterly*, 61(2), 294-308.
- Selk, J. (2008). *10-Minute toughness: The mental training program for winning before the game begins*. McGraw Hill.
- Stake, R. (1995). *The art of case study research*. Sage.
- Thomas, C. L., & Collen, J. F. (2022). Burnt out: how to help firefighters help themselves. *Journal of Clinical Sleep Medicine*, 18(1), 9-10.
- Van Hasselt, V. B., Bourke, M. L., & Schuhmann, B. B. (2022). Firefighter stress and mental health: Introduction to the special issue. *Behavior Modification*, 46(2), 259-266.
- Wagner, S., Fraess-Phillips, A., & Mikkelson, K. (2016). Recruit firefighters: personality and mental health. *International Journal of Emergency Services*, 5(2), 199-211.
- Williams-Bell, F. M., & McGregor AM, C. (2022). Firefighter personnel and their activities in extreme environments. In *Engineering and Medicine in Extreme Environments* (pp. 235-267). Springer.
- Wohlgemuth, K. (2021). *Changes in health and fitness in firefighter recruits* (Doctoral dissertation, The University of North Carolina at Chapel Hill).
- Yin, R. (2018). *Case study research: Design and method* (6th ed.). Sage.

Tables

Table 1

Theme: Crew Bonding - Esprit de Corps

Subthemes and Codes	Examples
Team; Teamwork; Crew; Classmates; Confidence in; Awareness; Us/We; Friends; Friendship; Family; Community	<p>"... sometimes it's important to focus on more than just yourself" (P. 5).</p> <p>"When we work together, we can work faster, and we can make the task easier for all people" (P. 6).</p> <p>"We all have to be accountable for each other and make sure we are all getting better because we are only as strong as are weakest link" (P. 8).</p> <p>"I'm happy when my day is spent being physically active and thinking about others instead of looking at my phone" (P. 12).</p> <p>"I want to be trusted in the eyes of the public, my coworkers...that they will have a comfort in working with me" (P. 1).</p> <p>"I am a much bigger team player than I have always thought...I am genuinely looking out for ways to make sure that my classmates succeed even sometimes before I am focusing on my own success" (P. 27).</p> <p>"I need to trust in the people around me and the advice they give me... it helps mentally knowing you can trust your crew to get the job done" (P. 35).</p> <p>"We have achieved better performance and better time by working as a team" (P. 6).</p> <p>"I'd rather see my whole class do well than just do well myself" (P. 12).</p> <p>"I have grown to really like the people in my class. We have been hanging out and doing stuff out of class" (P. 23).</p> <p>"I found myself looking out for my teammates almost more than I was about myself because I was confident in my own personal performance, so I was able to pay more attention to them" (P. 27).</p>

Table 2

Theme: Mental Toughness Development

Subthemes and Codes	Examples
Mentality; Mindset; Mind; Positive thoughts; Negative thoughts; Emotions; Pressure; Anxiety; In control of; Resilience	<p>"I am totally in control of my mind and how I deal with stress. I noticed that if I chose to be scared and stressed out, that would be the outcome in any activity" (P. 2).</p> <p>"How fast negativity can ruin things...I need to just stay positive" (P. 15).</p> <p>"I was able to [function] at times when it would be very easy to get overwhelmed and upset" (P. 7).</p> <p>"Attitude will make the biggest difference in my success moving forward and how I can improve over time" (P. 3).</p> <p>"If I keep focusing on the big "why" and where I want to be, I can put my head down, and push through the suck [sic] and the work" (P. 27).</p> <p>"How capable I am when I put my mind to a task. I couldn't remember ever being that exhausted, dehydrated or burnt out mentally, but I knew that it had to be done. So, I found a way to do something that my mind was telling me was impossible" (P. 33).</p> <p>"How others can affect your mental strength...I'm doing better than I think I am myself and hearing them say they trust me and will work with me had been a huge mental relief and uplifting mentally for me" (P. 31).</p> <p>"Even when I am fully panicking and feel out of control, I can still have enough mental discipline to follow the instructions...I guess I discovered a weakness and strength at the same time" (P. 12).</p> <p>"I am fully capable of overcoming fears...I experienced what it was like to run completely out of air and not breathe for at least 20 seconds" (P. 36).</p> <p>"I can perform well under a lot of pressure...I thought that I would crack from all the pressure" (P. 34).</p> <p>"I have always been anxious about heights and nervous to be very high...my mind is strong, and I can control it" (P. 8).</p> <p>"I had to turn my attitude around, I did so and was able to have a good day" (P. 23).</p> <p>"Stress can be a huge problem if I have too much of it in my life... I learned that I don't handle being overstressed that well. I have learned of ways to overcome these difficulties but now it's a matter of putting these strategies into practice" (P. 36).</p> <p>"I need to take care of my mind as much as my body, my lack of mental care affected my emotional state this week which ultimately negatively impacted me on the drill ground" (P. 34).</p> <p>"I need to work on my attitude...I should be enjoying myself more" (P. 18).</p>

Table 3**Theme: Realization of Physicality**

Subthemes and Codes	Examples
Strength; Stamina; Endurance; Weak; Strong; Diet; Nutrition; Exhaustion; Pain; Tired; Breath control	<p>"My physical health needs much improvement. I found myself lacking in upper body strength" (P.1).</p> <p>"I learned to listen to my body! I need to take breaks and rest and eat when needed and not be afraid to be vulnerable in front of people" (P. 14).</p> <p>"My body will give me more if I truly want it and ask it for more. I need to constantly be challenging myself to make myself better" (P. 36).</p> <p>"I am a lot stronger than I previously thought I was, with a little bit of pressure, I am capable of far more than I ever knew" (P. 22).</p> <p>Going into this academy, I was not confident in my physical ability...I learned that with dedicated effort comes significant results" (P. 34).</p> <p>"Taking care of my body is important" (P. 23).</p> <p>"I know that I probably cut myself short a lot of the time. I think I leave a bit in the tank and in the past haven't put it all on the table when I thought I might have" (P. 27).</p> <p>"I can feel that my body is much stronger than it's been in a while...I just realized I'm no longer sore every day from just our routine tasks that we do, which is good progress" (P. 12).</p> <p>"I am not physically where I want to be. I should have done more to prepare for the fire academy. For now, I will have to keep pushing myself and not give up" (P. 28).</p> <p>"How to work hard and push myself past my limits" (P. 9).</p> <p>"Learning to push myself after still being sick, all of the evolutions ask so much from us physically and you have to just push through it" (P. 7).</p> <p>"I need to be more aware of my body and that if something is hurting then it's something I should look in to" (P. 25).</p> <p>"I am able to push myself physically" (P. 4).</p> <p>"I can push myself...I was very tired when one of the instructors asked me if I was done and needed to go out, I wasn't about to give up and go out early" (P. 20).</p> <p>"Be smart about what I eat...I have noticed that by doing this, I feel much better. I have a better attitude, more energy, and more stamina during physical activity" (P. 36).</p> <p>"I have a difficult time motivating myself to do things outside of class...I started to go back to the gym this week on my off days and I have felt so much better and felt stronger as well. It helps me to focus and release stress and anxiety" (P. 32).</p> <p>"How to physically take care of myself...I made sure to stay on top of my body's needs so that I can perform well" (P. 11).</p> <p>"I could see and feel that I need to be able to better control my breathing" (P. 6).</p> <p>"I can do hard things even when I'm feeling like I'm at my worst...those days that I do, are some of the most rewarding days in my mind" (P. 33).</p> <p>"This week I learned that I am really good at managing my air... usually I just feel like I don't do enough or see any results" (P. 12).</p>

Table 4
Theme: Self-Becoming through Overcoming

Subthemes and Codes	Examples
<p>Feelings of self-improvement; Attitude matters; Learn from mistakes; Vulnerability; Opportunities to grow; Determination; I can do hard things; I can accomplish things; Lifelong habits; Perseverance</p>	<p>"No matter how hard the days or workouts were, if I put my head to the grindstone that I could do any task no matter how hard, tiring, or painful" (P. 7).</p> <p>"How far I can push myself past my perceived limits" (p. 33).</p> <p>"I can do difficult things. I can push through the tasks that are placed in my way and do the things that are hard" (P. 29).</p> <p>"When I took the time to practice, I was able to improve substantially. It does not matter how good I am at something in the beginning, but what matters is how much effort I put in to improve" (P. 34).</p> <p>"I can prioritize my time more effectively than I thought" (P. 37).</p> <p>"It's okay to show my weaknesses to other people" (P. 14).</p> <p>"I learned that I am developing a new level of grit and endurance. When it gets hard, I dig deep and push harder against the opposing obstacle" (P. 16).</p> <p>"I am a very capable person. Often, I doubt this fact, but the progress I am making, and the results of my efforts have proved to me that I am much more capable than I realize" (P. 34).</p> <p>"How much I can improve my life by working hard and dedicating myself to accomplishing goals I have set" (P. 22).</p> <p>"I still have a lot of work to do but that will come with continued work and training" (P. 28).</p> <p>"If I'm not willing to put time in outside of class for training or personal growth I will not make it through this course" (P. 4).</p> <p>"I realized that I'm not fully achieving my potential, I am trying to figure out how to do that, and I am looking forward to trying harder and different things" (P. 12).</p> <p>"I have come a long way from who I was in the beginning of the fire academy. I have grown so much in strength and knowledge" (P. 28).</p> <p>"I am really happy with my experience...I am really happy with where I am now compared to where I was at the beginning of class" (P. 11).</p> <p>"How much I can improve my life by working hard and dedicating myself to accomplishing goals I have set" (P. 22).</p> <p>"There is no limit to what I can achieve as long as I am willing to go get it and work hard for it" (P. 23).</p> <p>"I can overcome failure and still be successful" (P. 1).</p> <p>"I am a better problem solver than I had ever thought and if in a pickle [sic] I can slow down and think and fix the issue and feel better about the situation and myself at the end of the day" (P. 35).</p> <p>"I need more confidence and consistency...I need to be more confident in my decisions, in my skills, in my strength and in my knowledge" (P. 16).</p> <p>"It is ok to be vulnerable...all too often I put up walls with people, thinking if I am vulnerable, they will see me as weak" (P. 16).</p> <p>"I have learned so much about myself, I have faced my fears and did this" (P. 24).</p>

Table 5

Theme: Reflective Self-Critique

Subthemes and Codes	Examples
Need to improve; Communication; Valuing criticism; Personal accountability; Need struggle; Current state; Need to do better; Fear of failure; Time management; What is important to me; Attitude; Thick skin; Lack confidence; Believe in my abilities; Learn patience; Emotional Intelligence; Personal responsibility	<p>"I have a lot of improvement to make before I'm ready to function as part of an effective firefighting crew" (P. 12).</p> <p>"I need to manage my time more on my off days" (P. 15).</p> <p>"I need to ask questions about what I do not understand" (P. 15).</p> <p>"I was sore and tired, and got zero sleep all week and feel like I did not put in 100% effort in" (P. 21).</p> <p>"Speak up if I'm having a hard time with something or if I'm in pain" (P. 14).</p> <p>"I feel as if I'm not doing as well as all of the other recruits and had feelings of giving up" (P. 36).</p> <p>"I need to slow down and listen, I do better when I listen and focus instead of worrying and thinking about how I'm going to do something before the instructor is finished talking" (P. 17).</p> <p>"I was mad at myself...I just want to relax and recoup...if I don't figure my stuff out quickly, I won't be around much longer" (P. 20).</p> <p>"I have been sort of a 'gray man'...I am not doing anything blatantly detrimental; I am not achieving anything at an exceptionally high level" (P. 2).</p> <p>"I can't just sit here and not put in the personal time to become better. I noticed quite a few areas where I still have a lot of work to improve" (P. 4).</p> <p>"I have some overcoming to do in the future, while wearing my SCBA I can easily get panicked, and I had to quickly get out of my own head and try and calm down" (P. 27).</p> <p>"I need to calm down, breath, take a step back and I just need to think a few more steps ahead before I do something, so when I go in to do something I am not fumbling around freaking myself out and I am too panicked" (P. 8).</p> <p>"I have to make sure to dig deep and study as much as possible...I am struggling academically" (P.30).</p> <p>"Too many times I rely on the other students to know what's going on around me when I feel like I should know what to do" (P. 18).</p> <p>"I am an extremely passionate person, with that, comes emotion at times...I need to learn to reel it in and keep it professional, it puts me in the right headspace" (P. 16).</p> <p>"Adapting and overcoming a situation...not get strung up in the moment and forget to communicate what exactly we are doing" (P. 30).</p> <p>"I need to learn how to better take criticism from others. It took me a while to come to terms with doing things wrong quite often and being criticized for it" (P. 13).</p>

Author Biography

Eric J. Russell, Ed.D., CHPP is an associate professor with Utah Valley University's Department of Emergency Services. His writings and research focus on the influence and impact of servant leadership on emergency services organizations and individual responders, as well as homeland security education. He is the author of more than 80 peer-reviewed and trade publications as well as two books. Eric retired early as a Captain from the Department of Defense/USAF Fire and Emergency Services with combined active-duty military and DoD service.

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Building a Common Operating Picture via a Community Task Force During the COVID-19 Pandemic

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Abstract

In crises, emergencies, or disasters, decision-makers find themselves in need of accurate, actionable information. Nevertheless, for novel or large disasters, accurate and actionable information is at a premium (despite a near-deluge of available information). This article examines how a small community in West Virginia utilized an ad hoc community task force to share information during its response to the COVID-19 pandemic, thus contributing to a collective sensemaking process that yielded a dynamic, actionable common operating picture for participating entities. It combines literature from the emergency management field with findings from cognitive ergonomics and shared leadership lines of inquiry to describe what, on the surface, may have appeared to be simple conversations during task force briefings. Briefing notes, a mid-action review, and interview data suggest that the participative process contributed to the viability of the common operating picture and the willingness of those in need of it to use it. Open-ended, facilitated briefings can contribute to the joint possession of information, sensemaking and interpretation, and new ways of knowing about the unfolding situation. Further, the data reinforces the importance of consistent, factual information for decision-making.

Key Words: Common operating picture, Emergency management, Information sharing, Pandemic response management, Sensemaking

Introduction

Accurate information is critical for decision-making (Boin, 't Hart, Stern, & Sundelius, 2016; Houhamdi & Athamena, 2019; Kerns, 2016). During a crisis, emergency, or disaster, decision-makers encounter stressors (e.g., time pressures and varied spatial aspects) alongside a rush of information (from text sources, videos, social media, first-hand accounts, etc.). While a rush of data may appear to be a good thing, its quality is often suspect (Jayawardene, Huggins, Prasanna, & Fakhruddin, 2021), and leaders find themselves in need of a synthesized picture of the situation. In the United States, the Department of Homeland Security (USDHS)/Federal Emergency Management Agency (FEMA) doctrine refers to aggregated incident-specific information as the "common operating picture" (2008). The common operating picture is the foundation for subsequent decisions throughout the response and recovery phases.

Still, a common operating picture is not unique to the disaster management context. Decision-makers for high-reliability organizations (Weick, Sutcliffe, & Obstfeld, 1999) and military operations (Klann, 2003; McChrystal, 2015; Schraagen, Huis in 't Velt, de Koning, 2010), as just two examples, also rely on a steady stream of situational awareness to support decisions and to supply the fodder for feedback loops (Bedny & Meister, 1999; Tichy & Bennis, 2007).

In site-specific critical problems (Grint, 2005), where life safety is paramount and the response goal is often apparent with minimal or no negotiation, the on-scene incident command system often sustains a sufficient common operating picture. For more complex incidents, i.e., "tame problems" (Grint, 2005), addressed by a largely homogenous group of response stakeholders, a robust incident command structure can only construct an actionable,

yet incomplete common operating picture. Indeed, the "myth of top-down command and control" (Boin et al., 2016, p. 49) is exposed. However, since these anticipated, often planned-for incidents utilize a familiar set of stakeholders, trust that partners will honor their commitments can make up for vague situational awareness.

As public safety officials and crisis managers in all sectors stare down a seemingly expanding range of risks exacerbated by climate change (Gaddy, Clark, & Ryan, 2014; Houser, 2022; Montano, 2021; Ngcamu, 2022; Schneider, 2011), the increased potential for multi-jurisdictional, multi-disciplinary disasters is expected. In those instances, accurate information is at a premium, yet for the novel situations in which leaders find themselves, mental shortcuts that prove effective in more familiar situations can fail. As military personnel learned when in the heat of the War on Terror, restricting information flow to paths outlined in hierarchical organizational charts impedes the mission (McChrystal, 2015). For emergency managers or responders, it can mean a missed opportunity to prevent an incident's escalation. Identifying new, dynamic ways of constructing a common operating picture can support response and recovery decisions, potentially making operations more effective (Combe & Carrington, 2015).

Despite warnings of the potential for a pandemic and funding to support initial, local-level preparedness, the COVID-19 disaster represented a multi-disciplined, novel situation that strained community-level responders. Communities found themselves needing a standard response strategy, yet the needs of stakeholders varied wildly. Public health and medical responders, for example, faced one set of challenges, while public school districts and institutions of higher education faced a different set of challenges. Further, national and international level resources depicting estimated case counts (e.g., the popular Johns Hopkins

Interactive COVID-19 Dashboard, <https://coronavirus.jhu.edu/map.html>) were convenient and beneficial, but they did not provide the ground-truthed data needed to support decision-making at the local level. Even similar state-level dashboards (e.g., the West Virginia Department of Health and Human Resources resource, <https://dhhr.wv.gov/COVID-19/Pages/default.aspx>) had difficulty capturing the variance across a state's communities promptly. How could local officials build community-level awareness to support local and organizational decision-making?

This article examines the common operating picture, unpacking what it means to share information in a novel disaster context. The research setting includes two years of community-level "task force" briefings in a West Virginia community as it managed its response to the COVID-19 pandemic. It combines literature from the emergency management field with findings from cognitive ergonomics and shared leadership lines of inquiry. The narrative challenges the notion that an individual atop an organizational chart will know what data are actionable to a full range of partners. Task force members openly shared detailed information, engaging in a collective process that supported the individual decisions made by the members' home organizations. The substantial bottom-up contributions to the development of objectives for an upcoming operational period provides insight on what community leaders actually do within an incident management structure, rather than simply how they can organize. The following section outlines relevant literature, and subsequent sections discuss the task force structure, present and review data, and offer considerations for future research and practice.

Literature Review

In the United States, the U.S. Department of Homeland Security (USDHS)/Federal Emergency Management Agency (FEMA) defines a common operating picture as "a continuously updated overview of an incident compiled throughout an incident's life cycle from data shared between integrated communication, information management, and intelligence and information sharing systems" (USDHS SAVER, 2008). The intent of the common operating picture (COP), put generally, is to capture real-time incident information across all active arenas and from all active stakeholders to support situational awareness and decision-making (USDHS SAVER, 2008). From a definitional perspective, the COP is straightforward, and it can be reasonably simply compiled for confined (but potentially severe) critical incidents (Grint, 2005). However, compiling a complete and accurate common operating picture can be exceedingly difficult for larger incidents, particularly those that begin to span multiple disciplines and jurisdictions.

Sensemaking and Sensegiving

Though the USDHS/FEMA conceptualization of the COP focuses on the collection and availability of information, it implies comprehension and the ability to support action. Thus, sensemaking and sensegiving come into play. Sensemaking is the process by which one comes to understand the nature of the unfolding context (Boin et al., 2016; Combe & Carrington, 2015; Endsley, 1995; Shu & Furuta, 2005; Weick, 1988), and despite the somewhat obvious definition, numerous variables feed that process. Endsley's well-researched model of situational awareness recognizes the need for a period of perceiving, where the individual compiles a working assessment of the incident (1995). The perception process involves teasing

out the "status, attributes, and dynamics of relevant elements in the environment" (Jayawardene et al., 2021, p. 4). Next is the comprehension (or interpretation) stage, where an individual begins to understand the significance of what is happening, followed by a third stage, the ability to anticipate, or predict, changes in the situation (Jayawardene et al., 2021). Similarly, Klein's recognition-primed decision-making model uses pattern matching whereby an individual makes sense of the surroundings by recognizing distinct elements of a situation and mapping them onto an existing mental model to support a decision on action. Novel or complex situations require additional cognitive processing (1989, as cited in Jayawardene et al., 2021).

As a cognitive process, one cannot overlook the interpretations (Gioia & Chittipeddi, 1991), cognitive filters (Weick, 1995), or biases (Combe & Carrington, 2015) of the sensemaker. During disasters, an inability to comprehend the available information or outright conflict between different streams of available information (Boin et al., 2016; Carson, Tesluk, & Marrone, 2007; Jayawardene et al., 2021) cloud the sensemaking process, as do perceived instability (of the community or organization), a seemingly constant rate of change, and temporal pressures (i.e., to act now) (Burns & Stalker, 1961; Lichtenstein & Plowman, 2009; Mumford, Friedrich, Caughron, & Byrne, 2007). When combined with the inevitable influence of one's own mental models (Combe & Carrington, 2015), suspect data quality (Jayawardene et al., 2021; Klann, 2003), and even one's role in the emergency or disaster response (Prasanna, 2010), the difficulty of quickly compiling an informed foundation from which to make decisions is apparent.

Sensemaking is a dynamic process. Individuals make assumptions about, for example, the future (Endsley, 1995; Weick, Sutcliffe, & Obstfeld, 2005), the effectiveness of selected

responses, and the willingness of impacted populations to heed warnings and other instructions. Thus, the picture created through a sensemaking process changes constantly, requiring the sensemaker to reassess the situation iteratively (Weick, 1988). Sensemaking, at least initially, resides with the person (Bedny & Meister, 1999). A critical consideration of sensemaking in disaster situations that necessitate action is the ability of a leader or manager to influence the sensemaking of those she/he directs.

Sensegiving is constructing a convincing narrative that inspires confidence and supports complementary action (Boin et al., 2016; Fairhurst, 2011). It is, in essence, a series of "framing contests" (Boin et al., 2016, p. 80) wherein a range of stakeholders impose their views (or frames) of the situation on constituent populations. Importantly, those stakeholders can be in-group stakeholders, i.e., those participating in a collaborative effort, or out-group stakeholders, such as those with competing interests or even other levels of government involved in a response or recovery. Further, sensegiving is a socially constructed process (Weick, 1995). What constitutes risk and vulnerability contributes to the success of a crisis narrative that prompts action. To expect different interpretations by conflicting parties is understandable. Nonetheless, even a group of committed collaborators must recognize potential differences in risk tolerance and vulnerability definitions. Interaction and communication are two ways to reconcile some of those differences (Huber & Lewis, 2010; Shu & Furuta, 2005).

When a range of broadly consistent actions are necessary for a disaster, like a pandemic, and when the partners representing those actions come from diverse backgrounds with potentially conflicting or competitive peace-time missions, reconciling the frames into a consensus is difficult, if not impossible. As such, sensegiving and consensus remain separate

constructs. Kellermanns, Water, Lechner, and Floyd (2005) report that the connection between consensus and performance has been oft studied with mixed findings. This realization is neither good nor bad. Achieving consensus may slow progress or yield less innovative solutions. However, diverse perspectives mitigate individual biases (Combe & Carrington, 2015; van Knippenberg, De Dreu, & Homan, 2004). Varied experiences within the leadership team can increase the accuracy of the contextual understanding and yield more creative solutions to problems (Combe & Carrington, 2015; Kilduff, Angelmar, & Mehra, 2000; Shin, Kim, Lee, & Bian, 2012).

Still, a question remains: is the goal consensus around one person's interpretation? Boin and colleagues (2016) suggest that crises (or disasters) require a group of competent sensemakers to develop an actionable common operating picture. Schraagen et al.'s experiment pitting hierarchical teams against network teams demonstrated certain circumstances where network teams performed with similar accuracy as hierarchical teams, yet significantly faster (2010). That study confirmed network teams could derive actionable and accurate common operating pictures.

While the availability of individuals with relative experiences and perspectives is rarely an issue (Zaccaro, Ritman, & Marks, 2001), having a common framework through which to process information can be (Boin et al., 2016; Crosby & Bryson, 2010; Morse, 2010). In the emergency management literature, this structure is often the emergency operations center (McKinney, 2018). Research on workgroup diversity elaborates on how heterogeneous workgroups can generate creative solutions while better understanding the context in which the decision will be deployed. Van den Bossche, Gijselaers, Seques, Wolter, and Kirschner

(2011) note that team-based interactions characterized by "discourse processes" (p. 284) that lead to team learning can enable a shared cognition (i.e., understanding of the context at hand). Similarly, an interactive reconciliation of differing viewpoints leads to a mutual agreement on the context (Bittner & Leimeister, 2014; van Knippenberg et al., 2004; Wilkinson, 2012). While a collective agreement on response actions may be necessary for some situations, the multi-disciplined nature of an area-wide response brings together varied, sometimes clashing jurisdictional authorities and mission objectives (Zaccaro et al., 2001), making agreement unnecessary (let alone impossible to achieve).

Harvey's (2017) research on the recovery from localized disaster events in Ohio, Pennsylvania, and West Virginia (United States) identified a theme of "empowerment with influence" when describing collective interactions in the latter stages of response and early stages of recovery. One of the elements of that theme was "clarifying the elements of a strategy for greater effectiveness" (p. 111). During a disaster situation, strategizing becomes a recursive process. Strategy forms and then re-forms as partners add information. Harvey's work identified passages wherein partners shared information to increase the entire team's cognition; put differently, the information shared bore little relevance to the sharer's immediate decisions, but it was available to the sharer and could potentially contribute to a refinement of the overall response/recovery strategy (p. 112), which might be relevant to future decisions.

Collective Situational Awareness

Collective situational awareness is born out of interactions. Salas and Prince (1995) recognized instances where team members had, at least in part, a shared understanding of an

unfolding situation at one point in time. While Salas and Prince acknowledged that the sharedness does not exist among team members continually and exclusively (nor does it have to), earlier definitions of collective awareness presented a process whereby partners share some constructions of an unfolding situation while other constructions (of the same situation) remain distributed (Artman & Garbis, 1988). In disasters, a mix of sharedness and distribution is likely attributed to partners' individual "subgoals" (Endsley & Jones, 2001), such as mission focus, capabilities, or community/organization served.

Sharedness, according to Bittner and Leimeister's research, can take two forms (2014). It can refer to an agreed-upon division of labor wherein the outcome is shared, or it may represent a "joint possession" (p. 114) of something (e.g., a physical item or a nugget of information). Shu and Kuruta envisioned joint possession of information as "mutual awareness" (2005, p. 274). Further, the degree of sharedness can vary depending on the overlap of agreement. For instance, partners may agree on the nature of the problem and not the solution, or they may agree on both. In both instances, there is a shared understanding of the problem but not the resultant course of action.

In some cases, a shared understanding can only extend so far. Partners may represent divergent mission sets and, as such, not have the requisite knowledge to understand the needs of other partners. The missions may be so divergent that, despite the need for an impacted population to perceive the actions of those in charge to be consistent, it may be inefficient for a single partner to truly understand the intricacies of the interpretations and actions of all other partners. Congruence across such a network of partners stems from a common starting point.

Thus, a "shared system description" (Bouska, Houser, de Jager, & Hendrickson, 2018, p. 11) is vital to "team situation awareness" (Shu & Furuta, 2005).

Effectiveness in these multi-disciplinary, multi-function responses becomes less about the synchronicity of individual and agency actions and more about the congruence between them (Sapateiro & Antunes, 2009; Shu & Furuta, 2005). Do the actions coincide? Do agencies avoid contradicting or clashing against one another (Zaccaro et al., 2001)? Do agencies recognize their shared interdependence and share information (Boin et al., 2016)? In a study looking at a way to strategize for ecological resilience in the Upper Mississippi River Watershed, Bouska and colleagues observed that interactions between stakeholders were not arguments for one approach over another but discussions about how varied approaches could be complementary (2018).

If sharedness results from discourse (Huber & Lewis, 2010; Schraagen et al., 2010; Shu & Furuta, 2005), what are the implications for the foundations of sharedness? Boin and colleagues identify "new group syndrome" (2016, p. 55) as a barrier to decision-making in collective instances. As ad hoc groups come together for crisis response, members may be unfamiliar with one another, or, as noted above, their peace-time missions may be competitive (i.e., they compete for a share of the same set of limited resources). Beyond acknowledging a partner's role, there may be little incentive to collaborate initially. Hence, finding common ground early from which to build can be a critical success factor. An example is a commitment to serving the community (Harvey, 2017). Creating a vehicle for interaction and communication can identify a mutual awareness (Shu & Furuta, 2005) of these shared values early.

Emergency manager and author Kelly McKinney writes about “the big machine” (2018). The metaphor represents access to the people, knowledge, and other resources necessary to manage a large-scale response. Practitioners in emergency management will recognize the big machine to envision the emergency operations center, yet that is a simplistic understanding of it. Free-flowing, minimally filtered information that transcends individual mission or jurisdiction lubricates the elements of the machine (McChrystal, 2015; McKinney, 2018). Without it, not only are the decisions to send resources to a partner hindered but also the apparent congruence between the decisions of all partners involved in a response and the resultant complementarity of their actions grinds to a halt.

Methodology

This research was a case study (Crowe, Cresswell, Robertson, Huby, Avery, & Sheikh, 2011) of the COVID-19 pandemic response in a West Virginia community (University of Charleston Institutional Review Board Proposal #20-0018). The overall study included quantitative and qualitative components, though the data reported in this article came from 10 semi-structured qualitative interviews and document reviews. Documents included the ICS 201 incident briefing forms and meeting notes for 58 virtual task force briefings between March 2020 and March 2022, the minutes for nine recovery subcommittee meetings between April and July 2020, and the mid-action review (an after-action style document compiled in November 2021 to capture lessons learned from the lengthy and ongoing response). The research question examined shared leadership in disaster response and recovery. The themes discussed below contribute to calls for research on group-level situational awareness in disasters (see Jayawardene et al., 2021, as an example) by focusing on the formation of the

common operating picture that is necessary to enable shared leadership (Carson et al., 2007; Crosby & Bryson, 2010; Margolis & Ziegert, 2016; Morse, 2010; Pearce, Perry, & Sims, 2001; Serban & Roberts, 2016).

The community under study managed its response to the COVID-19 pandemic via an ad hoc, local-level task force consisting of 54 agencies. The agencies included the local public health authority, a critical access hospital, a federally qualified health center, private physicians' offices, traditional emergency services providers (i.e., police, fire, and emergency medical services), the local public school district, a private college, the divisions of local government, and numerous social and community services organizations (e.g., non-profit organizations, economic development agencies, professional organizations, etc.). The local health department asked the primary investigator to facilitate meetings in March 2020. The task force met at various intervals, and the participants considered the time between meetings to be an operational period. In the early days of the pandemic, operational periods were three days. In March 2022, when the task force disbanded, the operational periods were one month in length. For most of the response, operational periods were two weeks. Briefings averaged 45 minutes.

After the task force stopped meeting, the primary investigator conducted 10 semi-structured interviews. The interview guide included nine questions (see Appendix A). He selected interviewees by listing the task force member agencies alphabetically by name, numbering that list, and then using a random number generator to identify the agencies to approach. The interviewees were the most current task force representatives for that agency.

The research team conducted an inductive thematic analysis of the interview transcripts to identify themes. The researchers coded the data individually and then met to reconcile the

themes into a master list. The primary investigator further refined the data by comparing emergent themes from transcripts with scholarly literature from emergency management, shared leadership, and collaboration lines of inquiry. With the updated list, the researchers met again to validate the primary investigator's refinements. To conclude the analysis, the researchers discussed those themes framed by the primary investigator's experiences facilitating briefings and the documents collected (i.e., the ICS 201 forms, briefing/meeting notes and minutes, and the mid-action review).

Results

Briefings averaged 45 minutes in length ($n = 67$). Meeting attendance varied, with some briefings including 90+ individuals and others with about 10 participants. Further, attendance varied within each briefing, as some attendees joined late, left early, muted to take calls, or temporarily stepped away. Attendance was noticeably better in the early days of the pandemic, roughly March through June of 2020. The drop in attendance coincided with the full implementation of the West Virginia Strong-The Comeback recovery plan promulgated by the state's Governor when several members returned to their full-time jobs.

Semi-structured interviews averaged 25 minutes ($n = 10$). The interview sample consisted of six males and four females. By position, the sample included three government employees, two public health representatives, two non-profit representatives, and one each: congregate care representative, elected official, and volunteer firefighter. All interviewees attended multiple task force briefings, with eight of the 10 having attended most of the briefings across the two years the group met. Seven interviews were in-person and one-on-one, and two were via the Google Meet video conferencing platform. The final interview was in-

person but preceded a regular meeting of the interviewee's organization. Thus, there were others present during the interview.

Initially, community members created a subcommittee of entities designed to focus on recovery activities, and that subcommittee met from late April through early July 2020. The recovery subcommittee members began attending full task force briefings, and members found greater benefit from the larger group, thereby suspending separate meetings to plan recovery actions. Further, when the recovery subcommittee suspended its meetings, it was clear to community members that the response to the pandemic was still well underway (and would be for the foreseeable future). The members in attendance evolved throughout the pandemic. In 2020, numerous agencies attended briefings. By 2022, attendance consisted primarily of those agencies involved in the community's recovery (rendering the resumption of recovery subcommittee meetings unnecessary).

Document Review

Task force briefings began with public health and medical partners providing updates on their operations. For instance, the local health department updated local case counts and fatalities, and hospital and clinic representatives provided updates on their operational status, testing results, and vaccination efforts. On numerous occasions, other attendees posed questions to public health and medical partners, and these questions largely fell into one of three categories: (a) clarification of figures, (b) additional information on how proposed public health and medical actions addressed pandemic-related challenges in the community, or (c) comments on planned agency-specific actions.

Task force briefings, including the nine recovery subcommittee meetings, consistently included a "roll-up" during which attendees provided status updates for their organizations and, in many cases, disciplines. Though the facilitator often prompted a roll-up, in the few instances where it was not on the agenda, attendees began providing their status updates during an open question-answer period. Further, the roll-up period was the largest block of time within briefings, and it included more open-ended discussion than the situation updates and objective development.

In March and April 2020, the task force designated three individuals (the facilitator, county emergency manager, and county administrator) to compile press releases outlining the key points of its meetings for dissemination to the public. Between May and November 2020, the focus shifted from press releases to infographics members shared via social media outlets. By January 2021, many aspects of community life had resumed (e.g., businesses were open, governmental entities resumed an in-person component to meetings, in-person schooling partially resumed, etc.); thus, the task force suspended regular release of write-ups or infographics in place of information released by those operating entities.

Throughout 2020 and into 2021, task force briefings included the formulation of overarching objectives to guide the community's response. In late 2020, these objectives became less and less tactical and starting in early 2021, they rarely changed. By mid-2021, commenting on objectives ceased to be an element of task force briefings, with the discussion instead focusing solely on community and departmental status (i.e., the roll-up).

The "mid-action review" identified two items related to the common operating picture. Local representatives identified the challenges associated with addressing misinformation, with

phrases such as "*give it a local flair about the facts,*" "*try to influence rather than direct,*" and "*build and utilize relationships in this effort*" appearing in the report as an area for improvement. Partners noted a strength of the task force as its ability to evolve based on the community's needs. For example, when case counts were high and agencies were stretched thin, the task force met to share information more frequently.

Interviews

Several relevant keywords appeared in the interview data, including "sensemaking dynamics-interpretations," "consistent factual messaging," "separate state-nation data from local," and "new ways of knowing." Two of these keywords appeared in the literature (e.g., *joint possession of information* [Bittner & Leimeister, 2014] and *sensemaking dynamics-interpretations* [Endsley, 1995]), while another (i.e., *new ways of knowing*) was a nuanced take on themes that appear in the literature, such as "ambiguity" (Carson et al., 2007) and "constant change" (Burns & Stalker, 1961). One other keyword (i.e., *consistent factual messaging*) was unique to these data and not obviously or directly connected to the literature. The following paragraphs define the keywords and list representative passages from the interviews.

"Joint possession of information" appeared in the interview data 12 times. The keyword primarily comes from Bittner and Leimeister's 2014 work. In this context, it represents instances when information is shared in the sense that multiple members of the task force "possessed" it because of interactions. One interviewee related the possession of this range of information to decision-making.

It was more...recommendations. So I think it was used as a resource, just like the CDC, WHO, DHHR would be, to provide additional information as to why maybe we were making the decisions that we were making.

For another interviewee, giving and possessing information was a foundational purpose of the task force. When asked about why the interviewee participated, this individual responded:

And then we met and started talking...more about...how we're going to handle all of this, and then it came up. It would be nice to have (an opportunity to) know what everybody else was doing and all stay, you know, educated...We knew...things were going to be changing...and (a group of local representatives) was going to have the best information.

Other responses were general.

...having a little bit more knowledge of what's really going on full circle rather than just assuming or wondering.

A lot of it was just passing on knowledge.

The "sensemaking dynamics-interpretations" keyword derives from the second stage of Endsley's situation awareness model (1995). It refers to instances where attendees were working with the information gleaned from task force interactions, informing their views on the evolving situation. It appeared eight times in the interview data. In discussing how the information from the task force influenced his understanding of potential pandemic impacts, one interviewee noted:

Just the variety of folks...on the call and getting updates from everyone. Even like the (name of a daycare center); I mean, what (is going on) down there? I mean, I

thought that was important to know where they were at because I thought that was a big catalyst to people being able to stay working.

Another interviewee reflected on the organic ways that information from other partners matured his understanding of the pandemic.

...any time we bring certain minds together for an extended period of time and they (ex)change ideas, it almost...it's a subliminal...absorption of change that you want to implement in your own organization. Because of the things you learn from another organization. It may not smack it upside the head that, yeah, I've learned something today. You may simply find yourself practicing what others have talked about, and you think, okay, I learned it from that. So sometimes this is a subliminal type of help.

As noted, "new ways of knowing" included elements of ambiguity (Carson et al., 2007) and constant change (Burns & Stalker, 1961). It incorporates those ideas to refer to instances where attendees learned about or clarified their understanding of a change or a feature through interactions. This keyword appeared six times in the interview data. In a representative passage, one interviewee remarked:

I didn't realize a lot of this was available to people in the community...because I never had to partake of it...we have a lot of people in (County Name) that never had to...I know my (staff) are like, 'Wow, I didn't know they did that.'

Access to "consistent, factual information" was a common theme of the interview data. As a keyword, it appeared 15 times in the interview data, more than any other keyword highlighted by this article. In some ways, this keyword is akin to Endsley's Stage 1 situation awareness (1995), where individuals perceive what is happening around them. Perception,

though, carries with it emotional stimuli and reactions to incomplete or inconsistent information. This keyword could also refer to the initial interpretation process, but the representative responses imply looking for factual data to inform future interpretations. As such, the research team identified this keyword as unique to these data and defined it as local clarifications on the rumors, unverified information, misinformation, and conflicting information available from unverified, state, and national-level sources. One interviewee noted:

...having direct knowledge of conditions from the health department or the hospitals influenced some of how we responded to the customers we serve.

Another interviewee said:

...you're only as good as the information you have. The correct information. You never know 100 percent if you're getting all the facts correctly, but you've got to assume with a group of professionals, folks who have dedicated their lives to a certain area in the community, that they're going to come forward and be factual with the information they give.

Another interviewee related:

Sometimes you don't get that kind of information through the news. It doesn't matter what news you try to go to or what article you try to go to, because I felt like there just wasn't (relevant information available). I felt like with the task force...I felt like I got a true, like details of what was happening with the virus directly affecting us.

Discussion

Though the finding that individuals learn from one another through interaction is unsurprising, these data reinforce the importance of information for decision-making during

disasters. As such, this study is another in a long stream of research that empirically connects information quantity and as suggested by the *consistent, factual information* keyword, quality to the decision-making process. An interesting point to note is the placement of the *consistent, factual information* keyword between Stages 1 and 2 of Endsley's 1995 situation assessment model. Seeking out factual information contributes to perception through refinement and clarification, yet the deliberate search for factual information implies an analytical process. This analytical process, in turn, implies interpretation, yet interviewees seemed to suspend (to the extent possible) judgment while awaiting verification of facts.

The task force did not function as an incident command structure, though it loosely resembled a multi-agency coordination system (USDHS FEMA, 2017). Briefings did not include making critical decisions that would obligate task force members. Further, attendance was not mandatory as the task force was an ad hoc committee whose membership and role evolved within the pandemic response. These data suggest that access to trusted, local information kept members coming back. Briefing notes included roll-up style status updates from all attendees. Partners had the opportunity to pose questions to other members during the roll-up. As indicated above, the roll-up was the longest portion of task force briefings. It included the most open-ended, dynamic discussion, suggesting that the availability of the roll-up was a driver of attendance and participation.

The definition of "common operating picture" (provided above) references continual updates, which sets a real-time goal and identifies communication and information sharing as critical strategies. In a disaster such as the COVID-19 pandemic, where abundant misinformation was a challenge, responders desired input from local, trusted agents. As

suggested by the mid-action review, though, the common operating picture is not *just* a piece of information. Task force members valued the participative aspect of compiling the common operating picture for this community. Dynamic data validation and clarification (via the roll-up) allowed participants to probe where relevant for their mission, perhaps enhancing their understanding of the overall context and how their actions might impact the overall situation (Combe & Carrington, 2015; McChrystal, 2015).

Limitations

As with any study, this project had several constraints and limitations. Boin and colleagues (2016) note the importance of developing response networks, though they further acknowledge that group members often do not share actionable information effectively to support decision-making. The lack of sharing can be intentional (i.e., withholding it for whatever reason), but it need not be. Someone may view a piece of information as irrelevant while it is quite relevant to another partner around the table. This study suggests benefits to a collectively derived common operating picture (COP). However, it could not determine if task force members were sharing all the relevant, actionable information available to them.

This study examined one ad hoc team operating in a single community. The conditions under which the team came together (i.e., the COVID-19 pandemic) and how it interacted (i.e., virtual conferencing software) were unique. The ability to generalize these results is suspect, though the study's intent was, in part, to examine coordinating structures rather than comment on the most effective means of compiling a COP. The role of the principal investigator must also be noted. He served as the facilitator of task force briefings and knew many of the task force members personally. He took measures to exclude his own comments from the data and

utilized two co-investigators to validate and quality-check his findings. However, his familiarity with the community and its stakeholders may have indirectly affected the data (e.g., task force members felt more comfortable sharing information with someone they knew leading the discussion). The principal investigator also conducted all ten in-depth interviews. Again, his relationships with the interviewees may have influenced their responses, though the manner or degree of which is unknown.

The local public health department coordinated task force membership by agency affiliation, not a personal invitation. Some agencies had multiple representatives at most of the briefings, others had multiple representatives attend at different times, and others saw their personnel turnover within the protracted range of pandemic operations. This study did not focus on the actions of any individuals. Through direct observation and questioning interviewees, it examined the interactions of the range of group members. However, different individuals brought their unique personalities to the briefings, and the influence of this variable on the data is unknown.

Similarly, this research did not seek to comment on team development. The task force was, by design, an ad hoc group with no formal delegated authority, nor did the public health department, county commission, or city council that authorized its formation intend for it to continue beyond its intent to share incident management information about the pandemic response. As such, influences related to team development, new group syndrome, group thinking, or politicking among members (Boin et al., 2016) were beyond the scope of this research.

There was no effort made to assess the effectiveness of decisions made using task force-provided information, nor is there any data related to how effective the community found the task force's efforts to be. Further, beyond broad brush statements like "the briefings were helpful" and a general sense that the availability of timely, locally specific information was beneficial, this study did not attempt to quantify the number of decisions made by partner entities directly supported by task force-provided information.

The authors acknowledge that ten interviewees comprised a small sample. Though task force membership was robust at the start of the pandemic, regular consistent attendance decreased after two years of regular meetings. The small interview sample resulted, in part, from selecting from active members upon the demobilization of the task force. The document review enables inclusion of contributions from those that were unable to participate during the latter portions of the task force's operations. During briefings, the principal investigator displayed a Microsoft Word document on his screen and took notes real-time as attendees provided status updates, questions, etc. Aside from revising spelling errors and other minor grammatical mistakes, this document served as a key element of the minutes of the briefings; it was included in the document review, thereby providing at least minimal access to the contributions of a broader range of task force members. If the intent of this study was to produce more generalizable data, a more representative sample of task force members, past and current, would have been necessary.

A principal benefit of qualitative research is the availability of rich data. In qualitative studies where the researcher embeds her/himself in with the sample, data streams beyond the initial scope of a research project often present themselves (Guest, Namey, & Mitchell, 2013).

Such was the case with the data on which this article is based. Though the data used is based solidly on scholarly efforts to examine sensemaking and meaning making in disasters and, the research team believes, extend helpful knowledge for emergency managers and responders, it must acknowledge these findings as outside the scope of the original research question.

Recommendations

This study suggests several avenues for future research to enhance practitioner and scholar understandings of creating and sustaining common operating pictures during incidents.

Considerations for Practice

When engaging in discourse, it may seem apparent that the information under consideration is readily available to all participants. Confirming availability as well as ensuring the information remains accessible, however, is another matter. This study suggests that being mindful of information sharing is important. Scribing minutes of briefings and making full versions (i.e., not condensed or edited for content) available to all partners can keep the information “top of mind” as those tasked with implementing objectives leave the briefing and return to the operational theater.

Similarly, for those communities looking to implement virtual emergency operations centers (EOCs), sharing information while compiling it (i.e., in real time) is a key lesson from this study. Task force members could observe the facilitator documenting their contributions, which led to numerous corrections and clarifications, again in real time. Additionally, doing so prompted clarifying questions from other attendees, presumably ensuring a more thorough understanding of the evolving common operating picture. While virtual EOC proponents may

espouse the benefits of being able to see one another (with web camera options), this study suggests that also sharing the material under active consideration is beneficial.

National Incident Management System doctrine (USDHS FEMA, 2017) notes that ensuring comprehension of information shared is essential. This study suggests that not only are displaying the material while generating it and making it available beyond a briefing helpful, but also deliberately asking for questions is an effective, easy-to-implement tactic. Attendance does not equal participation, and encouraging participation enriches the resultant material that is available to everyone. Moreover, in virtual settings, attendees may “disappear” by remaining quiet with cameras off and microphones muted. Practitioners may consider calling on all entities in attendance, thereby minimizing the chance for an entity to be missed, unheard, or opt out of sharing a relevant status update. It is acceptable to report no significant status updates, as doing so clarifies what is important for and active in a response. This roll-up style of moderation also allows partner agencies to pose questions they may have otherwise missed if an entity did not speak up. While this strategy would benefit in-person briefings, it is particularly important in virtual settings.

The above narrative notes task force members’ preference for locally specific information from trusted agents. Not only did this relevant information seemingly contribute to decision-making, but it may also have been a significant motivator to keep bringing partners back to the briefings. Numerous task force participants commented on how nearly everything discussed during briefings would be locally specific, actionable, and valuable, even more so than information from official sources in higher levels of government. Thus, this study suggests that practitioners should focus intently on the relevance of information shared in collective settings.

Finally, emergency management and response practitioners should strongly consider bringing the common operating picture out of the planning section or associated EOC grouping. This study suggests that the COP is not something to be put together, but, rather, something to be created. Planning section or other EOC personnel would likely continue to play key roles in maintaining and disseminating the COP (between briefings), but relegating it to a “find and retrieve” task solely supporting overall incident documentation keeps it from becoming the comprehensive, near-real-time resource supporting effective and consistent incident decision-making throughout all of the incident management structure (USDHS SAVER, 2008).

Future Research

Even with a process that lays out relevant information, participants must consciously try to derive meaningful interpretations of events to inform their actions (Bedny & Meister, 1999). For the present study, there were no surveys, tests, or calculations to assess other measures of teamwork that often feature in the literature (e.g., trust and mutual performance monitoring). Future research could focus on these items with more quantitative methods. Similarly, future research extending the current design by measuring information exchange, which may elucidate not only the types of venues by which partners share information but also the ways to share information to increase comprehension (van Knippenberg et al., 2004). Short-answer questionnaires could measure agreement on primary themes from briefings; surveys could collect data on opinions as to how clear the messages conveyed by partners were.

Task force members had equal opportunities to attend briefings and contribute information; for various reasons, some members were more active than others. This study identified several variables that could contribute to a helpful, dynamic common operating

picture as well as a collaborative approach for managing certain incidents. A potentially fruitful line of inquiry could be to conduct a social network analysis on this type of task force grouping. Such an approach could identify which members within a group offer the most compelling or valuable information to support the decision-making of other partners. An extended study on those individuals could offer suggestions on what practitioners could do to enhance their communicative and leadership effectiveness during incident management activities.

Some researchers have acknowledged the potential benefit of mutual monitoring (Endsley & Robertson, 2000), whereby partners monitor one another's performance without explicit communication to refine situational awareness (see the second means of achieving mutual awareness, Shu & Furuta, 2005, p. 278). Despite acknowledging an awareness of what partner organizations were doing during task force briefings (i.e., what actions they had initiated between briefings), measuring the level of monitoring that task force partners did of one another was beyond the scope of the present study. Still, that approach could be another way of examining those who exhibit emergent leadership in collaborative disaster management settings.

Task force briefings in this community were virtual, even in 2022, as case numbers fell and many other aspects of work had returned to in-person settings. Anecdotally, the virtual format was convenient to task force members. Still, researchers have examined the different ways that distributed teams reliant on technology for their interactions develop, operate, and go about trying to accomplish tasks as co-located teams do (Fiore, Salas, Cuevas, & Bowers, 2003). As more individuals and organizations acclimate to virtual collaboration options, what are the implications for disaster management? In practice, many emergency managers are

working virtual or hybrid emergency operations center (EOC) options into their plans. Others in small, rural communities may be looking exclusively at virtual EOC options in the future. These data cannot comment on the pros and cons of virtual platforms, but future lines of inquiry could contribute much.

Conclusion

Though the initial aim of this study was to examine shared leadership in disaster response and recovery, the efforts the members of an ad hoc task force convened to manage a small community's pandemic response took to understand the unfolding situation offered insights for developing a useful common operating picture (COP) during disasters. This article suggests that the development of the COP, a practitioner construct, is similar to the individual and group-level sensemaking processes that are key to effective disaster decision-making. Though additional research and refinement through practice are necessary, providing an engaging venue to collectively contribute to the COP (within the constraints of an incident) may be a critical step in implementing a consistent, effective response.

References

- Artman, H., & Garbis, C. (1988). Situation awareness as distributed cognition [Conference session]. European Conference on Cognitive Ergonomics, Cognition and Co-operation, Limerick, Ireland.
- Bedny, G., & Meister, D. (1999). Theory of activity and situation awareness. *International Journal of Cognitive Ergonomics*, 3(1), 63-72.
- Bittner, E. A. C., & Leimeister, J. M. (2014). Creating shared understanding in heterogeneous work groups: Why it matters and how to achieve it. *Journal of Management Information Systems*, 31(1), 111–143.
- Boin, A., 't Hart, P., Stern, E., & Sundelius, B. (2016). *The politics of crisis management: Public leadership under pressure*. Cambridge.
- Bouska, K. L., Houser, J. N., De Jager, N. R., & Hendrickson, J. (2018). Developing a shared understanding of the Upper Mississippi River: The foundation of an ecological resilience assessment. *Ecology and Society*, 23(2).
- Burns, T., & Stalker, G. M. (1961). *The management of innovation*. Tavistock.
- Carson, J. B., Tesluk, P. E., & Marrone, J. A. (2007). Shared leadership in teams: An investigation of antecedent conditions and performance. *Academy of Management Journal*, 50(5), 1217-1234.
- Combe, I. A., & Carrington, D. J. (2015). Leaders' sensemaking under crises: Emerging cognitive consensus over time within management teams. *The Leadership Quarterly*, 26(3), 307–322. <https://doi.org/10.1016/j.leaqua.2015.02.002>

- Crosby, B. C., & Bryson, J. M. (2010). Integrative leadership and the creation and maintenance of cross-sector collaborations. *The Leadership Quarterly*, 21(2), 211-230.
- <http://doi.org/10.1016/j.leaqua.2010.001.003>
- Crowe, S., Cresswell, K., Robertson, A., Huby, G., Avery, A., & Sheikh, A. (2011). The case study approach. *BMC Medical Research Methodology*, 11(100).
- Endsley, M. R. (1995). Toward a theory of situation awareness in dynamic systems. *Human Factors*, 37(1), 32-64.
- Endsley, M. R., & Robertson, M. M. (2000). Situational awareness in aircraft teams. *International Journal of Industrial Ergonomics*, 26, 310-325.
- Endsley, M. R., & Jones, W. M. (2001). A model of inter and intra team situational awareness: Implications for design, training, and measurement. In M. McNeese, E. Salas, M. Endsley (Eds.), *New trends in cooperative activities: Understanding system dynamics in complex environments* (pp. 46-68). Human Factors & Ergonomics Society.
- Fairhurst, G. T. (2011). *The power of framing: Creating the language of leadership*. Jossey-Bass.
- Fiori, S. M., Salas, E., Cuevas, H. M., & Bowers, C. A. (2003). Distributed coordination space: Toward a theory of distributed team process and performance. *Theoretical Issues in Ergonomics Science*, 4, 340-364.
- Gaddy, J. W., Clark, E., & Ryan, J. R. (2014). How does climate adaptation affect emergency management? *Journal of Homeland Security & Emergency Management*, 11(2), 243-255.
- Gioia, D. A., & Chittipeddi, K. (1999). Sensemaking and sensegiving in strategic change initiation. *Strategic Management Journal*, 12, 433-448.

- Grint, K. (2005). Problems, problems, problems: The social construction of 'leadership'. *Human Relations*, 58(11), 1467-1494. doi: 10.1177/0018726705061314
- Guest, G., Namey, E. E., & Mitchell, M. L. (2013). *Collecting qualitative data: A field manual for applied research*. SAGE.
- Harvey, J. W. (2017). *Understanding disaster recovery: An exploratory student investigating the role of shared leadership during post-disaster periods* [Doctoral dissertation, University of Charleston]. ProQuest Dissertations and Theses Global.
- Houhamdi, Z., & Athamena, B. (2019). Impacts of information quality on decision-making. *Global Business and Economics Review*, 21(1), 26-42.
- Houser, R. S. (2022). Climate change and emergency management. *Journal of Emergency Management & Disaster Communications*, 3(1), 3-12.
- Huber, G. P., & Lewis, K. (2010). Cross-understanding: Implications for group cognition and performance. *Academy of Management Review*, 35, 6-26.
- Jayawardene, V., Huggins, T. J., Prasanna, R., & Fakhrudin, B. (2021). The role of data and information quality during disaster response decision-making. *Progress in Disaster Science*, 12. <http://dx.doi.org/10.1016/j.pdisas2021.100202>
- Kellermanns, F. W., Walter, J., Lechner, C., & Floyd, S. W. (2005). The lack of consensus about strategic consensus: Advancing theory and research. *Journal of Management*, 31, 719-737.
- Kerns, C. D. (2016). Decisive problem solving: A key leadership practice. *Journal of Management Policy and Practice*, 17(2), 62-77.

- Kilduff, M., Angelmar, R., & Mehra, A. (2000). Top management-team diversity and firm performance: Examining the role of cognitions. *Organization Science*, *11*, 21-34.
- Klann, G. (2003). *Crisis leadership: Using military lessons, organizational experiences, and the power of influence to lessen the impact of chaos on the people you lead*. Center for Creative Leadership.
- Klein, G. A. (1989). Recognition-primed decisions. In W. B. Rouse (Ed.), *Advances in man-machine systems research* (pp. 47-92). JAI Press.
- Lichtenstein, B. B., & Plowman, D. A. (2009). The leadership of emergence: A complex systems leadership theory of emergence at successive organizational levels. *The Leadership Quarterly*, *20*(4), 617–630. <https://doi.org/10.1016/j.leaqua.2009.04.006>
- McChyrstal, G. (2015). *Team of teams: New rules of engagement for a complex world*. Portfolio/Penguin.
- McKinney, K. (2018). *Moment of truth: The nature of catastrophes and how to prepare for them*. Savio Republic.
- Margolis, J. A., & Ziegert, J. C. (2016). Vertical flow of collectivistic leadership: An examination of the cascade of visionary leadership across levels. *The Leadership Quarterly*. <https://doi.org/10.1016/j.leaqua.2016.001.005>
- Montano, S. (2021). *Disasterology: Dispatches from the front lines of the climate crisis*. Park Row Books.
- Morse, R. S. (2010). Integrative public leadership: Catalyzing collaboration to create public value. *The Leadership Quarterly*, *21*(2), 231-245. <https://doi.org/10.1016/j.leaqua.2010.001.004>

- Mumford, M. D., Friedrich, T. L., Caughron, J. J., & Byrne, C. L. (2007). Leader cognition in real-world settings: How do leaders think about crises? *The Leadership Quarterly*, *18*, 515-543.
- Ngcamu, B. (2022). Climate change and disaster preparedness issues in Eastern Cape and Kwazulu-Natal, South Africa. *Town and Regional Planning*, *81*, 53-66.
- Pearce, C. L., Perry, M. L., Sims, H. P., Jr. (2001). Shared leadership: Relationship management to improve non-profit organization effectiveness. In T. D. Conners (Ed.), *The non-profit handbook: Management*. John Wiley & Sons.
- Prasanna, R.. (2010). *Information Systems for Supporting Fire Emergency Response* [Doctoral dissertation, Loughborough University]. Retrieved from <https://ethos.bl.uk/OrderDetails.do?uin=uk.bl.ethos.544487>.
- Salas, E., & Prince, C. (1995). Situation awareness in team performance. *Human Factors*, *37*(1), 123-136.
- Sapateiro, C., & Antunes, P. (2009, May 10-13). An emergency response model toward situational awareness improvement [Conference session]. 6th International Information Systems for Crisis Response and Management (ISCRAM) Conference, Gothenburg, Sweden.
- Schneider, R. O. (2011). Climate change: An emergency management perspective. *Disaster Prevention and Management*, *20*(1), 53-62.
<https://doi.org/10.1108/096535611111111081>

- Schraagen, J. M., Huis in 't Velt, M. H., de Koning, L. (2010). Information sharing during crisis management in hierarchical vs. network teams. *Journal of Contingencies and Crisis Management, 18*(2), 117-127.
- Serban, A., & Roberts, A. J. B. (2016). Exploring antecedents and outcomes of shared leadership in a creative context: A mixed-methods approach. *The Leadership Quarterly, 27*(2), 181-199. <https://doi.org/10.1016/j.leaqua.2016-001-009>
- Shin, S. J., Kim, T., Lee, J., & Bian, L. (2012). Cognitive team diversity and individual team member creativity: A cross-level interaction. *Academy of Management Journal, 55*, 197-212.
- Shu, Y., & Furuta, K. (2005). An inference model of team situation awareness based on mutual awareness. *Cognition, Technology, & Work, 7*, 272-287.
- Tichy, N. M., & Bennis, W. G. (2007). *Judgment: How winning leaders make great calls*. Portfolio.
- United States Department of Homeland Security (USDHS), System Assessment and Validation for Emergency Responders (SAVER). (2008). Common operating picture for emergency responders. [Website]. Retrieved from https://www.dhs.gov/sites/default/files/publications/CommonOpER_HLT_0908-508.pdf
- United States Department of Homeland Security (USDHS), Federal Emergency Management Agency (FEMA). (2017). *National Incident Management System*, 3rd ed. Retrieved from https://www.fema.gov/sites/default/files/2020-07/fema_nims_doctrine-2017.pdf

- Van den Bossche, P., Gijssels, W., Segers, M., Woltjer, G., & Kirschner, P. (2011). Team learning: Building shared mental models. *Instructional Science*, *39*, 283–301.
- van Knippenberg, D., De Dreu, C. K. W., & Homan, C. (2004). Work group diversity and group performance: An integrative model and research agenda. *Journal of Applied Psychology*, *89*(6), 1008–1022.
- Weick, K. E. (1988). Enacted sensemaking in crisis situations. *Journal of Management Studies*, *25*(4), 305–317. <http://onlinelibrary.wiley.com/doi/10.1111/j.1467-6486.1988.tb00039.x/full>
- Weick, K. E. (1995). *Sensemaking in organizations*. Sage.
- Weick, K. E., Sutcliffe, K. M., & Obstfeld, D. (1999). Organizing for high reliability: Processes of collective mindfulness. In R. I. Sutton & B. M. Staw (Eds.), *Research in organizational behavior*, Vol. 21, 81-123. JAI Press.
- Weick, K. E., Sutcliffe, K. M., Obstfeld, D. (2005). Organizing and the process of sensemaking. *Organization Science*, *16*, 409-421.
- Wilkinson, M. (2012). *The executive guide to facilitating strategy*. Leadership Strategies Publishing.
- Zaccaro, S. J., Rittman, A. L., & Marks, M. A. (2001). Team leadership. *The Leadership Quarterly*, *12*, 451-483.

Appendix A: Semi-Structured Interview Questions

1. What motivated you to participate in the task force?
2. Would you consider the task force to have been an example of collaboration? Why or why not?
 - Probing Question: Did the task force or the task force process impede your internal hierarchies in any way?
3. How did the task force approach help to make the response consistent for the citizenry?
 - Probing Question: Did your agency change direction based on anything you learned in task force briefings?
 - Probing Question: Did your agency alter its approach based on something you knew other partners were doing?
4. In what ways did the task force help to develop a shared mental model of what was going on?
5. In what ways do you feel the task force undertook collective problem-solving activities?
6. In what ways did you utilize information from other partners in your or your agency's decision-making?
7. Did you find it easier to reach out to partner organizations after having worked with them on the task force? Why or why not?
8. What barriers prevented you from participating in the task force?
 - Note: Barriers could be physical (e.g., time, availability, mode [i.e., virtual], etc.) or psychological (e.g., disagreement with objectives, personality conflicts with other players, etc.).

9. Do you think we would have been effective (or more effective) if we would have used a more hierarchical, vertical means of collecting and distributing information?

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