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THESIS

**TRANSFORMING VALUES AND CULTURE: THE FDNY
FIRE CADET ACADEMY'S BLUEPRINT FOR CHANGE**

by

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September 2023

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**TRANSFORMING VALUES AND CULTURE: THE FDNY FIRE CADET
ACADEMY'S BLUEPRINT FOR CHANGE**

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ABSTRACT

The New York City Fire Department (FDNY) has faced longstanding diversity, inclusion, and organizational culture issues. This study examines the revamped Fire Cadet Academy (FCA), reintroduced in 2023, which seeks to modernize the FDNY's professionalism, aligning it with societal shifts. Unlike its unsuccessful version, the new FCA aims to transform firefighter recruitment and training with a 24-month program. This research traces the FCA from its 2016 roots to the 2023 relaunch, highlighting its new core values fostering an inclusive culture. The redesigned FCA has a four-pillar curriculum focusing on academics, ethics, fitness, and hands-on learning, signifying the FDNY's dedication to progressive training techniques. However, the study does not shy away from potential oversight, planning, and evaluation challenges. The FCA employs summative and formative assessments to ensure flexibility and tangible results. The academy's revised core values deeply resonate with a firefighter's identity, emphasizing aligning deeds with fundamental beliefs. The FCA promises to revolutionize firefighter training, nurture inclusivity, and enhance professionalism in the FDNY. The academy's long-term effects demand continuous observation, underlining the need for extended research to ascertain its enduring influence.

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LIST OF ACRONYMS AND ABBREVIATIONS

BRAVEST	Bold, Respectful, Altruistic, Virtuous, Equitable, Safe, and Trained
CDIO	Chief Diversity and Inclusion Officer
CPAT	Candidate Physical Agility Test
DEI	Diversity, Equity, and Inclusion
DOJ	Department of Justice
EBP	Evidence-Based Practice
EEOC	Equal Employment Opportunity Commission
EMS	Emergency Medical Services
EMT	Emergency Medical Technician
F2T	Fit-2-Thrive
FCA	Fire Cadet Academy
FDNY	Fire Department City of New York
IAFF	International Association of Firefighters
PFS	Probationary Firefighter School
METS	Metabolic Equivalent Tasks
NCCRS	National College Credit Recommendation Services
NFPA	National Fire Protection Agency
NYC	New York City
NYS	New York State
UFA	Uniformed Firefighters Association
VUCA	Volatile, Uncertain, Complex, and Ambiguous

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EXECUTIVE SUMMARY

In an era demanding greater inclusivity and modernization, the Fire Department of New York (FDNY) finds itself at a crossroads. Amid diversity-related challenges and allegations of discrimination, the FDNY took a progressive step by launching the Fire Cadet Academy (FCA) in 2016.¹ This thesis thoroughly examines the FCA's curriculum, delving into its strategies and methodologies to evaluate its potential to stimulate cultural advancement and instill a heightened sense of professionalism.

The research adopted a qualitative case study approach to thoroughly understand the academy's journey. This method synthesized insights from diverse sources, including scholarly literature on organizational culture, ethics, and firsthand accounts from the FCA Uniformed Director position. The primary aim was to scrutinize critical facets of the FCA curriculum, especially its alignment with core organizational values, and gauge its prospective influence on the training of future firefighters and the broader culture of the FDNY.

Among the salient insights derived from the research, several themes stood out. In polarized environments, transparent communication, facilitated by resolute direction, is essential to building trust and fostering shared values.² These elements, in turn, are paramount for team cohesion and the successful navigation of ideological divides.³ Furthermore, a balanced recognition of individual freedoms and collective goals underscores the importance of leadership that can merge personal autonomy with shared

¹ Department of Justice, "Justice Department Sues New York City for Discriminating against Black and Hispanic Firefighter Applicants," Department of Justice, May 21, 2007, https://www.justice.gov/archive/opa/pr/2007/May/07_crt_375.html.

² Jesse W. Campbell and Tobin Im, "Identification and Trust in Public Organizations: A Communicative Approach," *Public Management Review* 17, no. 8 (2015): 1065–84, <https://doi.org/10.1080/14719037.2014.881531>.

³ Campbell and Im.

responsibilities, fostering trust and unity.⁴ A deliberate effort to nurture social bonds and political understanding further strengthens this trust.⁵

As the research suggests, organizations thrive when proactively aligning core values while simultaneously addressing and eliminating counterproductive behaviors.⁶ Such alignment fortifies the organizational structure and deeply resonates with its members, fostering a profound sense of trust.⁷ The FCA curriculum achieves this alignment by integrating hands-on learning with strong ethical underpinnings. With multifaceted evaluations and practices like rotational assignments, cadets receive a comprehensive, value-centric education.

Since its inception, the FCA exemplifies FDNY's dedication to addressing its historical challenges, including discrimination, and sets a benchmark for adaptability and ongoing improvement.⁸ Feedback systems like surveys ensure the curriculum stays relevant to current needs. Moreover, the FCA's emphasis on trust-building, value alignment, and ethical education marks a transformative shift, presenting its progressive curriculum as a benchmark for other institutions aiming to modernize yet retain foundational values.⁹

The research concludes with several recommendations to ensure the continuous growth and impact of the FCA. It advocates for a persistent refinement of the FCA curriculum, bolstered by regular assessments and feedback. Amplifying the principles and

⁴ Michael Gundlach, Suzanne Zivnуска, and Jason Stoner, "Understanding the Relationship between Individualism–Collectivism and Team Performance through an Integration of Social Identity Theory and the Social Relations Model," *Human Relations* 59, no. 12 (December 2006): 1603–32, <https://doi.org/10.1177/0018726706073193>.

⁵ Elena Lvina, Liam P. Maher, and John N. Harris, "Political Skill, Trust, and Efficacy in Teams," *Journal of Leadership & Organizational Studies* 24, no. 1 (2017): 95–105, <https://doi.org/10.1177/1548051816657984>.

⁶ Christopher C. Rosen and Paul E. Levy, "Stresses, Swaps, and Skill: An Investigation of the Psychological Dynamics That Relate Work Politics to Employee Performance," *Human Performance* 26, no. 1 (2013): 44–65, <https://doi.org/10.1080/08959285.2012.736901>.

⁷ Rosen and Levy.

⁸ Darius Charney, "Fire Cadet Program Would Improve FDNY Diversity," Center for Constitutional Rights, June 15, 2016, <https://ccrjustice.org/node/5821>.

⁹ Sebastian C. Schuh et al., "Does It Take More Than Ideals? How Counter-Ideal Value Congruence Shapes Employees' Trust in the Organization," *Journal of Business Ethics* 149, no. 4 (2018): 987–1003.

ethical values inherent to the FCA across the broader spectrum of FDNY leadership training must also happen. Collaborative endeavors with other national fire departments can catalyze a nationwide shift toward a more values-centric training approach. Concurrently, prioritizing community outreach and maintaining transparent communication about the FCA's objectives and achievements are essential.

The thesis also highlights potential avenues for future research. These include the exploration of the FCA curriculum's adaptability to diverse contexts, understanding the integration of technology in values education, and leveraging insights from fields like neuroscience or psychology to craft innovative strategies for shaping organizational culture. The overarching sentiment is that progress demands adaptability, collaboration, and a sustained commitment to inclusivity and cultural transformation.

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I. INTRODUCTION

In 2021, in the most extensive disciplinary action ever taken in its 150-plus-year history, the New York City Fire Department (FDNY) suspended nine members, firefighters, and fire officers amid alleged racism.¹ Media coverage and expert analysis of the events that led up to these suspensions pointed to the FDNY's organizational culture, typically described as tradition-centered and conservative in every sense, as well as its demographics—the department remains overwhelmingly white and male.²

In the past quarter century, at least two federal investigations and a lawsuit filed by the Department of Justice (DOJ) have called out the FDNY's persistent lack of diversity as an institutional problem with severe ramifications for the department's effectiveness and the safety of New York City.³ Meanwhile, an internal "Firehouse Climate Survey" from 2023 depicts a culture short on inclusion. The study revealed that Black and female firefighters face harassment and discourteous behavior from colleagues at work at a rate three times higher than their peers.⁴ These results speak to a crisis of professionalism.⁵

Indeed, the department has taken a tough stance on the behaviors perpetuating such an environment. For example, according to FDNY Department Order 96, titled "FDNY Social Media Policy," revised as of September 20, 2022, "In the last two years, the

¹ Astead W. Herndon and Ali Watkins, "How a Racist Scandal at the F.D.N.Y. Led to Its Biggest Suspensions Ever," *New York Times*, October 1, 2021, sec. New York, <https://www.nytimes.com/2021/10/01/nyregion/fdny-racism-scandal.html>.

² Herndon and Watkins; Zolan Kanno-Youngs, "FDNY Aims to Increase Minorities -- WSJ," *Dow Jones Institutional News*, February 9, 2018, <https://www.proquest.com/docview/1999868149/citation/58621F5DCBBE4196PQ/1>.

³ Department of Justice, "Overview of the Case," *U.S. v. City of New York (FDNY)*, July 27, 2015, <https://www.justice.gov/archives/crt-fdny/overview>; Department of Justice, "Justice Department Sues New York City."

⁴ Thomas Tracy, "FDNY Aims to Curb 'Frat-Like' Culture by Standardizing Punishment for Discrimination, Misconduct," *FireRescue1*, July 24, 2023, <https://www.firerescue1.com/harassment/articles/fdny-aims-to-curb-frat-like-culture-by-standardizing-punishment-for-discrimination-misconduct-kE0CteknuyuiO9u/>.

⁵ Brian McAllister Linn, "Samuel Huntington, Professionalism, and Self-Policing in the U.S. Army Officer Corps," *Parameters (Carlisle, Pa.)* 51, no. 3 (2021): 91–100, <https://doi.org/10.55540/0031-1723.3082>.

Department has issued fines and penalties to members who have violated the Social Media and EEO Policy in an amount totaling more than 300 days of pay, involuntary reassignment, removal from duty, and termination from employment with the Department.”⁶ Indeed, in the last ten years, the FDNY has issued policies on all manner of issues that affect or reflect the culture:

- Anti-Nepotism
- Affiliated Organization
- Mixed Gender Workforce
- Workplace Violence Prevention
- Professional Workplace
- Anti-Hazing/Anti-Bullying⁷

In July 2023, Fire Commissioner Laura Kavanagh proposed further strengthening disciplinary measures, particularly for alleged discrimination, harassment, and misconduct among firefighters and fire officers.⁸ Although such acts demand a punitive response, it seems unlikely that the FDNY can or should punish its way to cultural and institutional reform.

One promising initiative in this connection is the Fire Cadet Academy (FCA), a 24-month curriculum that stands on four pillars: academics, character/ethics, fitness, and

⁶ Laura Kavanagh and John J. Hodgins, “FDNY Social Media Policy” (Randall’s Island, NY: Fire Department City of New York, September 20, 2022), https://www.nyc.gov/html/fdny/insider/resources/do/2022/096_sup_68_2022_coe.pdf.

⁷ FDNY Bureau of Training, “FDNY Anti-Nepotism Policy” (Fire Department City of New York, April 28, 2022); FDNY Bureau of Training, “FDNY Affiliated Organization Policy” (Fire Department City of New York, December 2012), http://www.nyc.gov/html/fdny/pdf/legal/affiliated_org_policy.pdf; FDNY Bureau of Training, “FDNY Mixed Gender Workforce” (Fire Department City of New York, April 28, 2022); FDNY Bureau of Training, “FDNY Workplace Violence Prevention Policy” (Fire Department City of New York, April 28, 2022); FDNY Bureau of Training, “FDNY Professional Workplace Policy” (Fire Department City of New York, April 28, 2022); FDNY Bureau of Training, “FDNY Anti Hazing/Anti Bullying Policy” (Fire Department City of New York, April 28, 2022).

⁸ Tracy, “FDNY Aims to Curb ‘Frat-Like’ Culture by Standardizing Punishment for Discrimination, Misconduct.”

experiential learning. This comprehensive approach bolsters cadets' theoretical knowledge, problem-solving abilities, physical competencies, and real-world skills. With over 2,000 instructional hours, this program surpasses the national firefighter training average of 270 hours for theoretical and skill-based training.⁹ As a result, it complements and enriches the FDNY's Probationary Firefighter School.

In its name and one aspect of its mission, the FCA revives an earlier effort to recruit and retain a more diverse department. The current version of the FCA aims to instill proficiency and professionalism in line with FDNY's legal guidelines and community expectations. In this regard, the FCA itself marks something of a cultural shift. Specifically targeted at younger entrants to the FDNY, the academy aspires to attract good recruits, create good firefighters, and foster good people—all to forge a strong, effective, and inclusive department.

A. RESEARCH QUESTION

How can the Fire Cadet Academy modernize the FDNY's professionalism to ensure a culture that evolves and learns in line with societal shifts?

B. LITERATURE REVIEW

In a highly specialized profession like firefighting, where life and death hinge on expert teamwork, trust within the team and the agency is paramount. In other words, members of a given crew or company must develop and maintain confidence in each other; similarly, trust connects leaders with the rank and file, and, in the case of an organization like the FDNY, it also affects the relationship of the community with its fire department. Government, science, or technology routinely seek these attributes; however, most trust issues ultimately occur in interpersonal relationships.¹⁰ A high degree of trust likely fosters ethical and responsible behavior among citizens, whereas the erosion of social trust harms

⁹ "Analysis of Recruit Initial Firefighter Training Curricula." National Fire Protection Agency, accessed September 6, 2023, <https://www.nfpa.org/News-and-Research/Data-research-and-tools/Emergency-Responders/Analysis-of-Recruit-Initial-Fire-Fighter-Training-Curricula>.

¹⁰ Christopher Evans, *Leadership Trust: Build It, Keep It* (Greensboro, NC: La Vergne: Center for Creative Leadership, 2020), ProQuest Ebook Central.

society and accompanies a decline in achieving collective goals.¹¹ Christopher Evans defines trustworthiness as embodying three primary attributes: ability, integrity, and loyalty.¹² Trust, thus, looms large in the ongoing development of the FDNY Fire Cadet Academy. This literature review focuses on the scholarship on trust as both the agent and the outcome of a healthy professional culture.

1. The Definition and Dimensions of Trust

Trust is a flexible idea that fits different contexts. Its definition varies among environments and encompasses different meanings within relationships.¹³ Developing trust can promote innovation by decreasing concerns about self-serving actions.¹⁴ When there is trust, people feel more confident that others will demonstrate good intentions and cooperation in jointly exploring innovative solutions.¹⁵ In this way, trust affects organizational outcomes.

Trust also fosters safe environments where team members can pursue creative approaches and ideas freely exchanged without fear of negative consequences.¹⁶ Trust, adaptable to various contexts and vital in high-risk professions like firefighting, cultivates innovation by alleviating fears of self-interest, encouraging collaborative problem-solving, and creating safe spaces for idea exchange. This research specifically focuses on three forms of trust critical to the dynamics of firefighting: interpersonal, relating to trust between individual firefighters; organizational, addressing belief in the Fire Department as

¹¹ Amber Hye-Yon Lee, “Social Trust in Polarized Times: How Perceptions of Political Polarization Affect Americans’ Trust in Each Other,” *Political Behavior* 44, no. 3 (September 2022): 1533–54, <https://doi.org/10.1007/s11109-022-09787-1>.

¹² Evans, *Leadership Trust*.

¹³ Barna Kovács, “Affective and Cognitive Dimensions of Trust in Communication,” *Acta Universitatis Sapientiae, Communication* 7, no. 1 (November 30, 2020): 13–24, <https://doi.org/10.2478/auscom-2020-0002>.

¹⁴ Lucie Cerna, “Trust: What It Is and Why It Matters for Governance and Education,” *OECD Education Working Papers*, OECD Education Working Papers, 2014, 11, <https://doi.org/10.1787/5jxswcg0t6wl-en>.

¹⁵ Cerna, 11.

¹⁶ Cerna, 11.

a whole; and institutional, considering confidence in the broader systems and structures that govern firefighting practices.

2. Trust in Interpersonal Relationships amid Contested Cultures

In diverse teams, the challenge of divisive ideologies becomes apparent. As cliques form, members gravitate toward similar views, and these beliefs evolve into fixed identifications. What starts as beneficial cognitive diversity can quickly devolve into emotional discord.¹⁷ This polarization might cause team members to perceive each other as adversaries, becoming deeply entrenched in their distinct beliefs and drifting from team objectives.¹⁸ In this way, diversity can threaten unit cohesion.

The repercussions of such divisions are evident in their impact on team dynamics. Heightened conflict and inefficiencies arise.¹⁹ For instance, insights from the 2023 climate survey within the FDNY reveal a concerning scenario: a “fraternal” culture that suppresses voices of change and often tolerates discriminatory remarks.²⁰ As some officers continue to perpetuate negative sentiments, particularly about diversity, it further aggravates the existing tensions.²¹ While diversity can enhance team capabilities, unchecked divisive ideologies and organizational cultures that don’t foster inclusion can undermine the benefits sought from diverse teams, jeopardizing team cohesion and critical objectives like public safety.²²

Yet, amid these challenges, the organization can harness the power of trust. When coupled with trust, diversity can transition from a potential pitfall to an asset.²³ Drawing

¹⁷ Jason D. DeBode, Corey J. Fox, and Jordan J. McSweeney, “Top Management Team Political Polarization and Its Implications for Strategic Decision-Making,” *Small Group Research*, 2023, 104649642311522-, <https://doi.org/10.1177/10464964231152234>.

¹⁸ DeBode, Fox, and McSweeney.

¹⁹ DeBode, Fox, and McSweeney.

²⁰ Tracy, “FDNY Aims to Curb ‘Frat-Like’ Culture by Standardizing Punishment for Discrimination, Misconduct.”

²¹ Tracy.

²² DeBode, Fox, and McSweeney, “Top Management Team Political Polarization and Its Implications for Strategic Decision-Making.”

²³ Gundlach, Zivnuska, and Stoner, “Understanding the Relationship.”

from such significant research as the study conducted by Feng Shi et al., trust, when established and nurtured within teams, can diminish the adversarial dynamics, paving the way for collaborative problem-solving and innovation.²⁴ Their findings suggest that when politically polarized groups lean into focused debate, the outcomes are notably robust and of a superior quality.²⁵ Thus, divergence in views can yield better results when properly channeled.

The task then turns to leadership's role in fostering trust, particularly when divisive ideologies loom large. Research by Alessandro et al. and Campbell and Im highlight strategies that can make a difference.²⁶ Leaders who prioritize transparency, value individual contributions, and steadfastly champion trust can craft a more harmonious team environment.²⁷ By fostering a sense of team spirit and prioritizing open communication, they can counteract prevailing distrust and fortify group identity, ultimately anchoring the foundations of organizational trust.²⁸ In this way, leaders are pivotal in shaping the immediate team dynamics and the broader organizational culture.

In conclusion, while divisive ideologies undoubtedly present hurdles, they are not insurmountable. With trust as the linchpin and initiative-taking leadership, teams can leverage their diverse perspectives for unparalleled innovation and success.²⁹

3. The Role of Trust in Organizations

Agencies and organizations play a critical role in shaping the landscape of trust and group identity. Although both concepts revolve around belonging and security, their

²⁴ Feng Shi et al., "The Wisdom of Polarized Crowds," *Nature Human Behaviour* 3, no. 4 (April 2019): 329–36, <https://doi.org/10.1038/s41562-019-0541-6>.

²⁵ Shi et al.

²⁶ Martin Alessandro et al., "Transparency and Trust in Government. Evidence from a Survey Experiment," *World Development* 138 (February 2021): 105223, <https://doi.org/10.1016/j.worlddev.2020.105223>; Jesse W. Campbell and Tobin Im, "Identification and Trust in Public Organizations: A Communicative Approach," *Public Management Review* 17, no. 8 (2015): 1065–84, <https://doi.org/10.1080/14719037.2014.881531>.

²⁷ Campbell and Im, "Identification and Trust in Public Organizations," 2015.

²⁸ Campbell and Im.

²⁹ Richard L. Klok, "'We Need a Bomb Tech . . .' Integrating the Bomb Squad with Swat" (Thesis, Monterey, CA; Naval Postgraduate School, 2020), 52–58, <https://calhoun.nps.edu/handle/10945/66667>.

manifestation varies. At the organizational level, the interplay of political and social trust can either solidify unity or give rise to workplace incivility and dysfunction.³⁰ The inherent dynamics between individualism and collectivism, both of which have their merits and challenges, significantly influence this outcome.³¹ Therefore, organizations are responsible for balancing these two traits, ensuring an environment conducive to trust, positive group identity, and optimum performance.

Organizations must recognize and appreciate team members' diverse attitudes and behaviors to foster a healthy team dynamic. Although individualists lean toward autonomy and prioritize personal objectives over collective ones, those with collectivist inclinations demonstrate higher levels of cooperation, often placing group needs above their own.³² Organizations must understand, value, and balance varied attitudes to nurture trust and cohesive group identity to ensure a functional and united team environment.

Maintaining a balance between individualism and collectivism is crucial for fostering trust and group identity within organizations. The two concepts are not mutually exclusive, and a heterogeneous combination produces optimal levels of team performance.³³ People work together effectively when they share a high degree of social capital established through interpersonal connections, trust, and the pursuit of common goals.³⁴

Fostering social capital and balancing individualism and collectivism are critical factors in promoting group trust and enhancing organizational team performance.

³⁰ Bhawna Chahar and Vinod Hatwal, "Organizational Politics and Its Impact on Workplace Incivility: Mediating Role of Employee Resilience," in *AIP Conference Proceedings* 2378, 2021, 020008-1-020008-15, <https://doi.org/10.1063/5.0059032>.

³¹ John A. Wagner et al., "Individualism-Collectivism and Team Member Performance: Another Look: Team Member Performance," *Journal of Organizational Behavior* 33, no. 7 (October 2012): 946-49, <https://doi.org/10.1002/job.783>.

³² Polina Hadjiyankova and Tatiana Iancheva, "Individualism, Collectivism, and Goal Orientation for Athletes from Individual and Team Sports," *Journal of Applied Sports Sciences* 2 (2021): 66-76, <https://doi.org/10.37393/JASS.2021.02.6>.

³³ Wagner et al., "Individualism-Collectivism and Team Member Performance."

³⁴ Jungwoo Lee, Jun-Gi Park, and Seyoon Lee, "Raising Team Social Capital with Knowledge and Communication in Information Systems Development Projects," *International Journal of Project Management* 33, no. 4 (May 2015): 797-807, <https://doi.org/10.1016/j.ijproman.2014.12.001>.

Moreover, establishing social capital facilitates melding singular identities into a team identity and can activate group intelligence.³⁵ Empirical research demonstrates that those who develop the political skill to bridge personality gaps successfully develop greater group trust and promote the positive interdependence needed for optimal team performance.³⁶ Thus, balancing individualism and collectivism and fostering social capital through effective communication and collaboration can increase group trust and enhance team performance.

An imbalance between individualism and collectivism challenges team performance. A group with low social capital and dysfunctional organizational politics produce destructive outcomes that erode team performance and productivity.³⁷ As illustrated in Figure 1, Gundlach, Zivnuska, and Stoner show how achieving the cognitive, behavioral, and emotional alignments needed to establish team identity and optimal team performance requires a high degree of interdependence to pull people together.³⁸

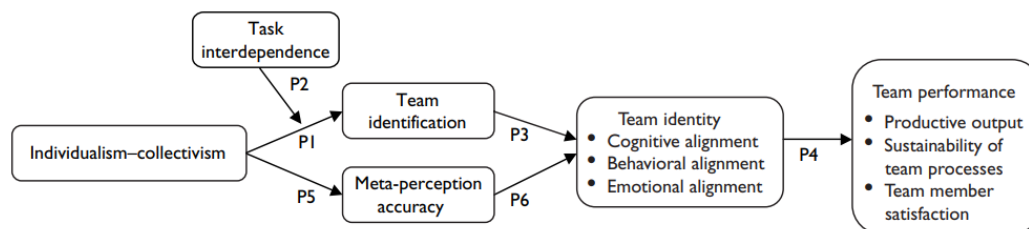


Figure 1. The Social Identity-Relations Model of Team Performance.³⁹

Furthermore, Figure 2 demonstrates how individuals with low social and political trust can disengage with the collective and exhibit behaviors that place their self-interests

³⁵ Lee, Park, and Lee.

³⁶ Lvina, Maher, and Harris, “Political Skill, Trust, and Efficacy in Teams.”

³⁷ Chahar and Hatwal, “Organizational Politics and Its Impact on Workplace Incivility.”

³⁸ Gundlach, Zivnuska, and Stoner, “Understanding the Relationship.”

³⁹Source: Gundlach, Zivnuska, and Stoner, 1606.

above that of the group.⁴⁰ Establishing group interdependence promotes a sense of shared accountability and can help develop trust and positive relationships among team members, improving overall group cohesion and performance.

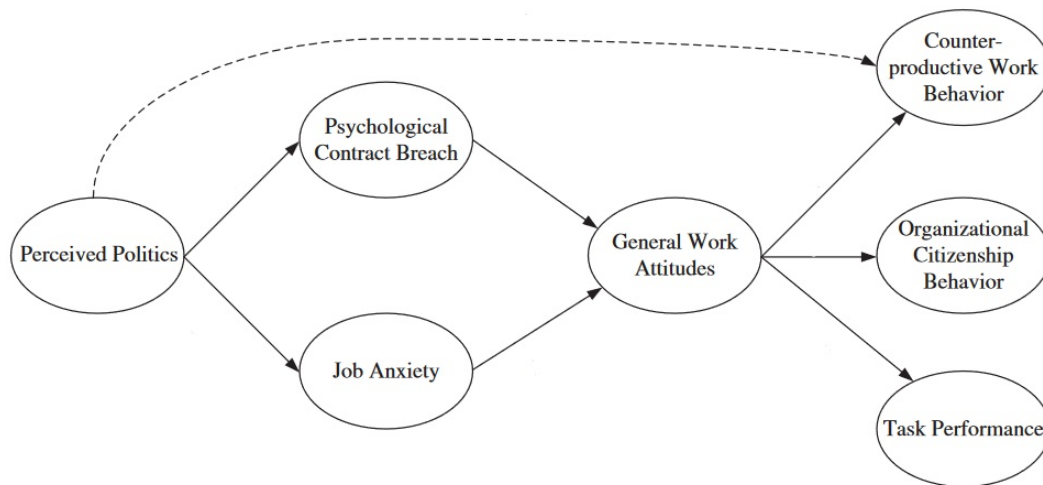


Figure 2. A Mediated Model of the Moderating Effects of Political Skill.⁴¹

4. Trust as the Bond Between Values and Ethics

Trust is fundamentally anchored in a system of values and ethical conduct. It can be established based on the knowledge about another's reliability, but the more significant trust hinges on our readiness to trust unfamiliar individuals.⁴² This type of trust is not strategic as it does not aim to achieve a predetermined goal. Instead, this generalized trust may be a moral endeavor.⁴³ The critical concept of moralistic trust is the faith that most people align with one's core ethical values.⁴⁴ An alignment of fundamental importance

⁴⁰ Rosen and Levy, "Stresses, Swaps, and Skill."

⁴¹ Source: Rosen and Levy, 54.

⁴² Raymond Hogler, Christine Henle, and Michael Gross, "Ethical Behavior and Regional Environments: The Effects of Culture, Values, and Trust," *Employee Responsibilities and Rights Journal* 25, no. 2 (June 2013): 113, <https://doi.org/10.1007/s10672-013-9215-0>.

⁴³ Hogler, Henle, and Gross, 113.

⁴⁴ Hogler, Henle, and Gross, 113.

and ethics facilitates generalized trust and social cohesion, enabling cooperation between unfamiliar individuals who share moral expectations of mutual respect and reciprocity.

Value alignment in organizations is essential, and recent studies spotlight the role of core and counter-ideal values in building trust among employees. Schuh et al. found that emphasizing these values can significantly boost employee trust.⁴⁵ Counter-ideal values, seen negatively by employees and organizations, represent behaviors and outcomes to avoid.⁴⁶ Organizations can enhance employee trust by aligning with core values and actively addressing counter-ideals, which is pivotal for overall performance. In essence, such alignment solidifies trust, a cornerstone of organizational success.⁴⁷ Figure 3 illustrates the equilibrium between ideal values and the endorsement of counter-ideal values.

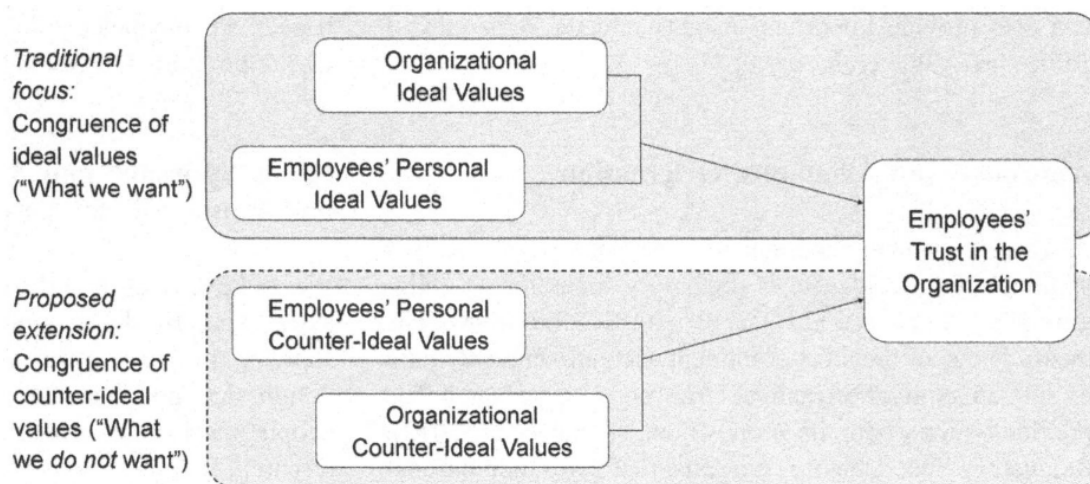


Figure 3. An Extended Model of Value Congruence Effects.⁴⁸

⁴⁵ Schuh et al., "Does It Take More Than Ideals?"

⁴⁶ Schuh et al., 987.

⁴⁷ Schuh et al., 1000.

⁴⁸ Source: Schuh et al., 989.

In specialized fields like firefighting, trust is more than just an asset; it is essential, underpinning team cohesion and the public's view of the department. The literature explores the intricacies of trust, spanning its foundational definitions to its role in bridging gaps in diverse environments. Although the intrinsic value of diversity can be harnessed as a strength, divisive ideologies can threaten unity.⁴⁹ Strong leadership, however, can redirect this potential adversity, harnessing diversity's power.⁵⁰ Blending trust with effective leadership can overcome challenges in these specialized environments, fostering team unity and a positive public view.

The foundation of trust within an organization intertwines with individual and collective values, going beyond mere reliability to encompass our core ethical beliefs.⁵¹ This synthesis of trust's multi-dimensional role provides context for the research question: How can the Fire Cadet Academy modernize the FDNY's professionalism to ensure a culture that evolves and learns in line with societal shifts?

C. RESEARCH DESIGN

FDNY leadership has traditionally relied on informal mentoring to influence the behavior of its members. For over a century, the only behavior or character-based curriculum for firefighters and fire officers existed in Regulations for the Uniformed Force, established in 1865.⁵² The department has since issued several Professional Workplace policies; however, the distribution of these guidelines has not been part of a department-wide strategic effort, limiting its ability to affect organizational change.⁵³ Notably, these policies often emphasize specific acts of misconduct, focusing more on penalties than positive reinforcement. Against this backdrop, this thesis posits that proactive and positive

⁴⁹ DeBode, Fox, and McSweeney, "Top Management Team Political Polarization and Its Implications for Strategic Decision-Making."

⁵⁰ Campbell and Im, "Identification and Trust in Public Organizations," 2015.

⁵¹ Wagner et al., "Individualism-Collectivism and Team Member Performance."

⁵² "The Paid Department 1865–Present," New York City Fire Museum, accessed June 16, 2022, <https://www.nycfiremuseum.org/the-paid-department>.

⁵³ Bureau of Training, "FDNY Professional Workplace Policy."

initiatives have the potential not only to diversify but also enrich the FDNY's workforce and culture.

The research employs a multifaceted approach to tease apart this potential, dissecting the Fire Cadet Academy's progress within the FDNY. First, it analyzes the Fire Cadet Academy's roots by studying the historical context from which the FCA emerged. This background helps in understanding its foundational ethos and the circumstances of its inception. Next, a developmental/progressive analysis tracks the academy's evolution. This step-by-step evaluation focuses on the academy's significant milestones, especially its reboot in 2016 and its launch in 2023.

The FCA undertakes a problem-solving analysis to address the practical challenges faced during its establishment. This framework looks at the hurdles it encountered, such as articulating core values and its strategies to navigate them. The FCA then applies an evaluative analysis to examine its status, assess remaining challenges, and ensure proficiency and professionalism to achieve its goals. These frameworks comprehensively view the Fire Cadet Academy's evolution, achievements, and future aspirations.

II. A REIMAGINED FIRE CADET ACADEMY

The Fire Cadet Academy presents solutions for at least two categories of problems or circumstances that have beset the FDNY in recent years: acute (if not crises) and structural factors. While examining the FDNY's diversification efforts, this chapter examines the influence of legal pressures and institutional solutions like the FCA. It also explores earlier initiatives, whose outcomes significantly shaped the FCA's development, providing a comprehensive understanding of the complexities in institutional reform.

A. THE EVOLUTION OF FDNY'S DIVERSIFICATION EFFORTS

Historical examinations of the FDNY have been marred with allegations of racial discrimination, as highlighted by investigations from major U.S. institutions. Independent studies by the U.S. Equal Employment Opportunity Commission (EEOC) and the Department of Justice (DOJ) discovered patterns of discrimination in the firefighter examinations administered in 1999 and 2002.⁵⁴ Both organizations determined that New York City and the FDNY had established "a pattern or practice of discrimination against both black and Hispanic applicants," contravening Title VII of the Civil Rights Act of 1964 (42 USC § 2000e and following sections).⁵⁵ Furthermore, the Department of Justice concluded that "The City's use of written exams with discriminatory impacts and little relation to the job of [a] firefighter was not a one-time mistake or the product of benign neglect. It was part of a pattern, practice, and policy of intentional discrimination against Black applicants that has deep historical antecedents and uniquely disabling effects."⁵⁶ Such consistent allegations underscore the urgency for systemic change within the FDNY to uphold the principles of equality and integrity.

⁵⁴ Department of Justice, "Justice Department Sues New York City."

⁵⁵ Department of Justice, "Overview of the Case."

⁵⁶ Department of Justice.

1. The Court Order

The stark demographic disparities within the FDNY in 2007 highlighted a significant misalignment with the diverse communities it served. In 2007, the U.S. Department of Justice (DOJ) filed a lawsuit against the FDNY, alleging that its policies and practices perpetuated a discriminatory organizational culture.⁵⁷ When the DOJ filed the case, the FDNY was notably unrepresentative of New York City's diverse population. Of its more than 11,000 uniformed members, 92.5 percent were white, and 99 percent were male.⁵⁸ Hispanic and Black firefighters represented a mere 4.5 percent and 3 percent, respectively, while women and Asian firefighters combined accounted for less than 1 percent.⁵⁹ This makeup starkly contrasts New York City's demographics at the time, which were 33 percent White, 29 percent Hispanic, 23 percent Black, 13 percent Asian, and 52 percent female.⁶⁰ Thus, the fire department did not reflect the communities it served in its makeup.

2. The FDNY's Legal Journey and Its Pursuit of Inclusivity

The federal government challenged the FDNY's status quo with substantial penalties. In 2007, the operational landscape of the FDNY significantly shifted when the Department of Justice (DOJ) filed a discrimination lawsuit. This lawsuit triggered a multi-year hiring freeze, culminating in a settlement that prescribed a \$100 million liability payment.⁶¹ A consequential settlement component was the FDNY's obligation to integrate new roles into their hierarchy: a Chief Diversity and Inclusion Officer (CDIO) and a Diversity Advocate. The settlement formulated these roles to address and navigate the intricacies of hiring and to foster a conducive cultural environment, especially as the FDNY endeavored to diversify its workforce.⁶² Thus, the federal government challenged FDNY to change its practices.

⁵⁷ Department of Justice, "Justice Department Sues New York City."

⁵⁸ Department of Justice.

⁵⁹ Department of Justice.

⁶⁰ NYC Department of City Planning, "Table SF1-DP NYC: Demographic Profile – New York City and Boroughs," Census (New York, United States, 2000), <https://www.nyc.gov/site/planning/planning-level/nyc-population/census-2010.page>.

⁶¹ Department of Justice, "Justice Department Sues New York City."

⁶² Department of Justice, "Overview of the Case."

2011, Federal Judge Nicholas Garaufis designated Mark Cohen, a former Assistant U.S. Attorney for the Eastern District of New York, as the FDNY’s Monitor.⁶³ From 2012, under Cohen’s oversight, augmenting the representation of racial and gender groups historically underrepresented in the FDNY became a key focus. As illustrated in Table 1, the hiring data provides insights into the trends and the court monitor’s influence on the FDNY’s hiring.

Table 1. FDNY Ethnic and Gender Hiring Distribution (2013–2021).⁶⁴

Exam 2000, Administered in 2012						
Exam 2000	White	Hispanic	Black	Asian	Male	Female
Total Hires from 2013–2016: 2,302	1,319 (57%)	527 (23%)	388 (17%)	62 (.3%)	2,274 (99%)	31 (1%)
Exam 7001, Administered in 2017						
Exam 7001	White	Hispanic	Black	Asian	Male	Female
Total Hires from 2017–2021: 1,823	1,127 (62%)	387 (21%)	224 (12%)	80 (.4%)	1,758 (96%)	65 (4%)
Difference	+5%	-2%	-5%	+1%	-3%	+3%
Total Hires 2013–2021	2,446 (59%)	914 (22%)	612 (15%)	142 (3%)	4,032 (98%)	96 (2%)

Note: A U.S. District Court-imposed hiring freeze meant no hires occurred between 2010 and 2013.

⁶³ Roger Gregg et al., Order Appointing Monitor 07-Cv-2067, No. 758 (United States District Court, Eastern District of New York November 9, 2011).

⁶⁴ Adapted from FDNY Office of Public Information, “Fire Fighter Civil Service Exam, 2012 Results: Admissions and Graduation Statistics Break Down by Race and Gender” (Brooklyn, NY: Fire Department City of New York, March 9, 2017), <https://www1.nyc.gov/assets/fdny/downloads/pdf/about/fdny-demographics-a-03-09-2017.pdf>; FDNY Office of Public Information, “Fire Fighter Civil Service Open Competitive (7001) and Promotional (7501) Exam, & Firefighter Proby School Results Admissions and Graduation Statistics Break Down by Race and Gender” (Brooklyn, NY: FDNY, December 16, 2020), <https://www.nyc.gov/assets/fdny/downloads/pdf/about/fdny-demographics-12-16-2020.pdf>.

Although the FDNY has complied with the court monitor and all the attendant requirements, its efficacy remains debated. Christie Ford and David Hess critique this approach in a Law and Policy Review.⁶⁵ They assert that the DOJ’s strategy—imposing heavy fines and designating a supervisory “czar”—is generic and might not always align with an organization’s unique requirements or challenges.⁶⁶ They further argue that these monitorships often overlook the importance of organizational culture, leaving underlying issues unaddressed.⁶⁷ In this way, the imposed solutions might only scratch the surface, failing to enact more profound, lasting change within the institution.

Although the FDNY has made strides in diversification over the years, significant disparities and challenges persist in achieving full representation. Historical data reveals increases in diversification before the court monitor’s involvement: between 2002 and 2007, there was a 17 percent increase in minority test-takers, moving from 21 percent to 38 percent.⁶⁸ By 2012, this figure had reached 46 percent.⁶⁹ However, despite an investment of \$230 million (comprising the lawsuit settlement, recruitment expenses, and Monitor fees), the 2017 FDNY entrance exam witnessed only an 18 percent rise to 56 percent in minority test-taker turnout.⁷⁰ Despite undeniable progress, the momentum for diversification predated the court monitor’s appointment. A 2022 NYC Council review casts further doubt, indicating the FDNY might fall short of its diversification objectives

⁶⁵ Cristie Ford and David Hess, “Corporate Monitorships and New Governance Regulation: In Theory, in Practice, and in Context,” *Law & Policy* 33, no. 4 (October 2011): 510, <https://doi.org/10.1111/j.1467-9930.2011.00347.x>.

⁶⁶ Ford and Hess, 511–12.

⁶⁷ Ford and Hess, 525–27.

⁶⁸ FDNY Office of Public Information, “FDNY Annual Report 2007” (Fire Department City of New York, 2007), 10.

⁶⁹ FDNY Office of Public Information, “FDNY Demographics 03–09–2017” (Brooklyn, NY: FDNY, March 9, 2017), <https://www.nyc.gov/assets/fdny/downloads/pdf/about/fdny-demographics-a-03-09-2017.pdf>.

⁷⁰ Office of Public Information, “Fire Fighter Civil Service Open Competitive (7001) and Promotional (7501) Exam, & Firefighter Proby School Results Admissions and Graduation Statistics Break Down by Race and Gender.”

in the forthcoming three test cycles, representing the next 15 years.⁷¹ Therefore, while the departments' investments and efforts have been commendable, more targeted and sustained strategies are essential to bridge the representation gap in the FDNY over the long term.

The FDNY's path toward diversification, shaped by legal pressures and external oversight, reveals the intricate nature of achieving genuine inclusivity. The task ahead extends beyond mere numbers and regulatory compliance; it involves fostering a profound and lasting change that genuinely reflects the diverse spirit of New York City.⁷² Thus, the FDNY must prioritize programs that address internal cultural shifts alongside external metrics to remain representative and inclusive in its mission.

B. STRUCTURAL FACTORS

Other aspects of life and work in the FDNY also affect the department and its culture. Of note in this connection are the department's exam-based promotion process and the broader context of the New York Civil Service Law. Thus, the FCA must acknowledge and adapt to these integral facets, recognizing them as foundational elements within the FDNY's structure and tradition.

1. Promotion

Promotions in the FDNY use written exams to the exclusion of broader measures of character. The promotion examinations administered by the department mirror the firefighter entrance exam in that they are competitive, primarily based on a multiple-choice written test, and include weighted components.⁷³ The assessment of the examinee remains solely confined to their ability to recall the technical knowledge contained in department

⁷¹ New York City Council, "Evaluating Diversity at the FDNY: Current Efforts to Reach Desired Targets," New York City Council, accessed April 21, 2023, <https://council.nyc.gov/data/data-team/evaluating-diversity-at-the-fdny/>.

⁷² NYC Department of Cultural Affairs, "Home – Diversity & Equity," 2023, <https://www.nyc.gov/site/diversity/index.page>.

⁷³ New York City Department of Administrative Services, "Notice of Examination: Promotion to Lieutenant (Fire)" (New York: NYC Department of Administrative Services, June 29, 2022), <https://www.nyc.gov/assets/dcas/downloads/pdf/noes/20200569000.pdf>.

manuals.⁷⁴ Examinations and the subsequent promotion process do not seek to assess such characteristics widely deemed essential for fire service leaders as integrity, honesty, confidence, decisiveness, fairness, and professionalism.⁷⁵ The FDNY's reliance on written exams for promotions overlooks critical leadership qualities, potentially compromising the selection of well-rounded fire service leaders.

The FDNY determines leadership ranks primarily through standardized tests and seniority.⁷⁶ These components are combined to produce a list number, and based on staffing needs, the FDNY promotes members from its promotional lists in numerical order. The highest competitive exam a fire officer can take is the Deputy Chief's test.⁷⁷

In the FDNY, the Chief of Department appoints senior uniformed staff roles, such as Deputy Assistant Chief and Assistant Chief, without written guidelines specifying the necessary qualifications. The Chief of Department role is distinct, being a political appointment made by the Fire Commissioner.⁷⁸ This system emphasizes that not all promotions within the FDNY rely strictly on exams, highlighting a varied approach to advancement. This lack of clear criteria could complicate the defense of promotion decisions if challenged legally.

2. Civil Service Rules

Since 1894, the New York State Civil Service Law has influenced the FDNY's leadership selection process. Yet, its vague wording defines leadership criteria as "merit

⁷⁴ New York City Department of Administrative Services.

⁷⁵ Monika S. Byrd, "Perceptions of Effective Organizational Leadership in American Fire and Emergency Services" (PhD diss., Chicago School of Professional Psychology, 2017), ProQuest.

⁷⁶ New York City Department of Administrative Services, "Notice of Examination: Promotion to Lieutenant (Fire)."

⁷⁷ New York City Department of Administrative Services, "Notice of Examination: Promotion to Deputy Chief (Fire)" (NYC Department of Administrative Services, March 28, 2023), <https://www.nyc.gov/assets/dcas/downloads/pdf/noes/20233590000.pdf>.

⁷⁸ New York State Department of Civil Service, *Summary of New York State Civil Service Law* (Albany, NY: New York State Department of Civil Service, 2008), <https://www.cs.ny.gov/pio/publications/summofcsl.pdf>.

and fitness,” leaving ample room for interpretation.⁷⁹ Professional development programs could demystify these ambiguities and provide more precise guidance.

Additionally, there is a noticeable absence of crucial traits when assessing prospective FDNY leaders. The FDNY’s existing promotion method, which predominantly relies on exam scores and seniority, diverges from the more comprehensive approach recommended by the Personnel Rules and Regulations of the City of New York.⁸⁰ Although these rules advocate for a balanced consideration of examination results, past training, hands-on experience, and performance evaluations, the FDNY disproportionately emphasizes exam scores and seniority.⁸¹ The FDNY’s current promotional approach may not fully align with the broader intent of the City’s regulations, potentially limiting its ability to identify and promote leaders who embody the comprehensive skills and attributes necessary for effective leadership.

The focus on exam scores and seniority has several downsides. This approach may not be fully attuned to the demands of leadership in high-intensity teams that require intricate knowledge and complex decision-making.⁸² Solely focusing on exams might not encapsulate the nuances of firsthand experience and innate leadership qualities. Likewise, an undue emphasis on seniority while recognizing loyalty may not truly reflect a firefighter’s overall competence or potential for growth. Overlooking performance evaluations can further miss consistent indicators of an individual’s reliability and resilience. Such biases could inadvertently hamper the FDNY’s leadership selections, sidelining the diverse skills of firefighters and affecting overall morale.

⁷⁹ Stephen Estes, *History and Overview* (Ithaca, NY: Tompkins County Personnel Department, 2008), 8, <https://tompkinscountyny.gov/files2/personnel/CIVIL%20SERVICE%20IN%20NEW%20YORK%20STATE%20HISTORY%20AND%20OVERVIEW.pdf>.

⁸⁰ NYC Department of Citywide Administrative Services, “Personnel Rules and Regulations – Rule 5 – Appointments – Department of Citywide Administrative Services,” accessed August 10, 2023, <https://www.nyc.gov/site/dcas/reports/personnel-rules-regulations-rule-5.page>.

⁸¹ Department of Citywide Administrative Services.

⁸² Ahsan Ali, Hongwei Wang, and Russell E. Johnson, “Empirical Analysis of Shared Leadership Promotion and Team Creativity: An Adaptive Leadership Perspective,” *Journal of Organizational Behavior* (John Wiley & Sons, Inc.) 41, no. 5 (June 2020): 3, <https://doi.org/10.1002/job.2437>.

Recognizing these challenges, the FCA, since its establishment in June 2023, has taken strides to bridge these gaps. While adhering to the civil service law and current promotion guidelines, the academy focuses on nurturing character, ethics, core values, and teamwork in its cadets.⁸³ Its hands-on training and curriculum adjustments prepare these emerging firefighters not just to meet their roles effectively but also to enrich the FDNY's legacy of excellence.

C. THE EVOLUTION OF FDNY TRAINING PROGRAMS

In response to the requirements of the department and its legal/procedural context, the FDNY has set up programs for recruiting and training new firefighters. The existing Probationary Firefighting School (PFS) performs laudably, though within a very particular remit. An earlier version of the Fire Cadet Academy arose and failed for specific reasons, which are instructive to and in the current FCA.

1. The Framework of Probationary Firefighting School

The Probationary Firefighting School (PFS) within the FDNY Fire Academy has a rich history of training the bravest of New York's firefighters. It plays a pivotal role in molding raw recruits into disciplined firefighters who are prepared in skills and spirit to face the intense demands of their profession.

PFS structures its curriculum to equip probationary firefighters with the skills and knowledge necessary to operate safely and effectively on the fire ground. Spread over 18 weeks, the training is thorough, demanding, and multifaceted. It covers a range of areas, from the fundamentals of the combustion process, fire behavior, and extinguishment methods to more advanced topics like building inspection, Self-Contained Breathing Apparatus use and care, and subway extrication.

In 2008, recognizing the increasing complexity of a firefighter's role, the FDNY extended the training duration to a comprehensive 23-week Fire Suppression and Control

⁸³ Sarah Dorsey, "State Panel Okays FDNY Cadet Springboard Plan," *The Chief*, June 20, 2016, <https://www.thechiefleader.com/stories/state-panel-okays-fdny-cadet-springboard-plan,14909?cb=1682199022>; FDNY Bureau of Training, "FDNY Fire Cadet Handbook" (Fire Department City of New York, May 18, 2023).

course. Although budgetary constraints in 2009 saw a return to the 18-week format, the commitment to a rigorous and complete training regimen remained unwavering.⁸⁴

A class in the PFS can host up to 320 students, a testament to the scale of the FDNY's recruitment and the trust in the academy's training methods. The coursework is not just about fighting fires. It incorporates the Certified First Responder qualification, which focuses on immediate medical response.⁸⁵ The training dives deeply into the technicalities, addressing topics like building construction, protective clothing and equipment, search and rescue, and ventilation.⁸⁶

As the course progresses, PFS exposes probationary firefighters to specialized fire service areas, such as Hazardous Materials at the First Responder Operational Level.⁸⁷ They also undergo the New York State Basic Peace Officer Training, which, though non-firearm, equips them with the knowledge required for roles like code enforcement and building inspection.⁸⁸ PFS not only cultivates the foundational firefighting skills of the FDNY's newest members but also ensures that they are multifaceted first responders ready to tackle a diverse range of emergencies and responsibilities in the dynamic urban environment of New York City.

Despite the comprehensive nature of the PFS, challenges arise. Although it instills foundational firefighting competencies, gaps in transmitting softer elements like the FDNY's organizational values, cultural norms, and anticipated behaviors may persist. Consequently, new firefighters may find themselves leaning on individual firehouses for

⁸⁴ Fire Department City of New York, "Probationary Firefighter Reading Schedule" (Randall's Island, NY: FDNY Fire Academy, October 27, 2022), <https://www.joinfdny.com/wp-content/uploads/2022/10/probationary-firefighter-reading-assignment-cycles-1-26.pdf>.

⁸⁵ FDNY Bureau of Training, "FDNY EMS CFR Program" (Fire Department City of New York, 2016), <https://www.nyc.gov/assets/fdny/downloads/pdf/join/join-cfr-manual.pdf>.

⁸⁶ Fire Department City of New York, *Probationary Firefighters Manual*, vol. 1 (Randall's Island, NY: FDNY Fire Academy, 2021), <https://www.nyc.gov/assets/fdny/downloads/pdf/join/probationary-firefighter-v1.pdf>.

⁸⁷ International Association of Firefighters, "HazMat Operations" (International Association of Firefighters, 2022), <https://www.iaff.org/hazmat-training/>.

⁸⁸ NYS Division of Criminal Justice Services, "New York Police and Peace Officer Training," NYS Division of Criminal Justice Services, 2023, <http://www.criminaljustice.ny.gov/ops/training/>.

direction. This guidance, while valuable, may sometimes diverge from the FDNY's central principles.

Additionally, despite the aid of a Candidate Physical Agility Test (CPAT) information sessions, CPAT preparatory sessions, a 12-week Fitness Awareness Program, and a Stairmaster Training Program, many candidates still drop out within the first few weeks, predominantly due to physical unpreparedness.⁸⁹ This reality underscores the importance of both physical and mental readiness, further solidifying the rigorous demands of the profession.

2. The First FCA

In 1997, the FDNY introduced its inaugural Fire Cadet Academy, a forward-looking initiative to mold the next generation of firefighters. The goal was clear: diversify the ranks of a department historically dominated by white males.⁹⁰ Yet, despite its commendable intentions, the academy's design and execution showed a lack of foresight. Despite the noble ambitions, the FCA barely scratched the surface of redressing the demographic imbalance. The question then arises: Why, with such a promising vision, did the program not achieve its desired impact?⁹¹

A decision in 2002 led the FDNY to shelve the Fire Cadet Academy (FCA), a program that, from 1997 to 2002, was marked by controversy and shortcomings.⁹² Official records of the FCA's inception are scant. Still, a surprising training approach stands out: the assignment of cadets to the FDNY Emergency Medical Service (EMS) Academy, preparing them for roles as Emergency Medical Technicians (EMTs) rather than offering

⁸⁹ FDNY Office of Recruitment and Retention, "FDNY-Firefighter-Recruitment-2022.Pdf" (Fire Department – City of New York, 2022), <https://www.nyc.gov/assets/fdny/downloads/pdf/about/fdny-firefighter-recruitment-2022.pdf>.

⁹⁰ Department of Justice, "Justice Department Sues New York City."

⁹¹ Joe Calderone and Frank Lombardi, "Cadet Corp for FDNY Corrupted by Nepotism," *Daily News*, November 17, 2000.

⁹² Mary Margaret Fonow, review of *Black Firefighters and the FDNY: The Struggle for Jobs, Justice, and Equity in New York City*, by David Goldberg, *Labor: Studies in Working-Class History of the Americas* 16, no. 2 (2019): 146–47.

firefighter-specific training.⁹³ This decision was perplexing, given the vast difference between the functions of the EMS and Fire Operations Bureaus and their governing unions.⁹⁴ Additionally, with EMTs earning considerably less than firefighters, economic pressures forced cadets to quickly transition to firefighting roles after just a two-year mandatory period as EMTs.⁹⁵ This not only disadvantaged the cadets but also negatively impacted the reputation of the EMS, relegating it to a perceived stepping stone rather than a dedicated profession.⁹⁶

However, the challenges extended beyond the program's curriculum. Although intended as a beacon for diversity, the Cadet Academy's reputation was marred when allegations emerged that senior FDNY officials had manipulated the intake process for personal interests.⁹⁷ A 2000 report by NYC's Fire and Criminal Justice Service Council unveiled an unsettling trend: a "noticeable cluster of relatives of fire department officials" had secured positions within the program.⁹⁸ These revelations cast a long shadow over the academy, suggesting entrenched nepotism and favoritism.⁹⁹ In this context, what was meant to be a beacon of hope and change became a symbol of the issues it aimed to address. How could the FDNY regain trust and rectify these missteps?

In retrospect, the initial phase of the FDNY Fire Cadet Academy, from 1997 to 2002, stands out as an earnest but misdirected endeavor. Although the academy's

⁹³ FDNY Fire Safety Cadet Program, "From Fire Safety Cadet and/or EMS Operations to Firefighter" (Brooklyn, NY: Fire Department City of New York, 2002), https://www.nyc.gov/html/fdny/pdf/job_opps/cadet_ems_2_firefighter.pdf.

⁹⁴ Abdo Nahmod, "The Collaborative Capacity of the NYPD, FDNY, and EMS in New York City: A Focus on the First Line Officer" (master's thesis, Naval Postgraduate School, 2010), 3–7, <https://hdl.handle.net/10945/5443>.

⁹⁵ Corey Johnson and Joseph C. Borelli, *Report of the Finance Division on the Fiscal 2021 Preliminary Plan and the Fiscal 2020 Preliminary Mayor's Management Report for the Fire Department of New York* (New York: Council for the City of New York, 2020), <https://council.nyc.gov/budget/wp-content/uploads/sites/54/2020/02/057-FDNY.pdf>; Ari Paul, "Tale of 2 Sides on EMS Role in FDNY," *The Chief*, July 5, 2007, <https://thechiefleader.com/stories/tale-of-2-sides-on-ems-role-in-fdny,39409?cb=1689534594>.

⁹⁶ Paul, "Tale of 2 Sides on EMS Role in FDNY."

⁹⁷ Calderone and Lombardi, "Cadet Corp for FDNY Corrupted by Nepotism."

⁹⁸ Fonow, "Black Firefighters and the FDNY."

⁹⁹ Calderone and Lombardi, "Cadet Corp for FDNY Corrupted by Nepotism."

objectives were laudable, issues plagued its execution, from misalignment in training to allegations of favoritism.¹⁰⁰ The FCA's first iteration offers a poignant lesson in aligning intentions with actions.

D. THE TRANSFORMATION OF THE FDNY'S FIRE CADET ACADEMY

City leaders questioned the transparency and implicit biases of the FDNY's first Fire Cadet Academy. In 2000, two NYC Council Members, Lawrence Warden, the Fire and Criminal Justice Services Committee chairman, and Sheldon Leffler, the head of the Public Safety Committee, raised alarms over the FDNY's FCA.¹⁰¹ They specifically questioned the equitable participation of racial and ethnic minorities without familial ties with FDNY.¹⁰² They posited that such individuals faced greater obstacles or biases when trying to join the Cadet program than applicants with family members in FDNY.¹⁰³ These concerns suggested that the academy, intended to diversify the FDNY, might inadvertently perpetuate nepotism and exclusion.

Moreover, deciding to train cadets exclusively as Emergency Medical Technicians (EMTs) presented another challenge. The Uniformed Firefighters Association (UFA) contested this approach, as it took issue with placing EMTs on the promotion-to-firefighter list and using a special promotional list instead of open competitive exams.¹⁰⁴ The UFA contended that using the promotional list infringed upon the Merit and Fitness clause of the New York State Constitution, describing it as arbitrary and devoid of rational basis.¹⁰⁵ Thus, the UFA's challenge underscores a broader contention about fairness and constitutional adherence in the FDNY's promotional practices.

¹⁰⁰ Equal Employment Practices Commission, "New York City Fire Department's Recruitment Program," May 25, 2000.

¹⁰¹ Calderone and Lombardi, "Cadet Corp for FDNY Corrupted by Nepotism."

¹⁰² Calderone and Lombardi.

¹⁰³ Calderone and Lombardi.

¹⁰⁴ *Gallagher v. City of N.Y.*, 2002 N.Y. Slip Op. 30171 (N.Y. Sup. Ct. 2002)

¹⁰⁵ *Gallagher v. City of N.Y.*

Abdo Nahmod, from FDNY, highlighted another concern: while cadets benefited from medical training as EMTs, they lacked immersion in the distinct culture and operational knowledge of firefighters.¹⁰⁶ This misalignment, compounded by accusations of senior FDNY officials manipulating the intake process, culminated in the program's discontinuation in 2002, signifying the FCA's inability to realize its innovative, diversifying, and equity-driven mission.

In response to a 2013 United States District Court ruling against the City of New York and FDNY, 2023 saw a reboot of the FDNY FCA. The ruling specified.

The City of New York, in consultation with the Parties and the Court Monitor, shall conduct a comprehensive top-to-bottom assessment of all steps in its process for the selection of entry-level firefighters that evaluates the strengths and weaknesses of the City's current selection process as a whole and of individual steps in that process. As part of its review, the City shall also research and develop alternative selection processes that solve the problems the City identifies in its current selection process. The Parties and the Court Monitor (in consultation with consultants as needed) may also propose alternative selection processes for consideration. The City shall evaluate the strengths and weaknesses of the alternative selection processes and identify barriers to their implementation, including the need for legislative, administrative, or other governmental action.¹⁰⁷

The Firefighter candidate refers to "any person who applies to participate in any step of the process for the selection of entry-level firefighters administered by the City of New York to hire entry-level firefighters until this person is formally appointed an entry-level firefighter."¹⁰⁸ The FCA's redesign provides NYC and the FDNY with an alternative selection process for the position of Firefighter candidate.

A redesigned FCA had supporters and detractors. In 2016, FDNY 1st Deputy Commissioner Robert Turner, a former Battalion Chief who spent his career supporting civil rights and promoting diversity in the department, redesigned the FCA.¹⁰⁹ Despite objections from the UFA, he secured support for the endeavor from the New York State

¹⁰⁶ Nahmod, "The Collaborative Capacity of the NYPD, FDNY, and EMS in New York City," 27–40.

¹⁰⁷ U.S. v. City of New York (FDNY), 12.

¹⁰⁸ U.S. v. City of New York (FDNY), 5.

¹⁰⁹ Dorsey, "State Panel Okays FDNY Cadet Springboard Plan."

Civil Service Commission.¹¹⁰ The UFA's position was that the Non-Competitive title would undermine the civil service system and allow for corruption: "Under the Classified Civil Service system, the Non-Competitive Jurisdictional Class represents roles that are neither part of the Exempt nor Labor Classes and where the Civil Service Commission finds competitive exams impractical for assessing an applicant's aptitude and suitability."¹¹¹ However, the Civil Service Commission disagreed with the UFA and subsequently approved 100 Non-Competitive Title Fire Cadet positions, marking the rebirth of the FCA.

¹¹⁰ Dorsey.

¹¹¹ Bureau of State Payroll Services, "Jurisdictional Classes," Bureau of State Payroll Services, accessed July 9, 2023, https://web.osc.state.ny.us/payroll/files/information/payrollsystem/files/payserv_manual/online_manual/Content/Earnings%20Manual/PayServ%20Information/juris_class.htm.

III. FCA OVERVIEW

The New York City Fire Department’s Fire Cadet Academy, re-established in 2016, is a product of lessons learned from a previous iteration that operated from 1997–2002. This chapter delves into the evolution of the FCA, pinpointing its redesigned components. The revamped academy was born from mandatory reforms initiated due to legal action against the FDNY’s hiring practices, which resulted in changes such as NYC residency requirements and rigorous screening measures. Key innovations within the FCA include:

- **Knowledge Cultivation:** The Academy offers intensive academic instruction, encompassing firefighting principles, FDNY history, and non-emergency services ranging from fire safety education to administrative functions.
- **Evaluation and Assessment:** The FCA emphasizes continuous learning checks and maintains a 24-month evaluation period.
- **Character Development:** Ethics, values, and leadership take center stage, with courses sourced from institutions like West Point.
- **Physical Preparedness:** Fitness training in the academy surpasses national standards, ensuring cadets are ready for the physical rigors of firefighting.
- **Experiential Learning:** Cadets undergo rotations across 41 FDNY bureaus, fostering practical skills and knowledge application.¹¹²
- **Mentorship and Discipline:** The Cadet Cadre emphasizes FDNY traditions and etiquette, while an individualized peer advisor system offers one-on-one mentorship.

¹¹² Wendy Harper, “FDNY Fire Cadet Academy Work Rotation Catalog” (Brooklyn, NY: FDNY Youth Workforce Pipeline Program, April 13, 2023).

- Transparency and Equity: The Academy upholds integrity by actively combating past issues of nepotism and favoritism.

Through its comprehensive approach, the FCA aspires to nurture skilled, ethical, and well-trained firefighters, aiming for a lasting positive impact on FDNY's organizational culture and capacity.

A. MODERNIZING THE FCA

This section provides an overview of the methods employed by the Fire Cadet Academy to instill trust, ethical conduct, and shared values in its members, with the goal of rectifying historical issues within the FDNY. These methods aim to cultivate a culture of trust, ethical behavior, and shared core values within the FDNY, offering a comprehensive solution to some of the department's longstanding issues. The methods include:

1. Expert Input for Academic Modules: The Fire Cadet Academy (FCA), in partnership with academic experts certified as Fire Instructor 1 and Fire Instructor 2, has successfully developed and imparted the teachings of Module 1 to the cadets.¹¹³ Currently, the team is finalizing the contents and structure of Module 2, ensuring its relevance and efficacy for the trainee.
2. Fitness Program Development: Certified personal trainers from the International Association of Firefighters' Fit-2-Thrive (F2T) program and the American Council on Exercise (ACE) will design and oversee the physical fitness part of the program.¹¹⁴ This two-year fitness program aims to prepare cadets for the physical demands of firefighting.

¹¹³ Steven Lee, "FDNY Fire Cadet Academy Academic Syllabus" (FDNY Youth Workforce Pipeline Program, May 10, 2023).

¹¹⁴ International Association of Firefighters, "Fit to Thrive (F2T) Program," IAFF, accessed August 8, 2023, <https://www.iaff.org/peer-fitness/>.

3. Ethical Education Component: Exploring morality, values, and ethics forms a critical part of the program, facilitated through the Morality of Everyday Life course, created by Dr. Paul Bloom and offered through Yale University.¹¹⁵
4. Application and Andragogy: The FCA integrates FDNY-specific material with ethical discussions from Bloom’s course to create practical applications.¹¹⁶ This combination stimulates peer-to-peer dialogue or andragogy, making the learning experience more relevant for adult learners.

The new FCA must still enact specific measures to prevent past nepotism and favoritism.¹¹⁷ The FDNY had already implemented a communications policy that effectively built a firewall between employees and its Candidate Investigations Division. So, the eligibility criteria for the new cadet program changed. Schools in New York City have a more diverse ethnic makeup than the suburban schools in the surrounding counties.¹¹⁸ To assist with its diversity goals, the FDNY’s Office of Recruitment and Retention, in consultation with the Court Monitor, decided that only applicants who graduated from high schools within the City’s five boroughs would be eligible for the new FCA.¹¹⁹ Thus, this change alone could counteract the influence of nepotism.

¹¹⁵ Yale University, “Moralities of Everyday Life | Yale Online,” June 20, 2016, <https://online.yale.edu/courses/moralities-everyday-life>.

¹¹⁶ Coursera Inc, “Moralities of Everyday Life,” Coursera, 2023, <https://www.coursera.org/learn/moralities>.

¹¹⁷ Fonow, “Black Firefighters and the FDNY.”

¹¹⁸ NYC Department of Education, “DOE Data at a Glance,” NYC Public Schools, accessed April 24, 2023, <https://www.schools.nyc.gov/about-us/reports/doe-data-at-a-glance>.

¹¹⁹ Fire Department City of New York, “Opportunity to Become a Fire Cadet,” Fire Cadet Academy, January 21, 2023, <https://www.joinfdny.com/careers/cadet/>.

The Firefighter Cadet Academy offers more than 2000 hours of instruction to its candidates, vastly surpassing the 270 hours typical of most fire departments.¹²⁰ This approach, combined with its various modules and programs, underscores the FCA's commitment to producing firefighters who are not only physically prepared but also ethically sound and aligned with the core values of FDNY.

To ensure integrity and counteract historical challenges, the FCA introduced two assessments: one personality-focused and the other emphasizing physical fitness.¹²¹ Both were developed in collaboration with the FDNY's Fire Academy and Probationary Firefighter School. Moreover, to bolster its diversity objectives and address issues of nepotism, the FDNY's Office of Recruitment and Retention decided that eligibility for the new FCA would be exclusive to graduates from high schools within New York City's five boroughs.¹²² This decision promotes inclusivity and aims to rectify some of the department's longstanding concerns.

B. IGNITING CHANGE

This section presents the design of the Fire Cadet Academy's program. Training primes cadets for a seamless transition from the academy to the Probationary Firefighter School after graduation. The Four Pillars of Instruction, encompassing academics, character/ethics, experiential learning, and fitness, are at the heart of the academy's curriculum. Beyond the foundational training, the academy ensures a holistic initiation by acquainting cadets with the FDNY's rich history through academic modules and site visits. The selection of highly skilled instructors and staff fortifies the program's integrity, while the Peer Advisor Program, pairing cadets with veteran firefighter mentors, offers

¹²⁰ Office of Fire Prevention and Control, *Firefighter Training Feasibility Study* (Albany, NY: New York State Homeland Security and Emergency Services, 2019), https://www.dhses.ny.gov/system/files?file=documents/2021/05/ofpc_training_feasibility_study.pdf; Patrick Mulherin and Beth Weckman, "Analysis of Recruit Initial Firefighter Training Curricula | NFPA" (National Fire Protection Agency, April 2015), <https://www.nfpa.org/News-and-Research/Data-research-and-tools/Emergency-Responders/Analysis-of-Recruit-Initial-Fire-Fighter-Training-Curricula>.

¹²¹ Cangrade, "Cangrade Customers," Cangrade, 2023, <https://www.cangrade.com/customers/>.

¹²² Fire Department City of New York, "Opportunity to Become a Fire Cadet."

invaluable guidance. These elements demonstrate the academy's commitment to nurturing the next generation of FDNY firefighters.

1. The Four Pillars of Instruction

During the late 1990s, the American military introduced the term “VUCA,” standing for Volatile, Uncertain, Complex, and Ambiguous, to characterize the evolving nature of warfare.¹²³ Like military operations, fire service personnel frequently face volatile situations where conditions can change rapidly without warning.¹²⁴ The uncertain nature of these incidents often means that initial information is incomplete or inaccurate, complicating decision-making.¹²⁵ In response to the volatile, uncertain, complex, and ambiguous scenarios that mirror VUCA conditions in the firefighting field, the Fire Cadet Academy emphasizes cultivating critical decision-making skills among its cadets.

To this end, the Fire Cadet Academy's curriculum stands on four foundational pillars. First, it features academics, ensuring cadets attain a robust theoretical grasp of firefighting principles and strategies.¹²⁶ This knowledge forms the mental framework decision-makers use to safeguard themselves during operations.¹²⁷ Second, the academy focuses on character and ethics, fostering a deep sense of duty, honesty, and dedication. This approach promotes the concept of vicarious experience, enabling cadets to learn from the actions and decisions of others, whether it is the guidance of veteran firefighters, historical accounts, or the practices of their peers and superiors.¹²⁸

¹²³ Rob Elkington, “Leadership Decision-Making Leveraging Big Data in VUCA Contexts,” *Journal of Leadership Studies* 12, no. 3 (November 2018): 66–70, <https://doi.org/10.1002/jls.21599>.

¹²⁴ Greg Penney et al., “Threat Assessment, Sense Making, and Critical Decision-Making in Police, Military, Ambulance, and Fire Services,” *Cognition, Technology & Work* 24, no. 3 (2022): 423–39, <https://doi.org/10.1007/s10111-022-00694-3>.

¹²⁵ Penney et al.

¹²⁶ Lee, “FDNY Fire Cadet Academy Academic Syllabus.”

¹²⁷ Adam A. Karaoguz, “Preparing to Be Unprepared: Ground Force Commander Decision Making in a Volatile, Uncertain, Complex, and Ambiguous World” (Monterey, California: Naval Postgraduate School, 2016), 18–33.

¹²⁸ Karaoguz, 18–33.

Third is a commitment to physical fitness, readying cadets for the demanding physical rigors intrinsic to their role. Lastly, by integrating cadets into fire service bureaus, they gain invaluable experiential learning, applying their acquired knowledge and honing their skills.¹²⁹ This approach ensures cadets and their teammates foster a “shared mind,” crucial for synchronized operations on the field.¹³⁰ Ultimately, the FCA designed the pillars of instruction to prepare cadets for the unpredictable and complex challenges of the firefighting profession.

a. Academics

To ensure well-rounded training, cadets receive academic instruction that imparts technical-level knowledge and provides a strategic overview of the FDNY, capturing its history, mission, values, and organizational structure.¹³¹ Olof Brunninge underscores the significance of this historical insight for organizational continuity.¹³² He emphasizes that aligning members with an institution’s past and their ability to interpret and apply it is paramount for mission fulfillment.¹³³ Profound historical insight is essential to gauge the momentum or stasis within any organization, as understanding change depends on the juxtaposition of distinct historical moments.¹³⁴ As Brunninge suggests, a firm grasp of an organization’s history gives its members the insight to catalyze meaningful change, safeguarding the institution’s ongoing success and pertinence.¹³⁵

The FCA employs a systematic approach to academic assessment, utilizing multiple-choice exams administered after each instructional module. These exams, consisting of 10–20 questions, evaluate a cadet’s understanding and retention of the course

¹²⁹ Harper, “FDNY Fire Cadet Academy Work Rotation Catalog.”

¹³⁰ Karaoguz, “Preparing to Be Unprepared.”

¹³¹ Lee, “FDNY Fire Cadet Academy Academic Syllabus.”

¹³² Olof Brunninge, “Using History in Organizations: How Managers Make Purposeful Reference to History in Strategy Processes,” *Journal of Organizational Change Management* 22, no. 1 (2009): 8–26, <https://doi.org/10.1108/09534810910933889>.

¹³³ Brunninge.

¹³⁴ Brunninge, 11.

¹³⁵ Brunninge, “Using History in Organizations.”

material.¹³⁶ Cadets must have a minimum score of 70 percent to pass each exam, a standard that upholds the academic integrity expected within the academy.¹³⁷

The FCA offers remedial sessions to cadets who fail to reach the minimum average of 70 percent. As a collegiate-level initiative, the FCA provides remedial classes with additional classroom sessions and a favorable student-to-instructor ratio, ensuring individualized attention. Research on first-year college students highlights the impact of such remedial courses on their success.¹³⁸ Students who enrolled in and completed remedial classes emerged with more precise educational and career objectives, a better understanding of collegiate success factors, and practical skills enhancing their achievements.¹³⁹ Moreover, the data suggested that students attending these remedial sessions had superior academic results than those who skipped them.¹⁴⁰ Therefore, the emphasis the FCA places on remedial classes directly contributes to students' academic achievements and enhances their readiness for future pursuits.

Moreover, the FCA reinforces the continuity of learning by implementing additional assessments every six months. These comprehensive tests consist of 50 multiple-choice or True/False questions, providing an extensive review of all material taught up to that point.¹⁴¹ The FCA Academics Department ensures cadets are well-prepared and adequately supported by offering review classes before these exams. The calculation of academic averages in the FCA follows a comprehensive approach, considering both active participation and exam performance. Cadet participation contributes up to 20 percent of the cumulative grade, underscoring the significance of active involvement and student

¹³⁶ Lee, "FDNY Fire Cadet Academy Academic Syllabus."

¹³⁷ Lee.

¹³⁸ Betül Betina Yolak, Zeynep Kiziltepe, and Fatma Nevra Seggie, "The Contribution of Remedial Courses on the Academic and Social Lives of Secondary School Students," *Journal of Education* 199, no. 1 (January 1, 2019): 24–34, <https://doi.org/10.1177/0022057419836434>.

¹³⁹ Yolak, Kiziltepe, and Seggie.

¹⁴⁰ Yolak, Kiziltepe, and Seggie.

¹⁴¹ Lee, "FDNY Fire Cadet Academy Academic Syllabus."

engagement in the learning environment.¹⁴² Accordingly, the FCA’s structured approach to assessments and grading emphasizes consistent engagement and understanding throughout the program.

One way the FCA differs from PFS is by recognizing the importance of active engagement and feedback within the learning process. Actively involving all partners from the onset of a process emphasizes authentic collaborations and fosters an environment that encourages the exploration of diverse viewpoints, even disagreements.¹⁴³ This approach promotes a more profound understanding, which can benefit fire cadets by enhancing their teamwork skills, broadening their perspectives, and helping them appreciate the value of different skills and insights in problem-solving.¹⁴⁴ This approach goes beyond technical training to nurture essential teamwork and problem-solving skills through active engagement and collaboration.

b. Character and Ethics

The FCA has recognized an inherent problem in the department’s traditional approach to leadership development: the informal approach of its current methods fails to address today’s VUCA environment. As a result, the academy has taken a proactive approach to address this issue by incorporating character and ethics into the curriculum for new cadets.

Three key reasons underpin this shift:

1. The absence of a systematic leadership development program within the FDNY has resulted in an operational tempo that hinders the organization and individual members’ ability to adapt to VUCA environments.¹⁴⁵

¹⁴² M. Kristiina Montero and Heather Waymouth, “Transforming Teaching and Learning: A Review of ‘No More Telling as Teaching: Less Lecture, More Engaged Learning,’” *Journal of Adolescent & Adult Literacy* 62, no. 3 (2018): 352–54.

¹⁴³ Tram Nguyen et al., “How Does Integrated Knowledge Translation (IKT) Compare to Other Collaborative Research Approaches to Generating and Translating Knowledge? Learning from Experts in the Field,” *Health Research Policy and Systems* 18, no. 1 (December 2020): 35, <https://doi.org/10.1186/s12961-020-0539-6>.

¹⁴⁴ Nguyen et al.

¹⁴⁵ Byrd, “Perceptions of Effective Organizational Leadership.”

2. The International Society of Fire Service Instructors recognizes a deficiency in developing such interpersonal soft skills as empathy, active listening, and ethical judgment.¹⁴⁶ Although vital for effective leadership, the FDNY overlooks these competencies.
3. The concept of adult education, often referred to as andragogy, coupled with progressive instruction in leadership, is the most effective strategy to equip upcoming generations for forthcoming challenges.¹⁴⁷

To close these gaps, the FDNY Fire Cadet Academy is leveraging various digital learning resources, including online courses, social platforms, and innovative learning tools.¹⁴⁸ This approach cultivates a basis for achieving expertise in the specific educational domain communicated through these integrated channels: character, ethics, and leadership development.¹⁴⁹ Additionally, through a collaboration with the U.S. Military Academy at West Point, the FCA has adopted a cadet-oriented leadership and character curriculum described as follows:

PL300 (Military Leadership) is a multidisciplinary study of leadership in organizations. Cadets gain a pragmatic understanding of the behavioral, organizational, and sociological sciences and apply that knowledge to become better leaders, develop better leaders, and make their organizations more effective. The course surveys a carefully selected set of the most relevant and useful ideas, concepts, theories and knowledge from these sciences. A representative list of topics explored includes: leader and leadership development, character and its development, perceptions and biases, decision making, motivation, power and influence, multiple leadership theories, counseling, negotiations, team dynamics, cohesion and group development, conflict management, organizational justice, organizational culture, organizational change, socialization, and leadership in extremis. In addition to applying knowledge of these topics, cadets

¹⁴⁶ Kevin Kupietz, “Teaching Soft Skills in the Fire Service,” *The Buzz* (blog), September 29, 2021, <https://www.isfsi.org/blog/teaching-soft-skills-in-the-fire-service>.

¹⁴⁷ Michael Ian Brabant, “Evolutionary Andragogy Within Learning Community for Embodied Transformation in Higher Education: A Case Study of the Next Wave of Leadership Training” (PhD diss., Saybrook University, 2015), ProQuest.

¹⁴⁸ Brabant.

¹⁴⁹ Brabant.

develop a leadership portfolio which helps refine and inform their personal approach to leading. The portfolio includes a ‘Journey Line’ reflection paper, an individual developmental plan, and a theoretically sound leadership philosophy. PL300 is designed to maximize direct application for cadets in their roles as leaders in the Corps of Cadets and as future Army officers.¹⁵⁰

By integrating character and ethics into the curriculum, the FCA aims to benefit cadets individually while enhancing overall performance, ensuring that the FDNY remains at the forefront of operational excellence.

c. Experiential Learning

Experiential learning, facilitated by the FCA, plays a pivotal role in the development and preparedness of FDNY fire cadets for their future roles. This hands-on learning approach, whereby cadets participate in practical activities and internships, allows them to reflect upon their experiences, deepening their understanding of the FDNY’s operations and values. Learning is a journey, not merely a destination, rooted in subjective experiences and intimately connected to the individual’s character.¹⁵¹ This technique, often called “learning through reflection on doing,” is highly effective for career readiness in the public safety domain.¹⁵² Thus, through experiential learning, the FCA integrates theoretical knowledge with practical application, enhancing cadet preparation for the complexities of the fire service profession.

The experiential learning approach is highly beneficial for career preparation as it encourages learners to actively explore, form concepts, solve real-world problems, and receive feedback.¹⁵³ Experiential learning is, by definition, “a purposeful process of

¹⁵⁰ United States Military Academy, “PL300 Course Details,” United States Military Academy Curriculum Catalog, accessed May 25, 2023, https://courses.westpoint.edu/crse_details.cfm?crse_nbr=PL300&int_crse_eff_acad_yr=2022&int_crse_eff_term=2.

¹⁵¹ Claudia Baldwin and Johanna Rosier, “Growing Future Planners: A Framework for Integrating Experiential Learning into Tertiary Planning Programs,” *Journal of Planning Education and Research* 37, no. 1 (March 2017): 43–55, <https://doi.org/10.1177/0739456X16634864>.

¹⁵² Elena Urquía-Grande et al., “Bridging the Gaps Between Higher Education and the Business World: Internships in a Faculty of Economics and Business,” *Education & Training* 63, no. 3 (2020): 490–509, <https://doi.org/10.1108/ET-01-2018-0017>.

¹⁵³ Baldwin and Rosier, “Growing Future Planners,” 45.

engaged, active learning in which the student constructs knowledge, skills, or values by means of direct experiences in authentic, real-world contexts.”¹⁵⁴ Learning, described as the knowledge creation or transformation process within a student’s mind, is central to the constructivist learning approach adopted by the Fire Cadet Academy.¹⁵⁵ This approach positions cadets at the heart of the learning experience, promoting self-regulation and active engagement.

As an institution operating at the collegiate level, the FCA holds National College Credit Recommendation Service (NCCRS) accreditation. The NCCRS mandates cadets to amass more than 1000 hours of professional experience via six work placements across various FDNY bureaus. Throughout these internships, the FCA enforces a comprehensive Code of Conduct, a minimum commitment of 20 weekly employment hours, and fulfilling duties specified in the FCA Work Rotation Catalog.¹⁵⁶ This structured approach enables cadets to double the NCCRS baseline, accruing more than 2,000 hours of hands-on experience. Cadets must also secure satisfactory evaluations from bureau supervisors, as non-compliance with these stipulations may lead to expulsion from the FCA.

Fundamentally, the Fire Cadet Academy’s adoption of the experiential learning methodology presents cadets with a pragmatic and immersive educational milieu, augmenting their competencies and knowledge. It enables them to practice these skills in real-world situations, consequently fortifying their preparedness for careers in public safety. Thus, through this experiential approach provided by the FCA, fire cadets acquire pivotal experience in public safety and fire services, effectively integrating theoretical understanding and its practical manifestation.

¹⁵⁴ Trudie Walters, “Delivering Employable Event Studies Graduates: Student Perspectives on the Benefits of Experiential Learning,” *Event Management* 25, no. 5 (September 2021): 521–33, <https://doi.org/10.3727/152599518X15299559637653>.

¹⁵⁵ I. W. Subagia, “Roles Model of Teachers in Facilitating Students Learning Viewed from Constructivist Theories of Learning,” *Journal of Physics: Conference Series* 1503, no. 1 (July 2020): 1–9, <https://doi.org/10.1088/1742-6596/1503/1/012051>.

¹⁵⁶ Harper, “FDNY Fire Cadet Academy Work Rotation Catalog.”

d. Fitness

In a strategic collaboration with the FDNY's Fitness Unit, the FCA emphasizes ensuring cadets attain and maintain physical standards benchmarked against nationally recognized criteria. Jette et al. provide a succinct definition for context: "One metabolic equivalent (MET) is the amount of oxygen consumed while sitting at rest. The MET concept represents a simple, practical, and easily understood procedure for expressing the energy cost of physical activities as a multiple of the resting metabolic rate."¹⁵⁷ Along this line, the National Fire Protection Association (NFPA) 1582 Standard establishes a benchmark of an aerobic fitness level of 12 Metabolic Equivalent Tasks for firefighters.¹⁵⁸ Within their first six months at the FCA, cadets must meet this national NFPA standard. This measure equips cadets to manage the intense and strenuous activities integral to firefighting.

A pivotal evaluation during this initial phase is the FDNY candidate stair mill test. Beyond its standing as a recognized national requirement by bodies like the NFPA, this test effectively simulates the demanding physical scenarios encountered during real-life fire rescue missions.¹⁵⁹ Cadets must ascend a step mill exercise machine for one minute while wearing a 50-pound weighted vest at a pace of 58 steps per minute.¹⁶⁰ Following this, they continue for an additional four minutes at 60 steps per minute.¹⁶¹ The rules prohibit the use of handrails, thereby highlighting the necessity of strength, endurance, and balance.¹⁶² Falling short of this standard can result in a cadet's removal from the FCA.

¹⁵⁷ M. Jetté, K. Sidney, and G. Blümchen, "Metabolic Equivalents (Mets) in Exercise Testing, Exercise Prescription, and Evaluation of Functional Capacity," *Clinical Cardiology* 13, no. 8 (August 1990): 555–65, <https://doi.org/10.1002/clc.4960130809>.

¹⁵⁸ Jake Rhoades and Kim C. Favorite, *A Fire Department's Guide to Implementing NFPA 1582* (McLean, VA: International Association of Fire Chiefs, 2019), 21, https://www.iafc.org/docs/default-source/1vcos/vws_rrkit_nfpa-1582.pdf?sfvrsn=ca9b9f0d_2.

¹⁵⁹ International Association of Firefighters, *Candidate Physical Ability Test: Candidate Orientation Guide* (McLean, VA: International Association of Firefighters, 1999), https://www.nyc.gov/assets/fdny/downloads/pdf/join/join-cpat-orientation_guide.pdf.

¹⁶⁰ International Association of Firefighters.

¹⁶¹ International Association of Firefighters.

¹⁶² International Association of Firefighters.

Another focal point in the FCA's fitness assessment is running proficiency. During their first year, the FCA requires cadets to complete a 1.5-mile run within 13 minutes. This evaluation offers insights into a cadet's cardiovascular endurance—which is essential for handling prolonged firefighting activities.¹⁶³ Aligning with more stringent standards, by the 18-month mark, the FCA reduces the run time: cadets must finish within 12 minutes. This progressive benchmark ensures continual improvement in their fitness trajectories, setting them up for success in the Probationary Firefighter School.¹⁶⁴

Recognizing that a holistic training approach is vital, the FCA ensures cadets are ready for immediate challenges and strategically positioned for future tasks, especially in PFS. Central to this preparation are virtual and face-to-face fitness coaching sessions.¹⁶⁵ The FCA explicitly crafts these sessions to meet individual cadet requirements, driving them toward specific fitness milestones.¹⁶⁶ Resolute FCA fitness coaches closely monitor cadet growth, embodying the philosophy of continuous improvement and engagement.¹⁶⁷ The FCA's tailored fitness coaching, both virtual and in-person, underscores the importance of individualized growth and readiness.

Central to FCA's training approach are the Evidence-Based Practice (EBP) principles illustrated in Figure 4. EBP seamlessly blends practitioner expertise, athlete values, and empirical research to form a solid foundation for decision-making.¹⁶⁸ While this method is comprehensive, it is not without its challenges. The synergy between the coach and the practitioner is pivotal for implementing EBP effectively.¹⁶⁹ The EBP

¹⁶³ Fire Department City of New York, *Firefighter Candidate Physical Preparation Guide* (New York: Fire Department City of New York, 2013), 10, <https://www.nyc.gov/assets/fdny/downloads/pdf/join/join-physical-prep-guide.pdf>.

¹⁶⁴ Fire Department City of New York, *Firefighter Candidate Physical Preparation Guide*.

¹⁶⁵ John Dohsten, Natalie Barker-Ruchti, and Eva-Carin Lindgren, "Caring as Sustainable Coaching in Elite Athletics: Benefits and Challenges," *Sports Coaching Review* 9, no. 1 (2020): 48–70, <https://doi.org/10.1080/21640629.2018.1558896>.

¹⁶⁶ Dohsten, Barker-Ruchti, and Lindgren.

¹⁶⁷ Dohsten, Barker-Ruchti, and Lindgren.

¹⁶⁸ Hugh et al., "The Translation of Sport Science Research to the Field: A Current Opinion and Overview on the Perceptions of Practitioners, Researchers and Coaches," *Sports Medicine* 49, no. 12 (December 2019): 1817–24, <https://doi.org/10.1007/s40279-019-01139-0>.

¹⁶⁹ Hugh et al.

framework is not a rigid formula but rather adjusts to each athlete's needs.¹⁷⁰ Instead of applying a generic solution, the approach is customized for individual situations. The EBP process can be summarized in five steps:

1. Ask – Frame the athlete's information into precise questions.
2. Acquire – Search for the most relevant data to answer these questions.
3. Appraise – Validate the data's authenticity and pertinence.
4. Apply – Implement the gathered data in decision-making.
5. Audit – Reflect on the entire process and identify areas of improvement for future applications.¹⁷¹

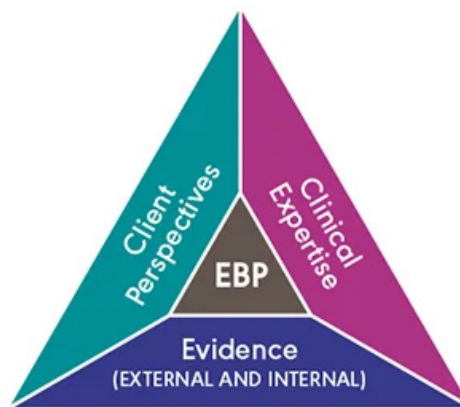


Figure 4. Evidence-Based Practice¹⁷²

The FCA employs a comprehensive approach, with tailored coaching and an incorporated EBP, to transform cadets into tactical athletes. This regimen ensures cadets

¹⁷⁰ Alex J. Ritson, Mark A. Hearris, and Laurent G. Bannock, "Bridging the Gap: Evidence-Based Practice Guidelines for Sports Nutritionists," *Frontiers in Nutrition (Lausanne)* 10 (2023): 1118547–1118547, <https://doi.org/10.3389/fnut.2023.1118547>.

¹⁷¹ Ritson, Hearris, and Bannock.

¹⁷² Sanja Gidakovic, "Guides: PSY 3100 – Research Methods: Evidence Based Practice (EBP)," August 27, 2023, <https://guides.library.ucmo.edu/c.php?g=968120&p=7821026>.

can meet present demands and excel in the demanding environment of the Probationary Firefighter School.

2. Orientation and Initial Steps

The FDNY, although fundamentally a civilian institution, has historically integrated military and paramilitary traditions into its *modus operandi*. This alignment with military ethos traces back to Alexander Shaler, a general officer in the Union Army and Medal of Honor winner who served as commissioner of the FDNY from 1867 to 1873.¹⁷³ Shaler leveraged his military background to reshape the department into a quasi-military design, echoing the organizational hierarchy and titles typical of armed forces.¹⁷⁴ He instituted battalion groupings for companies and revamped traditional officer and crew designations: “company foremen” became captains, “assistant foremen were termed lieutenants, and “assistant engineers,” overseeing specific regions, evolved into battalion chiefs.¹⁷⁵ Additionally, Shaler transformed the title of chief engineer to the chief of department.¹⁷⁶

This legacy is evident today, particularly in the FCA’s curriculum. The Academy’s Cadet Cadre consists of FDNY drill instructors honed at the U.S. Army Drill Sergeant Academy.¹⁷⁷ They imbue cadets with military disciplines like uniform inspections and bearing, thus cultivating a culture of unyielding professionalism and dedication from the early stages of their firefighting training.¹⁷⁸ Shaler’s pioneering adoption of these military frameworks and titles continues reverberating within the FDNY into the 21st century.

¹⁷³ Terry Golway, *So Others May Live* (New York: Basic Books, 2002), 129.

¹⁷⁴ Golway, 129.

¹⁷⁵ Golway, 129.

¹⁷⁶ Golway, 129.

¹⁷⁷ Gary Loten-Beckford, “Newly Restored Partnership Resumes, U.S. Army Drill Sergeant Academy and the New York City Fire Department Collaborate,” Defense Visual Information Distribution Service News, September 8, 2022, <https://www.dvidshub.net/news/428803/newly-restored-partnership-resumes-us-army-drill-sergeant-academy-and-new-york-city-fire-department-collaborate>.

¹⁷⁸ Loten-Beckford.

As the influence of the past melds with the innovation of the present, the FCA embarked on a fresh chapter. The inaugural class of the Fire Cadet Academy commenced on June 5, 2023.¹⁷⁹ This day marked the beginning of an orientation program for the select cohort of 100 cadets, offering them a glimpse into the academy's rigorous standards and core values.¹⁸⁰ The FCA introduced cadets to pivotal academy policies and overarching expectations during this initiation phase. Likewise, it ensured that every cadet was well-versed in vital workplace policies, encompassing Equal Employment Opportunity, Right-to-Know, and Workplace Violence statutes.

In addition, the FCA explicitly outlined their terms of employment, providing clarity about roles and responsibilities within the academy. A pivotal moment in their initiation came with the oath of office ceremony, a significant event that officially welcomed the cadets into the Fire Cadet Academy.¹⁸¹ The launch of this inaugural class represents an essential milestone in the evolution of the Fire Cadet Academy's program, paving the way for these cadets to embark on promising careers within the Fire Department.¹⁸² The integration of military traditions into the FDNY, tracing back to Shaler's tenure, underscores the FDNY's and FCA's profound commitment to discipline and professionalism.

3. Academic Module and Site Visits

The tragic events of September 11, 2001, indelibly shaped the FDNY. The selfless sacrifices made that day and the profound losses endured have become a cornerstone of the department's collective identity. It is a testament to the spirit of service, sacrifice, and resilience that epitomizes the FDNY. Recognizing this significance, the FCA's curriculum, right from Academic Module One, prioritizes immersing cadets in the FDNY's rich

¹⁷⁹ JoinFDNY, "The FDNY Fire Cadet Academy Has Begun," JoinFDNY, July 19, 2023, <https://www.joinfdny.com/the-fdny-fire-cadet-academy-has-begun/>.

¹⁸⁰ "Fire Cadet Academy," JoinFDNY, accessed August 9, 2023, <https://www.joinfdny.com/careers/cadet/>.

¹⁸¹ "Fire Cadet Academy."

¹⁸² JoinFDNY, "The FDNY Fire Cadet Academy Has Begun."

history.¹⁸³ Further enriching this education, the FCA curated two pivotal site visits for the cadets—the 9/11 Memorial Museum and the FDNY Museum. Beyond mere field trips, these visits are profound experiential learning opportunities, offering cadets a tangible connection to the legacy they stand poised to carry forward.

4. Instructor and Staff Selection

The success of the FCA program depends on the expertise and dedication of its instructors and staff. Understanding this critical link, the FCA has implemented a thorough selection process to ensure that only the most skilled, devoted, and suitable individuals lead and support the program. These standards aid cadets throughout training and emphasize the FCA’s commitment to diversity and merit, as evidenced by officers from historically underrepresented groups within its core staff.¹⁸⁴ Additionally, every FCA instructor is certified by the National Fire Protection Agency, and each fitness coach is accredited as an IAFF Peer Fitness Trainer.¹⁸⁵ Ensuring its staff and instructors meet the highest training and certification standards, the FCA guarantees cadets receive top-tier instruction and mentorship.

5. The Peer Advisor Program

The Fire Cadet Academy takes considerable pride in its Peer Advisor Program, which serves as a cornerstone for ensuring the holistic growth of its cadets. A standout feature of this initiative is the selection of advisors, who represent a diverse group of firefighters from across the five boroughs of New York City. These advisors, having between five to 25 years of firefighting experience, bring with them a diverse range of

¹⁸³ Lee, “FDNY Fire Cadet Academy Academic Syllabus.”

¹⁸⁴ JoinFDNY, “FDNY Officers Honored at NYC Mayor’s AAPI Celebration at Gracie Mansion,” JoinFDNY, May 18, 2022, <https://www.joinfdny.com/fdny-officers-honored-at-nyc-mayors-aapi-celebration-at-gracie-mansion/>; JoinFDNY, “Joann Diaz Makes History as First Latina Fire Lieutenant,” JoinFDNY, October 20, 2021, <https://www.joinfdny.com/joann-diaz-makes-history-as-first-latina-fire-lieutenant-in-fdny-history/>.

¹⁸⁵ National Fire Protection Agency, “NFPA 1041: Standard for Fire and Emergency Services Instructor Professional Qualifications,” accessed August 9, 2023, <https://www.nfpa.org/codes-and-standards/all-codes-and-standards/list-of-codes-and-standards/detail?code=1041>; International Association of Firefighters, “Fit to Thrive (F2T) Program.”

expertise. Unlike the apprenticeship that typically takes place within a firefighter's designated firehouse, the FCA selected its advisors from firehouses in every borough. This system promotes a broad cognitive diversity and ensures cadets benefit from a deep well of accumulated wisdom and expertise.¹⁸⁶

The fundamental idea behind the Peer Advisor Program is to enhance the cadet's learning experience, ensuring a smoother transition into the department once they graduate from Probationary Firefighting School. The FCA crafts the mentor-cadet relationship to provide a tailored approach to mentorship.¹⁸⁷ Direct feedback and individualized guidance seamlessly complement the academy's academic and fitness modules.

As the cadets embark on their two-year journey through the academy, the FCA pairs them with seasoned firefighters who assume the role of peer advisor. Beyond a conventional guidance system, this mentorship offers cadets an invaluable link to the real-world firefighting community.¹⁸⁸ These advisors draw from their FDNY experiences to provide cadets with insights, support, and guidance, bridging the gap between theory and practice and helping cadets internalize the department's values and culture.¹⁸⁹

The holistic development of a cadet is not solely about understanding fire dynamics or mastering physical fitness drills. It also requires internalizing the ethos, the values, and the lived experiences that shape a firefighter's daily reality.¹⁹⁰ The Fire Cadet Academy's Peer Advisor Program is not just a mentoring initiative; it exemplifies the department's commitment to fully integrating its newest members into its longstanding traditions and dynamic future.¹⁹¹

¹⁸⁶ FDNY Office of Recruitment and Retention, "FDNY Firefighter Candidate Mentorship Program" (Fire Department City of New York, April 17, 2023), <https://www.joinfdny.com/tag/firefighter-candidate-mentorship-program/>.

¹⁸⁷ Office of Recruitment and Retention.

¹⁸⁸ Office of Recruitment and Retention.

¹⁸⁹ JoinFDNY, "Celebrating MLK Day: FDNY Members Discuss Continuing Dr. King's Legacy," JoinFDNY, January 16, 2023, <https://www.joinfdny.com/mlkday2023/>.

¹⁹⁰ JoinFDNY, "Every Day Is Another Opportunity to Serve," *JoinFDNY* (blog), March 22, 2017, <https://www.joinfdny.com/fdny-firefighter-serve/>.

¹⁹¹ Office of Recruitment and Retention, "FDNY Firefighter Candidate Mentorship Program."

The Fire Cadet Academy equips cadets with knowledge, relationships, and insights that will be invaluable as they transition into the firefighting community. For the FDNY, this integration produces an incoming cohort already woven into the fabric of the department, strengthening its ties and ensuring its legacy.¹⁹² As other institutions look towards the FDNY for best practices in training and integration, the Peer Advisor Program stands out as a replicable model, underscoring the critical importance of mentorship in professional development.

¹⁹² Office of Recruitment and Retention.

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IV. CULTURE VS. CORE VALUES

Culture in the FDNY is reflective of its prevailing attitudes and behaviors, with the core values providing a guiding light for transformative growth. This chapter outlines the importance of these core values, emphasizing their role in fostering trust, integrity, and ethical responses to challenges.¹⁹³ The main finding of this chapter is that while values are foundational, their true power lies in genuine and consistent application, making them pivotal in shaping a resilient and ethical organizational ethos.

Despite its well-defined core values, the FDNY faces challenges in embodying these principles, prompting a reevaluation of their real-world application and the need for meaningful reforms. The FDNY's core values include service, bravery, safety, honor, dedication, equity, and preparedness.¹⁹⁴ However, the FDNY's failure to establish a solid culture to uphold these principles raises concerns. In recent years, the department has faced criticism for discrimination and lack of diversity, raising questions about implementing and applying these beliefs within the organization.¹⁹⁵ The discrepancy between the FDNY's stated core values and their manifestation in its practices underscores the critical need for internal reforms, as values are meaningful only when consistently applied and reflected in an organization's culture and actions.¹⁹⁶

A. THE VALUE OF VALUES

Values should arise from an organization's core purpose and be inextricably linked with its unique identity. Workplaces without defined values can leave employees feeling disconnected, impede the organization's ability to adapt strategically and operationally,

¹⁹³ Harald Askeland et al., "Understanding Values Work in Organisations and Leadership," in *Understanding Values Work: Institutional Perspectives in Organizations and Leadership*, ed. Harald Askeland et al. (Cham, Switzerland: Springer International Publishing, 2020), 4, https://doi.org/10.1007/978-3-030-37748-9_1.

¹⁹⁴ Office of the Deputy Commissioner for Strategic Initiatives and Policy, *FDNY Strategic Plan 2015–2017* (Brooklyn, NY: Fire Department – City of New York, 2015), 5, http://www.nyc.gov/html/fdny/pdf/ofc/FDNY_strategic_plan_2015_2017.pdf.

¹⁹⁵ Herndon and Watkins, "How a Racist Scandal."

¹⁹⁶ Askeland et al., "Understanding Values Work in Organisations and Leadership."

and limit the conduct of its team members.¹⁹⁷ Clearly defined and practiced organizational values are crucial for employee engagement, strategic adaptability, and guiding team behavior.¹⁹⁸

The alignment of deeply embedded organizational values with employees' experiences assists in shaping a robust and influential organizational culture.¹⁹⁹ However, to do so, employees must understand these values intellectually, emotionally, and subjectively.²⁰⁰ This culture, molded by shared values, beliefs, expectations, and behaviors, directly impacts the organization's operational efficacy, performance, and overall functionality.²⁰¹

With its profound 150-plus-year lineage, the FDNY embodies the power of an ingrained and evolving culture.²⁰² In 2023, the department celebrated the graduation of three "legacy graduates," members who joined the ranks alongside the previous 65 firefighters who had lost a parent in the September 11th terrorist attacks.²⁰³ These connections highlight the FDNY's history of service, sacrifice, and honor. At the same time, such personal commitment in FDNY tales further illustrates the department's evolving identity. Take, for example, the story of Robert Thomas, a Black firefighter who

¹⁹⁷ Patrick M. Lencioni, "Make Your Values Mean Something," *Harvard Business Review*, July 1, 2002, <https://hbr.org/2002/07/make-your-values-mean-something>.

¹⁹⁸ Ivan Malbašić, Carlos Rey, and Vojko Potočan, "Balanced Organizational Values: From Theory to Practice," *Journal of Business Ethics* 130, no. 2 (2015): 437–46, <https://doi.org/10.1007/s10551-014-2238-0>.

¹⁹⁹ Michel Guillemin and Robin Nicholas, "Core Values at Work—Essential Elements of a Healthy Workplace," *International Journal of Environmental Research and Public Health* 19, no. 19 (2022): 1–17, <https://doi.org/10.3390/ijerph191912505>.

²⁰⁰ Guillemin and Nicholas.

²⁰¹ Olaf Flak, "System of Organizational Terms as a Theoretical Foundation of Cultural Identity Research Using an Online Research Tool for Teaching Reflective Practice," *International Journal of Arts & Sciences* 12, no. 1 (2019): 243–55.

²⁰² Brian McDonald, *Five Floors Up: The Heroic Family Story of Four Generations in the FDNY* (New York: Grand Central Publishing, 2022).

²⁰³ Leonard Greene, "Legacy Graduates, Veterans, Women Among Diverse FDNY Firefighter Class," FireRescue1, accessed August 29, 2023, <https://www.firerescue1.com/fdny/articles/legacy-graduates-veterans-women-among-diverse-fdny-firefighter-class-XMgcxXHMLqPMotNv/>; Thomas Tracy, "FDNY's 9/11 'Legacy' Firefighters: Sons and Daughters of Responders Killed in Attacks," *New York Daily News*, September 8, 2021, <https://www.nydailynews.com/new-york/september-11/ny-9-11-fdny-children-victims-follow-fathers-footsteps-20210906-tae2af35a5arbeqyrl47k43heu-story.html>.

served in the department, then predominantly white, for 40 years.²⁰⁴ Today, three of his sons work as firefighters in the FDNY.²⁰⁵ Such narratives reinforce the department's enduring character and highlight its gradual shift toward greater inclusivity and representation.

The Thomas family's FDNY story also speaks to present and near-future issues. Surveys reveal that half of the fire chiefs from the country's largest departments feel unprepared to embrace Diversity, Equity, and Inclusion (DEI).²⁰⁶ Their concerns include difficulties discussing DEI, an absence of perspectives from marginalized groups, and a lack of internalization of organizational core values.²⁰⁷ The significance of diverse teams—and their potential to boost performance—is not fully grasped.²⁰⁸ Thus, the FDNY and many of the nation's major fire departments urgently need to understand and integrate DEI principles, recognizing that diverse teams foster a more inclusive environment and can significantly enhance operational performance and adaptability in a changing world.²⁰⁹

Although the fundamental role of a firefighter has stayed consistent over time, a digital shift is occurring to encompass staffing, mapping, and resource management.²¹⁰ However, as beneficial as this adaptation may be, a firefighter's willingness to adopt change depends on its perceived reliability and ease of use.²¹¹ The department now confronts new types of emergencies and heightened expectations, necessitating innovation

²⁰⁴ Thomas Tracy, "FDNY Firefighter Hangs up Helmet, Turnout Coat after 40 Years," Firehouse, April 11, 2023, <https://www.firehouse.com/careers-education/video/53056867/fdny-firefighter-robert-thomas-retires-after-40-years-three-fdny-sons-join-him-for-last-shift>.

²⁰⁵ Tracy.

²⁰⁶ Jesse Roman, "Leaning In," *NFPA Journal* 117, no. 2 (2023): 42–47.

²⁰⁷ Roman.

²⁰⁸ Roman.

²⁰⁹ Sylvia Moir, "Fluid Leadership: Inviting Diverse Inputs to Address Complex Problems" (master's thesis, Naval Postgraduate School, 2016), <https://hdl.handle.net/10945/48567>.

²¹⁰ John M. Steward, "Applying Technology Acceptance Research to Information Systems Implementation in the Fire Service" (Monterey, CA; Naval Postgraduate School, 2019), 1–3, https://calhoun.nps.edu/bitstream/handle/10945/62301/19Mar_Steward_John.pdf?sequence=1&isAllowed=y.

²¹¹ Steward, 39.

across various domains.²¹² Introducing initiatives like the FCA demonstrates the FDNY's attempt to balance preserving its rich heritage while adapting to the demands of a contemporary world.²¹³ Therefore, The FDNY's challenge lies in striking a balance between honoring tradition and embracing technological advancement, ensuring that they remain rooted in their history and adequately equipped to tackle modern emergencies effectively.

Establishing a values-based program in the FDNY is crucial for several reasons. First, the department must protect the public's safety and well-being, and upholding high ethical standards is paramount to retaining this trust.²¹⁴ Second, ethical behavior and decision-making are vital in maintaining the Department's and its member's integrity.²¹⁵ Third, an ethics-oriented program equips the FDNY to address emerging challenges, such as discrimination or other ethical infractions, ensuring the swift and fair implementation of corrective measures. In alignment with this, the Fire Cadet Academy integrates the core values summarized by the acronym "BRAVEST" alongside ethical training, cultivating a workforce adept at navigating these challenges.

B. OVERCOMING OBSTACLES

Leaders must first understand embedded social systems to effectively implement organizational changes in the fire service. Individuals or groups rely on innate knowledge and observations of others when deciding how to cope with hazards or unfamiliar shifts.²¹⁶

²¹² Glen M. Holder, "Strategic Planning for the Fire Service" (master's thesis, Naval Postgraduate School, 2016), 53, <https://hdl.handle.net/10945/48567>.

²¹³ Targeted News Service, "CCR Attorneys Urge State Commission to Adopt FDNY Cadet Program to Increase Diversity in Department," Targeted News Service, June 15, 2016, ProQuest; Anna L. Schermerhorn-Collins, "The Challenges to Gender Integration in the Career Fire Services: A Comparative Case Study of Men in Nursing" (master's thesis, Naval Postgraduate School, 2017), 11–25, <https://hdl.handle.net/10945/53044>.

²¹⁴ Lucie Cerna, *Trust: What It Is and Why It Matters for Governance and Education* (Paris: OECD, 2014), 15, <https://doi.org/10.1787/5jxswcg0t6wl-en>.

²¹⁵ Sonia Khanna Deel and Nelson B. Amaral, "Ethical Behavior and Decision-Making: An Interdisciplinary Review," *Journal of Multidisciplinary Research* 11, no. 2 (Fall 2019): 51–72.

²¹⁶ Alan Thomas Cox, "The Significance of Fire Service Culture as an Impediment to Effective Leadership in the Homeland Security Environment" (master's thesis, Naval Postgraduate School, 2012), 43, <http://hdl.handle.net/10945/6781>.

Therefore, leaders must grasp the group's social framework and roots to alter persistent, detrimental traditions and behaviors.²¹⁷ This understanding is fundamental in navigating what the fire service calls "Firehouse Culture."

In some cases, FDNY tradition can challenge the internalizing of core values. Change can be difficult because the department's long-standing practices and culture may not always align with contemporary ideals. Firefighters and other FDNY members have operated under specific beliefs for over a century, with several decades marked by racial tensions.²¹⁸ Take the core value of equity as an example. Although the FDNY champions this ideal, its traditional male-dominated and homogeneous makeup has posed significant barriers to its realization.²¹⁹ The transition toward a more inclusive culture thus emerges as a formidable challenge, underlining that the FDNY's endeavor to embrace core values such as equity genuinely demands policy changes and a more profound transformation of ingrained cultural norms. This challenge accentuates the intricate balance required to modernize long-standing institutions while preserving their traditions.

Changes to the status quo create employee pushback. Some department members view any modifications to the traditional way of operating as a threat to the identity and legacy of the FDNY, resulting in resistance to change.²²⁰ The challenge lies in promoting innovative measures to improve the department's long-standing cultural norms and traditions. Overall, core values are crucial in promoting moral conduct and fostering an ethical environment in an organization. They provide a foundation for organizational culture and are essential for building trust and cohesion among members. Lastly, response organizations can utilize core values as a framework for strategic growth, performance and conduct standards, and decentralized decision-making in emergencies.²²¹ By adhering to

²¹⁷ Cox, 43.

²¹⁸ Fonow, "Black Firefighters and the FDNY."

²¹⁹ Fonow.

²²⁰ Fonow.

²²¹ Chad W. Seagren, "U.S. Customs and Border Protection Policy Routinely Violates Stated Core Values" (working paper, Naval Postgraduate School, SSRN, August 14, 2020), <https://hdl.handle.net/10945/69309>.

its core values, the FDNY can maintain its reputation as one of the world's most respected and influential firefighting organizations.

C. REVISED CORE VALUES

The Fire Cadet Academy demonstrates the FDNY's commitment to excellence and continuous growth. In its innovative approach to instilling core values, the FCA has transformed the FDNY's foundational principles—bravery, service, preparedness, equity, safety, honor, and dedication—into a memorable mnemonic emblematic of firefighting: The BRAVEST.²²²

- **BOLD**—We exercise BOLD leadership. We will take the initiative to do what needs to be done.
- **RESPECTFUL**—We are RESPECTFUL leaders. We are dignified in our demeanor.
- **ALTRUISTIC**—ALTRUISM is essential to our leadership. We are selfless in our service to protect life.
- **VIRTUOUS**—We lead with VIRTUE · Our moral compass demands honor, integrity, and excellence in character.
- **EQUITABLE**—As leaders, we exercise EQUITY in all we do. We are committed to being inclusive, just, and fair.
- **SAFE**—As leaders, we create SAFE environments for our members and those we serve. The safety of our team and the safety of the citizens of NYC will always be our highest priority.

²²² Office of the Deputy Commissioner for Strategic Initiatives and Policy, *FDNY Strategic Plan 2015–2017*, 5.

- TRAINED—Our leadership TRAINING is second to none. We maintain a constant state of preparedness to meet all challenges.²²³

The FCA ensures cadets internalize core values by adopting mnemonics like BRAVEST, promoting a cohesive and efficient firefighting force. Studies on sequential learning and memory recall suggest that mnemonics aid in organizing material, resulting in lasting retention and improved recall by structuring knowledge systematically.²²⁴

In line with these principles, the FCA’s mission statement—“To develop well-rounded Cadets who will excel in the FDNY’s Probationary Firefighter School and have a successful and service-oriented future”—further emphasizes the academy’s dedication to its cadets’ holistic development.²²⁵ This guiding statement aligns individual aspirations with the organization’s broader goals, fostering a synergistic environment where commitment and satisfaction thrive.

Clear and well-defined mission statements are instrumental in shaping an organization’s culture and driving its performance. Mission statements play a pivotal role in promoting positive interactions within an organization.²²⁶ As employees relate more to these ideals, their dedication intensifies, often leading to enhanced organizational performance.²²⁷ Indeed, organizations that emphasize alignment with their mission frequently experience increased initiative-taking from their employees and achieve superior outcomes.²²⁸ Organizations that prioritize alignment with their mission

²²³ Bureau of Training, “FDNY Fire Cadet Handbook,” 6.

²²⁴ Tara Radović and Dietrich Manzey, “The Impact of a Mnemonic Acronym on Learning and Performing a Procedural Task and Its Resilience Toward Interruptions,” *Frontiers in Psychology* 10 (2019): 2522–2522, <https://doi.org/10.3389/fpsyg.2019.02522>.

²²⁵ Lee, “FDNY Fire Cadet Academy Academic Syllabus,” 4.

²²⁶ Ryan Stephenson, Colt Rothlisberger, and Jonathan H. Westover, “Extracurricular Engagement and Person-Organization Fit through Internalizing Organizational Mission Statements and Values,” *Organizational Cultures (Champaign, Ill. Online)* 17, no. 4 (2018): 21–37, <https://doi.org/10.18848/2327-8013/CGP/v17i04/21-37>.

²²⁷ Stephenson, Rothlisberger, and Westover, 25.

²²⁸ Stephenson, Rothlisberger, and Westover, 25.

statements foster more profound employee commitment, drive proactive engagement, and achieve better results.²²⁹

The Fire Cadet Academy integrates the power of mnemonics, like BRAVEST, with its mission statement to instill core values in its cadets.²³⁰ By blending rigorous training with a solid commitment to values, the academy ensures that each cadet has a grounding in the broader objectives of the FDNY.²³¹ Through these strategies, the FCA is shaping a new generation of firefighters deeply rooted in the principles that define and distinguish the FDNY.

²²⁹ Stephenson, Rothlisberger, and Westover, “Extracurricular Engagement and Person-Organization Fit through Internalizing Organizational Mission Statements and Values.”

²³⁰ Radović and Manzey, “The Impact of a Mnemonic Acronym on Learning and Performing a Procedural Task and Its Resilience Toward Interruptions.”

²³¹ Flak, “System of Organizational Terms as a Theoretical Foundation of Cultural Identity Research Using an Online Research Tool for Teaching Reflective Practice.”

V. HOW THE FCA WORKS

This chapter traces the roots of the academy's redesign, inspired partly by legal challenges to FDNY's hiring protocols. It highlights such noteworthy achievements as the FCA's comprehensive four-pillar curriculum, its emphasis on values and ethics, and a solid commitment to experiential learning.

Crucially, this chapter underscores the academy's role in marking a cultural transformation with strategies deeply rooted in reflective analysis of past misjudgments. The Fire Cadet Academy seeks to forge firefighters equipped with knowledge, expertise, and integrity through its steadfast dedication to excellence, evaluation, and conscientious adherence.

A. THE MONITOR

As the FCA embarks on the effort to define its purpose, it does so in an environment that is as demanding as it is transformative. In this connection, the supervision from the court-appointed Monitor represents a key anticipated challenge. Although this surveillance ensures accountability and adherence to regulations, it has inadvertently added layers to communication, leading to protracted decision-making processes. The compliance with the Monitor's directives does not come without a cost either; candidate recruitment expenditures have exceeded \$90 million, accounting for 5 percent of the FDNY's annual operating budget.²³² Additionally, these figures do not include the reported \$37 million NYC has paid to Cohen's firm since 2011.

The substantial financial and operational implications of the Monitor's oversight highlight the financial commitments and emphasize the profound impact of external regulation on the FDNY's decision-making and resources. This situation highlights the need for the FDNY to develop efficient and sustainable compliance strategies, ensuring that resources are effectively utilized while maintaining the program's integrity.

²³² Office of Public Information, "Fire Fighter Civil Service Exam."

B. PLANNING CHALLENGES

Implementing the FCA’s design entails logistical challenges. Paramount among them is the effective management and supervision of 100 cadets stationed across 41 distinct FDNY work locations dispersed throughout New York City.²³³ The wide dispersal of cadets creates multifaceted issues, including but not limited to maintaining consistency in training protocols, ensuring equitable access to resources, and establishing reliable communication channels.

Cadets’ challenges are multifaceted in a vast and varied environment like NYC. The enormity of the City and the differences in operational conditions across locations add layers of complexity, potentially leading to disparities in experiential learning and assimilation for the cadets. Studies highlight the transformative power of adequate supervision in such situations, emphasizing that when employees understand the significance and rationale behind workplace policies, they are more likely to adopt them.²³⁴

Moreover, creating a supportive work environment through fostering improved teamwork, cultivating robust relationships, and ensuring increased support can significantly enhance professional growth.²³⁵ In such an environment, strong supervision and supportive workplace relationships become essential. They are crucial in providing cadets with consistent learning experiences and professional development, especially in diverse and multifaceted settings like NYC.

Likewise, various forms of supervision—encompassing one-on-one, group, internal, external, and remote—offer distinct advantages in training and oversight.²³⁶ To affect this supervision, the FCA has tasked a Cadet Cadre to undertake daily site inspections. The mandate is threefold: monitoring cadet progress, ensuring optimal

²³³ Harper, “FDNY Fire Cadet Academy Work Rotation Catalog.”

²³⁴ Charlotte Rothwell et al., “Enablers and Barriers to Effective Clinical Supervision in the Workplace: A Rapid Evidence Review,” *BMJ Open*, Original research, 11, no. 9 (2021): e052929–e052929, <https://doi.org/10.1136/bmjopen-2021-052929>.

²³⁵ Rothwell et al.

²³⁶ Rothwell et al.

working conditions, and providing constructive feedback. Although demanding in terms of planning and resource allocation, this rigorous approach has proven its worth. Early interventions have improved cadet performance and adaptability, evidencing the strategy's efficacy in navigating the complexities of diverse operational environments.

The abovementioned challenges underline the imperative for a flexible and dynamic program format. Giovanni De Zan et al. describe how the as-is state, or the initial conditions and practices within work environments, may highlight inefficiencies and ineffectiveness.²³⁷ FCA leadership must analyze and link these “challenging situations” to conceptual material in training modules for efficient learning.

A strategic approach adopted by the Cadet Academy staff to address these challenges is the rotational placement of cadets. The academy employed a system where cadets switch work locations every four months. This rotation plan serves dual purposes: it ensures broad exposure to varied operational conditions and experiences and promotes an equitable distribution of work experiences among the cadets.

Leadership staff play a crucial role in identifying these inefficiencies. Furthermore, the transformative role of the leadership staff is vital. Drawing upon the learners' conceptual understanding, they guide the cadets to implement principles and methods learned from these inefficiencies.²³⁸ This process transforms the current as-is state to a more efficient future state (to-be state).²³⁹ This systematic rotation scheme embodies an innovative attempt to ensure learning occurs across the extensive FDNY work locations network.

The extended length of the cadet program, the only 24-month fire service preparatory program in the nation, is a double-edged sword. On the one hand, it allows the academy to provide more comprehensive training and better prepare cadets for the demands of firefighting. However, it also presents significant challenges. The extended

²³⁷ Giovanni De Zan et al., “A Methodology for the Assessment of Experiential Learning Lean: The Lean Experience Factory Case Study,” *European Journal of Training and Development* 39, no. 4 (2015): 332–54, <https://doi.org/10.1108/EJTD-05-2014-0040>.

²³⁸ Zan et al.

²³⁹ Zan et al.

program may deter potential candidates who prefer shorter, more direct paths to employment. Retention rates could suffer as cadets struggle with the comprehensive training period's physical, mental, and financial burdens. The part-time work schedule and the minimum wage salary of \$15.67 an hour are a cause of concern for retaining talent.²⁴⁰ Therefore, The Academy must find a delicate balance, ensuring its program is comprehensive, rigorous, accessible, manageable, and appealing to a diverse range of potential cadets.

C. EVALUATION

The Fire Cadet Academy pioneers a new professional development program for the FDNY with exciting potential. However, for this program to succeed in the long term, its implementation and progress require close monitoring and management. To drive lasting change, FDNY leadership should actively reinforce the program's goals through positive feedback, recognition of successes, rewards, and celebrations.²⁴¹ Instituting accountability measures and audits will also help ingrain new expectations and behaviors.²⁴² With concerted support, this pioneering program can transform training and development within the department.

In the future, evaluations will become an integral part of the process. Regular assessments will allow the academy to monitor cadets' progress, assess the changes' effectiveness, and adjust their approach as needed. This commitment to continuous improvement shows that the academy dedicates itself to its mission: training and preparing future generations of firefighters to face the profession's physical and mental challenges.

The Fire Cadet Academy has embraced a hybrid approach to assessments, combining aspects of both summative and formative assessments. This blend, often called

²⁴⁰ Fire Department City of New York, "Fire Cadet" (Brooklyn, NY: Fire Department City of New York, 2019), <https://www.nyc.gov/assets/queenscb2/downloads/pdf/notices/2022/Fire-Cadet-Info-sheet.pdf>.

²⁴¹ Cynthia Holmes, "After the Exercise: Using Change Management Theory to Improve After-Action Event Outcomes" (master's thesis, Naval Postgraduate School, 2019), 21, <http://hdl.handle.net/10945/63458>.

²⁴² Holmes, 21.

summative-formative assessment, allows the academy to evaluate cadets' progress through outcomes, ongoing feedback, and improvement throughout the course.²⁴³ As defined by Ismail et al., "formative assessment allows for feedback which improves learning while summative assessment measures learning."²⁴⁴ By using both formative and summative assessments, the FCA measures a cadet's skills and knowledge at the end of their training while also offering feedback throughout, aiding in consistent learning and adjustment

The academy's academics department has adopted the summative assessment method to create a synergistic alignment between the Fire Cadet Academy and Probationary Firefighter School. A summative approach to the FCA's academics ensures cadets complete and pass each assessment before progressing in their training.²⁴⁵ However, although this approach often leads to higher grades, the FCA needs to provide students with constructive input and guidance, harnessing the motivational aspects of learning to encourage further progress.²⁴⁶ Integrating regular feedback can offer cadets a more straightforward path for improvement, promoting a deeper understanding of their training and enhancing their overall learning experience.²⁴⁷

Fire Cadet Academy Cadets have begun to undertake the first of six 15-week rotations in different fire service bureaus to amass thousands of hours of firsthand experience. The academy will use biweekly surveys, a form of formative assessment, to collect feedback on the efficacy of these assignments. These formative assessments aim to gather real-time feedback on cadet learning, pinpointing program strengths and areas for

²⁴³ Seyed M. Ismail et al., "Formative vs. Summative Assessment: Impacts on Academic Motivation, Attitude Toward Learning, Test Anxiety, and Self-Regulation Skill," *Language Testing in Asia* 12, no. 1 (2022): 2, <https://doi.org/10.1186/s40468-022-00191-4>.

²⁴⁴ Ismail et al., 2.

²⁴⁵ Edward Palmer and Peter Devitt, "The Assessment of a Structured Online Formative Assessment Program: A Randomised Controlled Trial," *BMC Medical Education* 14, no. 1 (2014): 1–10, <https://doi.org/10.1186/1472-6920-14-8>.

²⁴⁶ Anton WJP den Boer, Peter P.J.L. Verkoeijen, and Anita E.G. Heijltjes, "Comparing Formative and Summative Cumulative Assessment: Two Field Experiments in an Applied University Engineering Course," *Psychology Learning and Teaching* 20, no. 1 (2021): 139, <https://doi.org/10.1177/1475725720971946>.

²⁴⁷ den Boer, Verkoeijen, and Heijltjes, 138–39.

improvement.²⁴⁸ Understanding what is functioning well and what needs improvement is vital. The assignments must provide valuable work experience to the cadets, as this learning method is essential to the FCA.

Building on the importance of feedback and continuous learning, fostering collaborative thinking is another aspect of the FCA’s approach. Collaborative thinking, frequently termed collaboration, involves aligning thoughts among two or more individuals to foster shared comprehension, address challenges, and achieve collective goals.²⁴⁹ Recognizing the crucial role of collaborative thinking in the firefighting profession, the Fire Cadet Academy has integrated an evaluation system for cadet involvement, using a Daily Collaboration Rubric (Figure 5) to nurture and assess these collaborative skill sets.

✓: Demonstrated all of the following **Prerequisite Steps**

☐ **Punctual attendance:** Ready to engage by the start of class. Any lateness was minimal and non-disruptive or excused.

☐ **Preparation:** Completed any necessary pre-class activities (e.g., reflection paper) and/or showed prior preparation by responding to questions or referencing relevant ideas in class activities (written or spoken).

☐ **Active listening:** Showed active listening both with nonverbal (e.g., eye contact, nodding) and verbal behavior (ability to connect contributions to prior remarks). Did not engage in distracting or disruptive activities (e.g., cell phone use, talking while others were speaking).

✓: Demonstrated at least one of the following Collaborative Mindsets:

☐ **Taking risks:** Showed willingness to take risks by sharing ideas or engaging in challenging activities with no clear “right answer.”

☐ **Supporting:** Supported other’s ideas by responding to them with positive attention and/or by disagreeing constructively.

☐ **Critically evaluating:** Critically evaluated others’ ideas by offering alternative perspectives or possibilities.

✓: Demonstrated at least one of the following **Ways to Contribute:**

☐ **Building:** Built on the contributions of others by offering relevant ideas.

☐ **Asking:** Asked clarifying or thought-provoking questions.

☐ **Amplifying:** Amplified other voices by yielding the floor to other students, encouraging others to contribute or highlighted or credited others’ ideas.

Overall Assessment

☐ ✓: Met minimum standards in the categories described above

☐ ✓-: Did not meet minimum standards in the categories above

☐ ✓+: Exceeded standards by demonstrating all or nearly all Collaborative Mindsets or Ways to Contribute

✓: Demonstrated all of the following **Prerequisite Steps**

Figure 5. Daily Collaboration Rubric.²⁵⁰

²⁴⁸ Ismail et al., “Formative vs. Summative Assessment,” 5.

²⁴⁹ Bridgette Martin Hard and Taalin RaoShah, “Developing Collaborative Thinkers: Rethinking How We Define, Teach, and Assess Class Participation,” *Teaching of Psychology* 49, no. 2 (2022): 176–84, <https://doi.org/10.1177/0098628320986953>.

²⁵⁰ Source: Hard and RaoShah, 180.

The Fire Cadet Academy acknowledges the importance of comprehensive evaluations in refining its training program. In its commitment, the academy recognizes the need for future research to establish effective methodologies for assessing vital quantitative metrics. These include graduation rates, academic and fitness scores, and credits earned by cadets. Such evaluations will provide valuable insights, further informing the academy's continuous efforts to improve and optimize its training curriculum.

The Fire Cadet Academy's assessment approach encapsulates summative and formative methods. This summative-formative method measures learning outcomes and fosters continuous improvement through consistent feedback. Moreover, the academy uses formative assessments, like biweekly surveys, during cadets' 15-week rotations across fire service bureaus to ensure meaningful experiential learning and to identify areas for enhancement. Recognizing the necessity of constant improvement, the academy also considers future research to effectively evaluate quantitative metrics, including graduation rates and academic and fitness scores. This ongoing assessment and adaptability illustrate the academy's commitment to delivering a top-tier, comprehensive training program for the firefighters of the future.

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VI. CONCLUSION

Reestablished in 2016, the FDNY Fire Cadet Academy emerged like a phoenix from the ashes of its predecessor, which operated from 1997–2002 and faced severe allegations of nepotism and favoritism. In contrast to its previous version that restricted cadets’ training to EMT medical responsibilities, the new academy provides comprehensive preparation for a career as a NYC firefighter.

The resurgence of the Cadet Academy took place in the backdrop of comprehensive reforms triggered by legal challenges to the FDNY’s hiring practices, identified as violating civil rights laws. Implementing rigorous steps like residency prerequisites and extensive screening evaluations, the new Academy endeavors to exemplify integrity and prevent any recurrence of past discrepancies.

At its core, the FCA’s approach signifies an investment in the future firefighters of New York City. The FCA aims to facilitate internal change within the FDNY by emphasizing lifelong learning and progressive development. By adopting innovative practices while critically reflecting on past shortcomings, the newly structured FCA emerges as a beacon, illuminating the evolution of contemporary firefighters primed to face modern challenges.

A. RECOMMENDATIONS

Based on the research and conclusions from this thesis, nine recommendations emerge:

- Build on the Fire Cadet Academy framework and refine the program based on feedback and evaluations. This pioneering initiative has strong potential for positive impacts but requires ongoing support and commitment to realize its full potential.
- Expand research on the long-term influence of the FCA’s professional development approach to confirm and quantify its benefits. Tracking FCA

graduates and their career progression could provide valuable insights and quantify the benefits.

- Share critical insights from the FCA model with fire departments nationwide to inspire innovative leadership development and value-based training programs. These collaborations can spread the impact more broadly.
- Maintain an unyielding commitment to the FCA's core pillars, particularly ethics and values, to achieve the cultural transformation envisioned. Complacency risks regression, so these foundations must remain a focus.
- Uphold efforts to balance tradition and innovation within the FDNY. Activities like cadet visits to historical sites honor the legacy, while the FCA represents necessary evolution.
- Continue to diversify FDNY leadership and staff. Enabling new perspectives is vital to meet emerging challenges. Progress has occurred, but more work remains.
- Encourage open dialogues about organizational values and their role in daily practices to reinforce a culture of integrity.
- Explore supplemental training for existing staff to align behaviors with core values. Parallel efforts at all levels can have mutually reinforcing benefits.
- Study methods to perpetuate the FCA's objectives amid inevitable staffing changes. A resilient culture of ethics and inclusion is imperative for organizational success.

An unwavering commitment to the program's founding principles is imperative. Ongoing efforts must persist in aligning behaviors with espoused values fully. Dedication is vital, not only for the FDNY but also for the fire service broadly.

B. CONCLUSION

After a thorough analysis, the answer emerged to the central research question, “How can the Fire Cadet Academy modernize FDNY professionalism to ensure a culture that evolves and learns in line with societal shifts?” Organizations like the FDNY must emphasize professional development deeply anchored in ethics, values, and trust. Such a focus becomes crucial in adapting to internal cultural transitions and addressing challenges arising from external societal shifts.

A clear challenge lies in aligning deeply rooted organizational values with day-to-day behavior, especially when faced with long-standing traditions and inherent resistance to change. This situation underscores the need for continuous commitment to maintain this alignment. The existing FDNY training paradigms have gaps, notably a lack of focus on holistic leadership development and the instilling of core organizational values and culture, a deficiency that becomes starker compared to military training frameworks.

With its fresh perspective and approach, the Fire Cadet Academy is a corrective mechanism for past program design flaws. It champions equitable opportunities, emphasizes comprehensive health and fitness regimes, and introduces a strategic character and ethics department. This new department complements the probationary firefighter school and fosters experiential fire service learning and value-driven peer discussions, strengthening the bonds of trust and team cohesion.

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APPENDIX. BUT WILL IT WORK? A SWEDEN POLICE CASE STUDY

The evolution of society, characterized by technical advancements, specialization, increased communications, and transparency, has altered the working conditions and environment of various professions, including the fire service.²⁵¹ As a result, it has been essential and often inevitable to adapt the recruitment and training processes for first responders to reflect these societal changes and the evolving demands and challenges of their professions.²⁵² Sweden's progressive approach to community-oriented policing is one such model.

In 1998, to prioritize community-oriented policing, Swedish police adopted a new public management model emphasizing professional conduct and moral responsibility.²⁵³ The revised training curriculum, the National Programme Syllabus for the Police Programme, consists of two and a half years of education, including six months of internship training.²⁵⁴ An analysis of Sweden's approach is relevant because, despite their distinct responsibilities, police officers and firefighters share similarities in serving as first responders and working to protect their communities.

In Sweden, individuals pursuing a career in law enforcement must undertake a 30-month training program in one of five universities contracted by the Swedish Police

²⁵¹ Casey Grant et al., *Research Roadmap for Smart Fire Fighting*, NIST Special Publication 1191 (Gaithersburg, MD: National Institute of Standards and Technology, 2015), <https://doi.org/10.6028/NIST.SP.1191>.

²⁵² Björn Furuhausen, "The Making of a Social, Representative and Intellectual Police Force – Recruitment and Education of Police Trainees in Sweden during the 20th Century," *Nordisk Politiforskning* 2, no. 1 (2015): 6–33, <https://doi.org/10.18261/ISSN1894-8693-2015-01-02>.

²⁵³ Bengt Bergman and Staffan Karp, "Conflicting Thought Styles? – Responsibility and Accountability in the Education of Swedish Police Officers," *Policing & Society* 31, no. 6 (August 2021): 656–71, <https://doi.org/10.1080/10439463.2020.1761805>.

²⁵⁴ Vivian B. Lord, "Swedish Police Selection and Training: Issues from a Comparative Perspective," *Policing: An International Journal of Police Strategies & Management* 21, no. 2 (1998): 280–92, <https://doi.org/10.1108/13639519810220253>.

Authority.²⁵⁵ The training curriculum is standardized, though each school is allowed a degree of latitude to accomplish the program's goals.²⁵⁶ All five training programs are in a higher education format; however, students do not receive a degree from any of the five institutions and must apply for credits after completing all their courses.²⁵⁷ While not designed similarly, the FDNY's FCA 24-month training program resembles Sweden's progressive approach to addressing contemporary challenges.²⁵⁸

Sweden prioritizes teaching conflict resolution and crisis management, specifically focusing on behavioral studies and interpersonal communication.²⁵⁹ After receiving almost 300 hours of training in social science, psychology, and human relations, Swedish recruits are better equipped to deal with their community.²⁶⁰ In contrast, Police training in the U.S. focuses on developing skills related to enforcement, and the average U.S. officer receives less than 20 hours of training in these areas.²⁶¹ The FDNY and the U.S. Fire Service do not provide standardized training for firefighters in these subjects.²⁶²

The Swedish program also highlights the interdependence between theory and practice.²⁶³ During the last six months of their education, the Swedish Police Authority pairs up recruits with experienced officers whose primary responsibility is to assist them with integrating into the profession.²⁶⁴ This interdisciplinary curriculum is a form of work-

²⁵⁵ Marie Leijon and Martin Stigmar, "Knowledge Requirements in the Governing Documents of the Swedish Police Programme," *Nordic Journal of Studies in Policing* 9, no. 1 (2022): 1–16, <https://doi.org/10.18261/njsp.9.1.1>.

²⁵⁶ Leijon and Stigmar.

²⁵⁷ Leijon and Stigmar.

²⁵⁸ Fire Department City of New York, "Opportunity to Become a Fire Cadet."

²⁵⁹ Lord, "Swedish Police Selection and Training."

²⁶⁰ Lord.

²⁶¹ Lord.

²⁶² Mike Beyerstedt, "Have Soft Skills Become the New Hard Skills for Today's Fire Service Leaders?," *Fire Engineering*, June 24, 2014, <https://www.fireengineering.com/leadership/mike-beyerstedt-have-soft-skills-become-the-new-hard-skills-for-today-s-fire-service-leaders/>.

²⁶³ Leijon and Stigmar, "Knowledge Requirements in the Governing Documents."

²⁶⁴ Lord, "Swedish Police Selection and Training."

integrated learning that balances academics with experience and vocation-based knowledge.²⁶⁵

Work-integrated learning, commonly called internships, has been a widely recognized teaching methodology that enables students to apply their skills and knowledge in real-world settings.²⁶⁶ These internships are essential to the FDNY because they provide a roadmap to increasing future firefighters' institutional involvement and contributions to the wider fire service community.²⁶⁷ The FCA represents an effort to employ this roadmap, as its design primarily serves as an apprenticeship program.²⁶⁸

In conclusion, Sweden's extended education process for police officers provides a valuable model for enhancing the training and education of first responders, including firefighters, in the FDNY. Conflict resolution, crisis management, behavioral studies, and improved interpersonal communication skills are all elements of professional firefighting.²⁶⁹ Identifying contemporary methods to embed these elements early in a firefighter's career can enhance their professional and leadership development.²⁷⁰

²⁶⁵ Leijon and Stigmar, "Knowledge Requirements in the Governing Documents."

²⁶⁶ Tracey Bowen and Maureen Drysdale, *Work-Integrated Learning in the 21st Century: Global Perspectives on the Future* (Bingley, UK: Emerald Publishing Limited, 2017), ProQuest Ebook Central.

²⁶⁷ Lesley Cooper, Janice Orrell, and Margaret Bowden, *Work Integrated Learning: A Guide to Effective Practice* (New York: Taylor & Francis Group, 2010), ProQuest Ebook Central.

²⁶⁸ Fire Department City of New York, "Opportunity to Become a Fire Cadet."

²⁶⁹ Tony Correia, "Character, Attitudes, and Values: Defining the 'Good' Firefighter," *Fire Engineering*, January 28, 2021, <https://www.fireengineering.com/commentary/character-attitudes-and-values-defining-the-good-firefighter/>.

²⁷⁰ Mihnea Moldoveanu and Das Narayandas, "The Future of Leadership Development," *Harvard Business Review* 97, no. 2 (March 2019): 40–48.

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LIST OF REFERENCES

- Alessandro, Martin, Bruno Cardinale Lagomarsino, Carlos Scartascini, Jorge Streb, and Jerónimo Torrealday. “Transparency and Trust in Government. Evidence from a Survey Experiment.” *World Development* 138 (February 2021): 105223. <https://doi.org/10.1016/j.worlddev.2020.105223>.
- Ali, Ahsan, Hongwei Wang, and Russell E. Johnson. “Empirical Analysis of Shared Leadership Promotion and Team Creativity: An Adaptive Leadership Perspective.” *Journal of Organizational Behavior (John Wiley & Sons, Inc.)* 41, no. 5 (June 2020): 405–23. <https://doi.org/10.1002/job.2437>.
- Askeland, Harald, Gry Espedal, Beate Jelstad Løvaas, and Stephen Sirris. “Understanding Values Work in Organisations and Leadership.” In *Understanding Values Work: Institutional Perspectives in Organizations and Leadership*, edited by Harald Askeland, Gry Espedal, Beate Jelstad Løvaas, and Stephen Sirris, 1–12. Cham, Switzerland: Springer International Publishing, 2020. https://doi.org/10.1007/978-3-030-37748-9_1.
- Baldwin, Claudia, and Johanna Rosier. “Growing Future Planners: A Framework for Integrating Experiential Learning into Tertiary Planning Programs.” *Journal of Planning Education and Research* 37, no. 1 (March 2017): 43–55. <https://doi.org/10.1177/0739456X16634864>.
- Bergman, Bengt, and Staffan Karp. “Conflicting Thought Styles? – Responsibility and Accountability in the Education of Swedish Police Officers.” *Policing & Society* 31, no. 6 (August 2021): 656–71. <https://doi.org/10.1080/10439463.2020.1761805>.
- Beyerstedt, Mike. “Have Soft Skills Become the New Hard Skills for Today’s Fire Service Leaders?” *Fire Engineering*, June 24, 2014. <https://www.fireengineering.com/leadership/mike-beyerstedt-have-soft-skills-become-the-new-hard-skills-for-today-s-fire-service-leaders/>.
- Boer, Anton WJP den, Peter PJJ Verkoeijen, and Anita EG Heijltjes. “Comparing Formative and Summative Cumulative Assessment: Two Field Experiments in an Applied University Engineering Course.” *Psychology Learning and Teaching* 20, no. 1 (2021): 128–43. <https://doi.org/10.1177/1475725720971946>.
- Bowen, Tracey, and Maureen Drysdale. *Work-Integrated Learning in the 21st Century: Global Perspectives on the Future*. Bingley, UK: Emerald Publishing Limited, 2017. ProQuest Ebook Central.

- Brabant, Michael Ian. "Evolutionary Andragogy Within Learning Community for Embodied Transformation in Higher Education: A Case Study of the Next Wave of Leadership Training." PhD diss., Saybrook University, 2015. ProQuest.
- Brunninge, Olof. "Using History in Organizations: How Managers Make Purposeful Reference to History in Strategy Processes." *Journal of Organizational Change Management* 22, no. 1 (2009): 8–26.
<https://doi.org/10.1108/09534810910933889>.
- Bureau of State Payroll Services. "Jurisdictional Classes." Bureau of State Payroll Services. Accessed July 9, 2023.
https://web.osc.state.ny.us/payroll/files/information/payrollsystem/files/payserv_manual/online_manual/Content/Earnings%20Manual/PayServ%20Information/juris_class.htm.
- Bureau of Training, FDNY. "FDNY Affiliated Organization Policy." Fire Department City of New York, December 2012.
http://www.nyc.gov/html/fdny/pdf/legal/affiliated_org_policy.pdf.
- . "FDNY Anti Hazing/Anti Bullying Policy." Fire Department City of New York, April 28, 2022.
- . "FDNY Anti-Nepotism Policy." Fire Department City of New York, April 28, 2022.
- . "FDNY EMS CFR Program." Fire Department City of New York, 2016.
<https://www.nyc.gov/assets/fdny/downloads/pdf/join/join-cfr-manual.pdf>.
- . "FDNY Fire Cadet Handbook." Fire Department City of New York, May 18, 2023.
- . "FDNY Mixed Gender Workforce." Fire Department City of New York, April 28, 2022.
- . "FDNY Professional Workplace Policy." Fire Department City of New York, April 28, 2022.
- . "FDNY Workplace Violence Prevention Policy." Fire Department City of New York, April 28, 2022.
- Byrd, Monika S. "Perceptions of Effective Organizational Leadership in American Fire and Emergency Services." PhD diss., Chicago School of Professional Psychology, 2017. ProQuest.
- Calderone, Joe, and Frank Lombardi. "Cadet Corp for FDNY Corrupted by Nepotism." *Daily News*, November 17, 2000.

- Campbell, Jesse W., and Tobin Im. "Identification and Trust in Public Organizations: A Communicative Approach." *Public Management Review* 17, no. 8 (2015): 1065–84. <https://doi.org/10.1080/14719037.2014.881531>.
- . "Identification and Trust in Public Organizations: A Communicative Approach." *Public Management Review* 17, no. 8 (2015): 1065–84. <https://doi.org/10.1080/14719037.2014.881531>.
- Cangrade. "Cangrade Customers." Cangrade, 2023. <https://www.cangrade.com/customers/>.
- Cerna, Lucie. "Trust: What It Is and Why It Matters for Governance and Education." *OECD Education Working Papers*, OECD Education Working Papers, 2014. <https://doi.org/10.1787/5jxswcg0t6wl-en>.
- . *Trust: What It Is and Why It Matters for Governance and Education*. Paris: OECD, 2014. <https://doi.org/10.1787/5jxswcg0t6wl-en>.
- Chahar, Bhawna, and Vinod Hatwal. "Organizational Politics and Its Impact on Workplace Incivility: Mediating Role of Employee Resilience." In *AIP Conference Proceedings* 2378, 020008-1-020008–15, 2021. <https://doi.org/10.1063/5.0059032>.
- Charney, Darius. "Fire Cadet Program Would Improve FDNY Diversity." Center for Constitutional Rights, June 15, 2016. <https://ccrjustice.org/node/5821>.
- Cooper, Lesley, Janice Orrell, and Margaret Bowden. *Work Integrated Learning: A Guide to Effective Practice*. New York: Taylor & Francis Group, 2010. ProQuest Ebook Central.
- Correia, Tony. "Character, Attitudes, and Values: Defining the 'Good' Firefighter." *Fire Engineering*, January 28, 2021. <https://www.fireengineering.com/commentary/character-attitudes-and-values-defining-the-good-firefighter/>.
- Coursera Inc. "Moralities of Everyday Life." Coursera, 2023. <https://www.coursera.org/learn/moralities>.
- Cox, Alan Thomas. "The Significance of Fire Service Culture as an Impediment to Effective Leadership in the Homeland Security Environment." Master's thesis, Naval Postgraduate School, 2012. <http://hdl.handle.net/10945/6781>.
- DeBode, Jason D., Corey J. Fox, and Jordan J. McSweeney. "Top Management Team Political Polarization and Its Implications for Strategic Decision-Making." *Small Group Research*, 2023, 104649642311522-. <https://doi.org/10.1177/10464964231152234>.

- Deel, Sonia Khanna, and Nelson B. Amaral. “Ethical Behavior and Decision-Making: An Interdisciplinary Review.” *Journal of Multidisciplinary Research* 11, no. 2 (Fall 2019): 51–72.
- Department of City Planning, NYC. “Table SF1-DP NYC: Demographic Profile – New York City and Boroughs.” Census. New York, United States, 2000.
<https://www.nyc.gov/site/planning/planning-level/nyc-population/census-2010.page>.
- Department of Citywide Administrative Services, NYC. “Personnel Rules and Regulations – Rule 5 – Appointments – Department of Citywide Administrative Services.” Accessed August 10, 2023.
<https://www.nyc.gov/site/dcass/reports/personnel-rules-regulations-rule-5.page>.
- Department of Cultural Affairs, NYC. “Home – Diversity & Equity,” 2023.
<https://www.nyc.gov/site/diversity/index.page>.
- Department of Justice. “Justice Department Sues New York City for Discriminating against Black and Hispanic Firefighter Applicants.” Department of Justice, May 21, 2007. https://www.justice.gov/archive/opa/pr/2007/May/07_crt_375.html.
- . “Overview of the Case.” *U.S. v. City of New York (FDNY)*, July 27, 2015.
<https://www.justice.gov/archives/crt-fdny/overview>.
- Division of Criminal Justice Services, NYS. “New York Police and Peace Officer Training.” NYS Division of Criminal Justice Services, 2023.
<http://www.criminaljustice.ny.gov/ops/training/>.
- Dohsten, John, Natalie Barker-Ruchti, and Eva-Carin Lindgren. “Caring as Sustainable Coaching in Elite Athletics: Benefits and Challenges.” *Sports Coaching Review* 9, no. 1 (2020): 48–70. <https://doi.org/10.1080/21640629.2018.1558896>.
- Dorsey, Sarah. “State Panel Okays FDNY Cadet Springboard Plan.” *The Chief*, June 20, 2016. <https://www.thechiefleader.com/stories/state-panel-okays-fdny-cadet-springboard-plan,14909?cb=1682199022>.
- Elkington, Rob. “Leadership Decision-Making Leveraging Big Data in VUCA Contexts.” *Journal of Leadership Studies* 12, no. 3 (November 2018): 66–70.
<https://doi.org/10.1002/jls.21599>.
- Equal Employment Practices Commission. “New York City Fire Department’s Recruitment Program,” May 25, 2000.
- Estes, Stephen. *History and Overview*. Ithaca, NY: Tompkins County Personnel Department, 2008.
<https://tompkinscountyny.gov/files2/personnel/CIVIL%20SERVICE%20IN%20NEW%20YORK%20STATE%20HISTORY%20AND%20OVERVIEW.pdf>.

- Evans, Christopher. *Leadership Trust: Build It, Keep It*. Greensboro, NC: La Vergne: Center for Creative Leadership, 2020. ProQuest Ebook Central.
- FDNY Fire Safety Cadet Program. “From Fire Safety Cadet and/or EMS Operations to Firefighter.” Brooklyn, NY: Fire Department City of New York, 2002.
https://www.nyc.gov/html/fdny/pdf/job_opps/cadet_ems_2_firefighter.pdf.
- Fire Department City of New York. “Fire Cadet.” Brooklyn, NY: Fire Department City of New York, 2019.
<https://www.nyc.gov/assets/queenscb2/downloads/pdf/notices/2022/Fire-Cadet-Info-sheet.pdf>.
- . *Firefighter Candidate Physical Preparation Guide*. New York: Fire Department City of New York, 2013.
<https://www.nyc.gov/assets/fdny/downloads/pdf/join/join-physical-prep-guide.pdf>.
- . “Opportunity to Become a Fire Cadet.” Fire Cadet Academy, January 21, 2023.
<https://www.joinfdny.com/careers/cadet/>.
- . “Probationary Firefighter Reading Schedule.” Randall’s Island, NY: FDNY Fire Academy, October 27, 2022. <https://www.joinfdny.com/wp-content/uploads/2022/10/probationary-firefighter-reading-assignment-cycles-1-26.pdf>.
- . *Probationary Firefighters Manual*. Vol. 1. Randall’s Island, NY: FDNY Fire Academy, 2021.
<https://www.nyc.gov/assets/fdny/downloads/pdf/join/probationary-firefighter-v1.pdf>.
- Flak, Olaf. “System of Organizational Terms as a Theoretical Foundation of Cultural Identity Research Using an Online Research Tool for Teaching Reflective Practice.” *International Journal of Arts & Sciences* 12, no. 1 (2019): 243–55.
- Fonow, Mary Margaret. Review of *Black Firefighters and the FDNY: The Struggle for Jobs, Justice, and Equity in New York City*, by David Goldberg. *Labor: Studies in Working-Class History of the Americas* 16, no. 2 (2019): 146–47.
- Ford, Cristie, and David Hess. “Corporate Monitorships and New Governance Regulation: In Theory, in Practice, and in Context.” *Law & Policy* 33, no. 4 (October 2011): 509–41. <https://doi.org/10.1111/j.1467-9930.2011.00347.x>.
- Furuhagen, Björn. “The Making of a Social, Representative and Intellectual Police Force – Recruitment and Education of Police Trainees in Sweden during the 20th Century.” *Nordisk Politiforskning* 2, no. 1 (2015): 6–33.
<https://doi.org/10.18261/ISSN1894-8693-2015-01-02>.

- Gidakovic, Sanja. "Guides: PSY 3100 – Research Methods: Evidence-Based Practice (EBP)," August 27, 2023.
<https://guides.library.ucmo.edu/c.php?g=968120&p=7821026>.
- Golway, Terry. *So Others May Live*. New York: Basic Books, 2002.
- Grant, Casey, Anthony Hamins, Nelson P. Bryner, Albert W. Jones, and Galen H. Koepke. *Research Roadmap for Smart Fire Fighting*. NIST Special Publication 1191. Gaithersburg, MD: National Institute of Standards and Technology, 2015.
<https://doi.org/10.6028/NIST.SP.1191>.
- Greene, Leonard. "Legacy Graduates, Veterans, Women Among Diverse FDNY Firefighter Class." FireRescue1. Accessed August 29, 2023.
<https://www.firerescue1.com/fdny/articles/legacy-graduates-veterans-women-among-diverse-fdny-firefighter-class-XMgcxXHmIqPMotNv/>.
- Gregg, Roger, Marcus Haywood, Kevin Walker, Candido Nuñez, and Kevin Simpkins. Order Appointing Monitor 07-Cv-2067, No. 758 (United States District Court, Eastern District of New York November 9, 2011).
- Guillemin, Michel, and Robin Nicholas. "Core Values at Work—Essential Elements of a Healthy Workplace." *International Journal of Environmental Research and Public Health* 19, no. 19 (2022): 1–17. <https://doi.org/10.3390/ijerph191912505>.
- Gundlach, Michael, Suzanne Zivnuska, and Jason Stoner. "Understanding the Relationship between Individualism–Collectivism and Team Performance through an Integration of Social Identity Theory and the Social Relations Model." *Human Relations* 59, no. 12 (December 2006): 1603–32.
<https://doi.org/10.1177/0018726706073193>.
- Hadjiyankova, Polina, and Tatiana Iancheva. "Individualism, Collectivism, and Goal Orientation for Athletes from Individual and Team Sports." *Journal of Applied Sports Sciences* 2 (2021): 66–76. <https://doi.org/10.37393/JASS.2021.02.6>.
- Hard, Bridgette Martin, and Taalin RaoShah. "Developing Collaborative Thinkers: Rethinking How We Define, Teach, and Assess Class Participation." *Teaching of Psychology* 49, no. 2 (2022): 176–84. <https://doi.org/10.1177/0098628320986953>.
- Harper, Wendy. "FDNY Fire Cadet Academy Work Rotation Catalog." Brooklyn, NY: FDNY Youth Workforce Pipeline Program, April 13, 2023.
- Herndon, Astead W., and Ali Watkins. "How a Racist Scandal at the F.D.N.Y. Led to Its Biggest Suspensions Ever." *New York Times*, October 1, 2021, sec. New York.
<https://www.nytimes.com/2021/10/01/nyregion/fdny-racism-scandal.html>.

- Hogler, Raymond, Christine Henle, and Michael Gross. "Ethical Behavior and Regional Environments: The Effects of Culture, Values, and Trust." *Employee Responsibilities and Rights Journal* 25, no. 2 (June 2013): 109–21. <https://doi.org/10.1007/s10672-013-9215-0>.
- Holder, Glen M. "Strategic Planning for the Fire Service." Master's thesis, Naval Postgraduate School, 2016. <https://hdl.handle.net/10945/48567>.
- Holmes, Cynthia. "After the Exercise: Using Change Management Theory to Improve After-Action Event Outcomes." Master's thesis, Naval Postgraduate School, 2019. <http://hdl.handle.net/10945/63458>.
- Hugh, Alan McCall, Franco M. Impellizzeri, Terry Favero, and Aaron J. Coutts. "The Translation of Sport Science Research to the Field: A Current Opinion and Overview on the Perceptions of Practitioners, Researchers and Coaches." *Sports Medicine* 49, no. 12 (December 2019): 1817–24. <https://doi.org/10.1007/s40279-019-01139-0>.
- International Association of Firefighters. *Candidate Physical Ability Test: Candidate Orientation Guide*. McLean, VA: International Association of Firefighters, 1999. https://www.nyc.gov/assets/fdny/downloads/pdf/join/join-cpat-orientation_guide.pdf.
- . "Fit to Thrive (F2T) Program." IAFF. Accessed August 8, 2023. <https://www.iaff.org/peer-fitness/>.
- . "HazMat Operations." International Association of Firefighters, 2022. <https://www.iaff.org/hazmat-training/>.
- Ismail, Seyed M., D. R. Rahul, Indrajit Patra, and Ehsan Rezvani. "Formative vs. Summative Assessment: Impacts on Academic Motivation, Attitude Toward Learning, Test Anxiety, and Self-Regulation Skill." *Language Testing in Asia* 12, no. 1 (2022): 1–23. <https://doi.org/10.1186/s40468-022-00191-4>.
- Jetté, M., K. Sidney, and G. Blümchen. "Metabolic Equivalents (Mets) in Exercise Testing, Exercise Prescription, and Evaluation of Functional Capacity." *Clinical Cardiology* 13, no. 8 (August 1990): 555–65. <https://doi.org/10.1002/clc.4960130809>.
- Johnson, Corey, and Joseph C. Borelli. *Report of the Finance Division on the Fiscal 2021 Preliminary Plan and the Fiscal 2020 Preliminary Mayor's Management Report for the Fire Department of New York*. New York: Council for the City of New York, 2020. <https://council.nyc.gov/budget/wp-content/uploads/sites/54/2020/02/057-FDNY.pdf>.
- JoinFDNY. "Celebrating MLK Day: FDNY Members Discuss Continuing Dr. King's Legacy." JoinFDNY, January 16, 2023. <https://www.joinfdny.com/mlkday2023/>.

- . “Every Day Is Another Opportunity to Serve.” *JoinFDNY* (blog), March 22, 2017. <https://www.joinfdny.com/fdny-firefighter-serve/>.
- . “FDNY Officers Honored at NYC Mayor’s AAPI Celebration at Gracie Mansion.” *JoinFDNY*, May 18, 2022. <https://www.joinfdny.com/fdny-officers-honored-at-nyc-mayors-aapi-celebration-at-gracie-mansion/>.
- JoinFDNY. “Fire Cadet Academy.” Accessed August 9, 2023. <https://www.joinfdny.com/careers/cadet/>.
- . “Joann Diaz Makes History as First Latina Fire Lieutenant.” *JoinFDNY*, October 20, 2021. <https://www.joinfdny.com/joann-diaz-makes-history-as-first-latina-fire-lieutenant-in-fdny-history/>.
- . “The FDNY Fire Cadet Academy Has Begun.” *JoinFDNY*, July 19, 2023. <https://www.joinfdny.com/the-fdny-fire-cadet-academy-has-begun/>.
- Kanno-Youngs, Zolan. “FDNY Aims to Increase Minorities -- WSJ.” *Dow Jones Institutional News*, February 9, 2018. <https://www.proquest.com/docview/1999868149/citation/58621F5DCBBE4196PQ/1>.
- Karaoguz, Adam A. “Preparing to Be Unprepared: Ground Force Commander Decision Making in a Volatile, Uncertain, Complex, and Ambiguous World.” Monterey, California: Naval Postgraduate School, 2016.
- Kavanagh, Laura, and John J. Hodgins. “FDNY Social Media Policy.” Randall’s Island, NY: Fire Department City of New York, September 20, 2022. https://www.nyc.gov/html/fdny/insider/resources/do/2022/096_sup_68_2022_eoe.pdf.
- Klok, Richard L. ““We Need a Bomb Tech . . . ‘ Integrating the Bomb Squad with Swat.” Thesis, Monterey, CA; Naval Postgraduate School, 2020. <https://calhoun.nps.edu/handle/10945/66667>.
- Kovács, Barna. “Affective and Cognitive Dimensions of Trust in Communication.” *Acta Universitatis Sapientiae* 7, no. 1 (December 2020): 13–24. <https://doi.org/10.2478/auscom-2020-0002>.
- Kupietz, Kevin. “Teaching Soft Skills in the Fire Service.” *The Buzz* (blog), September 29, 2021. <https://www.isfsi.org/blog/teaching-soft-skills-in-the-fire-service>.
- Lee, Amber Hye-Yon. “Social Trust in Polarized Times: How Perceptions of Political Polarization Affect Americans’ Trust in Each Other.” *Political Behavior* 44, no. 3 (September 2022): 1533–54. <https://doi.org/10.1007/s11109-022-09787-1>.

- Lee, Jungwoo, Jun-Gi Park, and Seyoon Lee. "Raising Team Social Capital with Knowledge and Communication in Information Systems Development Projects." *International Journal of Project Management* 33, no. 4 (May 2015): 797–807. <https://doi.org/10.1016/j.ijproman.2014.12.001>.
- Lee, Steven. "FDNY Fire Cadet Academy Academic Syllabus." FDNY Youth Workforce Pipeline Program, May 10, 2023.
- Leijon, Marie, and Martin Stigmar. "Knowledge Requirements in the Governing Documents of the Swedish Police Programme." *Nordic Journal of Studies in Policing* 9, no. 1 (2022): 1–16. <https://doi.org/10.18261/njsp.9.1.1>.
- Lencioni, Patrick M. "Make Your Values Mean Something." *Harvard Business Review*, July 1, 2002. <https://hbr.org/2002/07/make-your-values-mean-something>.
- Linn, Brian McAllister. "Samuel Huntington, Professionalism, and Self-Policing in the U.S. Army Officer Corps." *Parameters (Carlisle, Pa.)* 51, no. 3 (2021): 91–100. <https://doi.org/10.55540/0031-1723.3082>.
- Lord, Vivian B. "Swedish Police Selection and Training: Issues from a Comparative Perspective." *Policing: An International Journal of Police Strategies & Management* 21, no. 2 (1998): 280–92. <https://doi.org/10.1108/13639519810220253>.
- Loten-Beckford, Gary. "Newly Restored Partnership Resumes, U.S. Army Drill Sergeant Academy and the New York City Fire Department Collaborate." Defense Visual Information Distribution Service News, September 8, 2022. <https://www.dvidshub.net/news/428803/newly-restored-partnership-resumes-us-army-drill-sergeant-academy-and-new-york-city-fire-department-collaborate>.
- Lvina, Elena, Liam P. Maher, and John N. Harris. "Political Skill, Trust, and Efficacy in Teams." *Journal of Leadership & Organizational Studies* 24, no. 1 (2017): 95–105. <https://doi.org/10.1177/1548051816657984>.
- Malbašić, Ivan, Carlos Rey, and Vojko Potočan. "Balanced Organizational Values: From Theory to Practice." *Journal of Business Ethics* 130, no. 2 (2015): 437–46. <https://doi.org/10.1007/s10551-014-2238-0>.
- McDonald, Brian. *Five Floors Up: The Heroic Family Story of Four Generations in the FDNY*. New York: Grand Central Publishing, 2022.
- Moir, Sylvia. "Fluid Leadership: Inviting Diverse Inputs to Address Complex Problems." Master's thesis, Naval Postgraduate School, 2016. <https://hdl.handle.net/10945/48567>.
- Moldoveanu, Mihnea, and Das Narayandas. "The Future of Leadership Development." *Harvard Business Review* 97, no. 2 (March 2019): 40–48.

- Montero, M. Kristiina, and Heather Waymouth. “Transforming Teaching and Learning: A Review of ‘No More Telling as Teaching: Less Lecture, More Engaged Learning.’” *Journal of Adolescent & Adult Literacy* 62, no. 3 (2018): 352–54.
- Mulherin, Patrick, and Beth Weckman. “Analysis of Recruit Initial Firefighter Training Curricula | NFPA.” National Fire Protection Agency, April 2015. <https://www.nfpa.org/News-and-Research/Data-research-and-tools/Emergency-Responders/Analysis-of-Recruit-Initial-Fire-Fighter-Training-Curricula>.
- Nahmod, Abdo. “The Collaborative Capacity of the NYPD, FDNY, and EMS in New York City: A Focus on the First Line Officer.” Master’s thesis, Naval Postgraduate School, 2010. <https://hdl.handle.net/10945/5443>.
- National Fire Protection Agency. “NFPA 1041: Standard for Fire and Emergency Services Instructor Professional Qualifications.” Accessed August 9, 2023. <https://www.nfpa.org/codes-and-standards/all-codes-and-standards/list-of-codes-and-standards/detail?code=1041>.
- . “Analysis of Recruit Initial Firefighter Training Curricula.” Accessed September 6, 2023. <https://www.nfpa.org/News-and-Research/Data-research-and-tools/Emergency-Responders/Analysis-of-Recruit-Initial-Fire-Fighter-Training-Curricula>.
- New York City Council. “Evaluating Diversity at the FDNY: Current Efforts to Reach Desired Targets.” New York City Council. Accessed April 21, 2023. <https://council.nyc.gov/data/data-team/evaluating-diversity-at-the-fdny/>.
- New York City Department of Administrative Services. “Notice of Examination: Promotion to Deputy Chief (Fire).” NYC Department of Administrative Services, March 28, 2023. <https://www.nyc.gov/assets/dcas/downloads/pdf/noes/20233590000.pdf>.
- . “Notice of Examination: Promotion to Lieutenant (Fire).” New York: NYC Department of Administrative Services, June 29, 2022. <https://www.nyc.gov/assets/dcas/downloads/pdf/noes/20200569000.pdf>.
- New York City Fire Museum. “The Paid Department 1865–Present.” New York City Fire Museum. Accessed June 16, 2022. <https://www.nycfiremuseum.org/the-paid-department>.
- New York State Department of Civil Service. *Summary of New York State Civil Service Law*. Albany, NY: New York State Department of Civil Service, 2008. <https://www.cs.ny.gov/pio/publications/summofcsl.pdf>.

- Nguyen, Tram, Ian D. Graham, Kelly J. Mrklas, Sarah Bowen, Margaret Cargo, Carole A. Estabrooks, Anita Kothari et al. “How Does Integrated Knowledge Translation (IKT) Compare to Other Collaborative Research Approaches to Generating and Translating Knowledge? Learning from Experts in the Field.” *Health Research Policy and Systems* 18, no. 1 (December 2020): 35.
<https://doi.org/10.1186/s12961-020-0539-6>.
- NYC Department of Education. “DOE Data at a Glance.” NYC Public Schools. Accessed April 24, 2023. <https://www.schools.nyc.gov/about-us/reports/doe-data-at-a-glance>.
- Office of Fire Prevention and Control. *Firefighter Training Feasibility Study*. Albany, NY: New York State Homeland Security and Emergency Services, 2019.
https://www.dhses.ny.gov/system/files?file=documents/2021/05/ofpc_training_feasibility_study.pdf.
- Office of Public Information, FDNY. “FDNY Annual Report 2007.” Fire Department City of New York, 2007.
- . “FDNY Demographics 03–09-2017.” Brooklyn, NY: FDNY, March 9, 2017.
<https://www.nyc.gov/assets/fdny/downloads/pdf/about/fdny-demographics-a-03-09-2017.pdf>.
- . “Fire Fighter Civil Service Exam, 2012 Results: Admissions and Graduation Statistics Break Down by Race and Gender.” Brooklyn, NY: Fire Department City of New York, March 9, 2017.
<https://www1.nyc.gov/assets/fdny/downloads/pdf/about/fdny-demographics-a-03-09-2017.pdf>.
- . “Fire Fighter Civil Service Open Competitive (7001) and Promotional (7501) Exam, & Firefighter Proby School Results Admissions and Graduation Statistics Break Down by Race and Gender.” Brooklyn, NY: FDNY, December 16, 2020.
<https://www.nyc.gov/assets/fdny/downloads/pdf/about/fdny-demographics-12-16-2020.pdf>.
- Office of Recruitment and Retention, FDNY. “FDNY Firefighter Candidate Mentorship Program.” Fire Department City of New York, April 17, 2023.
<https://www.joinfdny.com/tag/firefighter-candidate-mentorship-program/>.
- . “FDNY-Firefighter-Recruitment-2022.Pdf.” Fire Department – City of New York, 2022. <https://www.nyc.gov/assets/fdny/downloads/pdf/about/fdny-firefighter-recruitment-2022.pdf>.
- Office of the Deputy Commissioner for Strategic Initiatives and Policy. *FDNY Strategic Plan 2015–2017*. Brooklyn, NY: Fire Department – City of New York, 2015.
http://www.nyc.gov/html/fdny/pdf/ofc/FDNY_strategic_plan_2015_2017.pdf.

- Palmer, Edward, and Peter Devitt. "The Assessment of a Structured Online Formative Assessment Program: A Randomised Controlled Trial." *BMC Medical Education* 14, no. 1 (2014): 1–10. <https://doi.org/10.1186/1472-6920-14-8>.
- Paul, Ari. "Tale of 2 Sides on EMS Role in FDNY." *The Chief*, July 5, 2007. <https://thechiefleader.com/stories/tale-of-2-sides-on-ems-role-in-fdny,39409?cb=1689534594>.
- Penney, Greg, David Launder, Joe Cuthbertson, and Matthew B. Thompson. "Threat Assessment, Sense Making, and Critical Decision-Making in Police, Military, Ambulance, and Fire Services." *Cognition, Technology & Work* 24, no. 3 (2022): 423–39. <https://doi.org/10.1007/s10111-022-00694-3>.
- Radović, Tara, and Dietrich Manzey. "The Impact of a Mnemonic Acronym on Learning and Performing a Procedural Task and Its Resilience Toward Interruptions." *Frontiers in Psychology* 10 (2019): 2522–2522. <https://doi.org/10.3389/fpsyg.2019.02522>.
- Rhoades, Jake, and Kim C. Favorite. *A Fire Department's Guide to Implementing NFPA 1582*. McLean, VA: International Association of Fire Chiefs, 2019. https://www.iafc.org/docs/default-source/1vcos/vws_rrkit_nfpa-1582.pdf?sfvrsn=ca9b9f0d_2.
- Ritson, Alex J., Mark A. Hearn, and Laurent G. Bannock. "Bridging the Gap: Evidence-Based Practice Guidelines for Sports Nutritionists." *Frontiers in Nutrition (Lausanne)* 10 (2023): 1118547–1118547. <https://doi.org/10.3389/fnut.2023.1118547>.
- Roman, Jesse. "Leaning In." *NFPA Journal* 117, no. 2 (2023): 42–47.
- Rosen, Christopher C., and Paul E. Levy. "Stresses, Swaps, and Skill: An Investigation of the Psychological Dynamics That Relate Work Politics to Employee Performance." *Human Performance* 26, no. 1 (2013): 44–65. <https://doi.org/10.1080/08959285.2012.736901>.
- Rothwell, Charlotte, Amelia Kehoe, Sophia Farhene Farook, and Jan Illing. "Enablers and Barriers to Effective Clinical Supervision in the Workplace: A Rapid Evidence Review." *BMJ Open*, Original research, 11, no. 9 (2021): e052929–e052929. <https://doi.org/10.1136/bmjopen-2021-052929>.
- Schermerhorn-Collins, Anna L. "The Challenges to Gender Integration in the Career Fire Services: A Comparative Case Study of Men in Nursing." Master's thesis, Naval Postgraduate School, 2017. <https://hdl.handle.net/10945/53044>.

- Schuh, Sebastian C., Niels Van Quaquebeke, Natalija Keck, Anja S. Göritz, David De Cremer, and Katherine R. Xin. “Does It Take More Than Ideals? How Counter-Ideal Value Congruence Shapes Employees’ Trust in the Organization.” *Journal of Business Ethics* 149, no. 4 (2018): 987–1003.
- Seagren, Chad W. “U.S. Customs and Border Protection Policy Routinely Violates Stated Core Values.” Working paper, Naval Postgraduate School, August 14, 2020. <https://hdl.handle.net/10945/69309>.
- Shi, Feng, Misha Teplitskiy, Eamon Duede, and James Evans. “The Wisdom of Polarized Crowds.” *Nature Human Behaviour* 3, no. 4 (April 2019): 329–36. <https://doi.org/10.1038/s41562-019-0541-6>.
- Stephenson, Ryan, Colt Rothlisberger, and Jonathan H. Westover. “Extracurricular Engagement and Person-Organization Fit through Internalizing Organizational Mission Statements and Values.” *Organizational Cultures (Champaign, Ill. Online)* 17, no. 4 (2018): 21–37. <https://doi.org/10.18848/2327-8013/CGP/v17i04/21-37>.
- Steward, John M. “Applying Technology Acceptance Research to Information Systems Implementation in the Fire Service.” Monterey, CA; Naval Postgraduate School, 2019. https://calhoun.nps.edu/bitstream/handle/10945/62301/19Mar_Steward_John.pdf?sequence=1&isAllowed=y.
- Subagia, I. W. “Roles Model of Teachers in Facilitating Students Learning Viewed from Constructivist Theories of Learning.” *Journal of Physics: Conference Series* 1503, no. 1 (July 2020): 1–9. <https://doi.org/10.1088/1742-6596/1503/1/012051>.
- Targeted News Service. “CCR Attorneys Urge State Commission to Adopt FDNY Cadet Program to Increase Diversity in Department.” Targeted News Service, June 15, 2016. ProQuest.
- Tracy, Thomas. “FDNY Aims to Curb ‘Frat-Like’ Culture by Standardizing Punishment for Discrimination, Misconduct.” FireRescue1, July 24, 2023. <https://www.firerescue1.com/harassment/articles/fdny-aims-to-curb-frat-like-culture-by-standardizing-punishment-for-discrimination-misconduct-kE0CtekknuyuiO9u/>.
- . “FDNY Firefighter Hangs up Helmet, Turnout Coat after 40 Years.” Firehouse, April 11, 2023. <https://www.firehouse.com/careers-education/video/53056867/fdny-firefighter-robert-thomas-retires-after-40-years-three-fdny-sons-join-him-for-last-shift>.

- . “FDNY’s 9/11 ‘Legacy’ Firefighters: Sons and Daughters of Responders Killed in Attacks.” *New York Daily News*, September 8, 2021. <https://www.nydailynews.com/new-york/september-11/ny-9-11-fdny-children-victims-follow-fathers-footsteps-20210906-tae2af35a5arbeqyrl47k43heu-story.html>.
- United States Military Academy. “PL300 Course Details.” United States Military Academy Curriculum Catalog. Accessed May 25, 2023. https://courses.westpoint.edu/crse_details.cfm?crse_nbr=PL300&int_crse_eff_acad_yr=2022&int_crse_eff_term=2.
- Urquía-Grande, Elena, Raquel Pérez Estébanez. “Bridging the Gaps Between Higher Education and the Business World: Internships in a Faculty of Economics and Business.” *Education & Training* 63, no. 3 (2020): 490–509. <https://doi.org/10.1108/ET-01-2018-0017>.
- Wagner, John A., Stephen E. Humphrey, Christopher J. Meyer, and John R. Hollenbeck. “Individualism-Collectivism and Team Member Performance: Another Look: Team Member Performance.” *Journal of Organizational Behavior* 33, no. 7 (October 2012): 946–63. <https://doi.org/10.1002/job.783>.
- Walters, Trudie. “Delivering Employable Event Studies Graduates: Student Perspectives on the Benefits of Experiential Learning.” *Event Management* 25, no. 5 (September 2021): 521–33. <https://doi.org/10.3727/152599518X15299559637653>.
- Yale University. “Moralties of Everyday Life | Yale Online,” June 20, 2016. <https://online.yale.edu/courses/moralties-everyday-life>.
- Yolak, Betül Betina, Zeynep Kiziltepe, and Fatma Nevra Seggie. “The Contribution of Remedial Courses on the Academic and Social Lives of Secondary School Students.” *Journal of Education* 199, no. 1 (January 1, 2019): 24–34. <https://doi.org/10.1177/0022057419836434>.
- Zan, Giovanni De, Alberto Felice De Toni, Andrea Fornasier, and Cinzia Battistella. “A Methodology for the Assessment of Experiential Learning Lean: The Lean Experience Factory Case Study.” *European Journal of Training and Development* 39, no. 4 (2015): 332–54. <https://doi.org/10.1108/EJTD-05-2014-0040>.

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