

A PRACTICE-BASED RESEARCH STUDY: EXPLORING PEER-MENTORING

St. Edward's University
School of Behavioral and Social Sciences

A Practice-Based Research Study:
Exploring Peer-Mentoring Behaviors
In The San Marcos Fire Department

A dissertation submitted in partial satisfaction of the requirements for the degree of
Doctor of Education in Leadership and Higher Education

Daniel Guerrero

November 2022

Dr. Thomas Sechrest, Ph.D. – Dissertation Chairperson
Dr. Ted Middelberg, MBA, Ed.D. – Dissertation Committee Member
Dr. Rosina Ruiz Valle, Ph.D. – Dissertation Committee Member

Abstract

A large body of assessment literature and firefighter testimonials indicate that peer mentoring is essential to emergency services. A department's ability to nurture positive relationships among its personnel can benefit the development of skills, trust, communication, retention, recruitment, and performance. The industry's challenge resides in a fire department's ability to invest time, talent, and resources toward behavioral practices that are not as easy to define as other regulated training protocols.

Battalion Chief Howie Minor oversees the training and mentoring for the San Marcos Fire Department. While the state of Texas mandates the training requirements for firefighters, activity related to mentoring behaviors is left to the discretion of the training officer. Chief Minor's challenge regarding how he should prepare his people to be better mentors catalyzed this research project. A SWOT analysis was conducted with San Marcos Fire Department members to explore the department's peer-mentoring behaviors practiced and observed.

The data identified emerging themes that indicated three areas that the fire department has nurtured and should continue to invest in improving the mentoring behaviors of their people. The peer-mentoring behaviors and practices observed by the survey respondents were then aligned with a firefighter's physical attributes of the head, the hands, and the heart. Mentoring behaviors associated with intellectual growth and information sharing, aligned with the head, are valued, and sought by department personnel. Mentoring behaviors related to physical work, presence, and modeling behaviors are aligned with the hands. Firefighters appreciate visual demonstrations to improve their skills. They value watching peers and department leaders model behaviors and demonstrate skill sets. Finally, behaviors associated with empathy, love, and encouragement are aligned with the heart. Behaviors influencing and motivating the heart and passion for the job are valued most within the San Marcos Fire

Department. Heart-driven behaviors are valued, sought, and practiced in many behaviors that influence positive relationships and professional growth.

Dedication

This study is dedicated to the people who have poured wisdom, discernment, compassion, empathy, and love into our hearts. Formally and informally, their spirit appears in our lives when we need them the most. Their words, actions, thoughts, and influence move us to greater heights, propel us toward challenges, and inspire us to be better people. Thank you to the men and women who have shared their life experiences with me through their narratives, actions, insights, dreams, and intellect. Your investment in head, hands, and heart continues to nurture the next generation of people who care for each other. Thank you for your love. I appreciate your support. Thank you for being a mentor.

Acknowledgment

Thank you to the men and women of the San Marcos Fire Department, who dedicate their lives to the safety and protection of their communities. Our emergency management professionals' leadership, service, and sacrifices are genuinely valued by those who call upon your profession during moments of crisis and trauma. You place your own lives, health, safety, and sanity on the line every day. We will never forget those who have lost their lives in service to our world, nation, state, county, city, town, neighborhood, or home.

Thank you to my brother, Miguel Guerrero, whom I am incredibly proud of and love dearly. Thank you to my parents, Robert, and Socorro Guerrero, who grew up as migrant farm workers and sacrificed so my brother and I would have a better life. Thank you to my grandparents, Jose and Maria Silguero and Filberto and Maria Guerrero, who instilled the values of faith in God, family, hard work, and education into our hearts.

Thank you to the staff at Café on the Square in downtown San Marcos who allowed me to take over table #25 every other day to study, write, and sip coffee. Thank you to my friends and colleagues at Concordia University – Texas, who have encouraged me throughout this journey. I am incredibly grateful to my cohort classmates, professors, and friends at St. Edward's University. You have been a source of strength and encouragement that I could not have survived without. Thank you to Dr. Rosina Ruiz-Valle for continuing to serve as an advocate from first grade and beyond. Thank you to Dr. Ted Middelberg for inspiring me to think deeply about the value of mentoring. I am incredibly grateful to my mentor, friend, and professor, Dr. Thomas Sechrest, with whom I started this educational journey in 2008. Dr. Sechrest has served as much more than a teacher and mentor. He has been a Godsent friend and has led me through some of the most significant challenges in my life.

Finally, I am eternally grateful to Fire Chief Les Stephens and Battalion Chief Howie Minor. These two mentors lead an organization that motivates men and women to race into the fire to serve people experiencing the worst moments of their lives. They do not view their profession as a job; it is a passion. A calling from God to serve others to the greatest extent in the most challenging circumstances. All while maintaining a positive outlook on life, a fantastic sense of humor, and a willingness to stop what they are doing to lend an empathic ear. Thank you for being a part of my journey.

Table of Contents

ABSTRACT	3
DEDICATION.....	5
ACKNOWLEDGMENTS	6
TABLE OF CONTENTS	8
LIST OF TABLES.....	10
LIST OF FIGURES.....	14
LIST OF GRAPHS.....	4
CHAPTER 1- INTRODUCTION	18
Introduction to the Problem/Issue.....	18
Statement of the Problem/Issue	19
Purpose of the Proposed Study	21
Research Questions	22
Rationale, Relevance, and Significance of the Proposed Study	23
Definitions of Terms	23
Assumptions, Delimitations, and Limitations.....	25
Summary	25
CHAPTER 2 - THE LITERATURE REVIEW.....	27
Literature Search Strategy.....	28
Theoretical Framework.....	29
Review of the Research and Methodological Literature.....	30
Summary	33
CHAPTER 3 - METHODOLOGY.....	35
Research Questions	35
Purpose and Design of the Proposed Study	35
Research Population and Sampling Method.....	36
Instrumentation	37
Data Collection	38
Data Collection and Analysis.....	40
Limitations of the Research Design.....	41

Limitations	41
Delimitations.....	42
Expected Findings.....	42
Ethical Issues	43
Conflict of Interest Assessment	43
Researcher’s Position	44
Ethical Issues in the Proposed Study	44
Summary of the Methodology	45
CHAPTER 4 – DATA ANALYSIS AND RESULTS	47
Introduction.....	47
Description of the Sample.....	48
Data Analysis	50
Practical Application of the Findings	58
Limitations of the Study.....	62
Summary	62
CHAPTER 5 – DISCUSSION AND CONCLUSION	66
Introduction.....	66
Discussion of the Results	66
Discussion of the Results of the Literature	67
Implications of the Results for Practice, Policy, and Theory	69
Practice.....	70
Policy	72
Theory	72
Recommendations for Further Research.....	73
Conclusions.....	75
REFERENCES	78
APPENDIX	4
VITA.....	82

List of Tables

The following lists represent a sample of the macro and micro-level themes that emerged from the research data collection:

Slide 13 - In a word or short phrase...what does mentoring mean to you?		Slide 30 - Describe the mentoring strengths of the SMFD.	
Micro Themes	Macro Themes	Micro Themes	Macro Themes
Growth	Hands	Informal Mentoring Relationships	Hands
Trust	Heart	Resources / Budget	Head
Guidance / Advise / Coach	Head	Good People (Experience)	Hands
Leadership	Heart	Good People (Teachers)	Hands
Teaching / Training / Knowledge	Head	Encouragement	Heart
Experience	Hands	Training Culture	Head
Advocacy	Heart	Success Driven	Hands
Role Model / Example	Hands	Constructive Criticism	Head
Accountability	Hands	Expectations / High Standards	Head
Influencer	Heart	Love / Care / Family	Heart
Challenge	Hands	Motivated Mentors	Heart
Constructive Criticism	Head	Passion for the Job	Heart
Compassion / Understanding	Heart	Modeling Behavior	Hands
Integrity	Heart	Formal Rookie Class	Head
Listens	Head	Pride	Heart
Humility	Heart	Ownership	Heart
Honesty	Heart	Patience	Heart
Health (Mental/Physical/Emotional)	Hands	Competition	Heart
Empowerment	Heart	Positive Attitude	Heart
Encouragement / Positivity / Love	Heart	Repetition	Hands
Patience	Heart	Accountability	Hands
Friendship	Heart	Confidence	Heart
Teamwork	Hands	Fire Marshals	Hands
Brings Snacks / Kudos	Hands	Innovation	Head
Family	Heart	Admin Support	Hands
Humor	Heart	Customer Service Centered	Heart
Security	Hands	Communication	Head
Maintaining	Hands		
Career Opportunities	Head		
Empathy	Heart		
Intelligence	Head		

Slide 34 - What are the mentoring weaknesses of the SMFD?		Slide 43 - In a word or short phrase... what do you need from the SMFD to be a better mentor?	
Micro Themes	Macro Themes	Micro Themes	Macro Themes
Inconsistent Discipline	Hands	Support	Hands
bad attitudes	Heart	Time	Hands
Ego	Head	Consistency	Hands
Laziness	Hands	Accountability	Hands
Lack of Vision	Head	Trust	Heart
Overusing the calendar	Hands	Drive	Hands
Whining	Hands	Communication	Head
Myopic views	Head	Solutions to Problems	Head
Entitlement	Heart	Honest Evaluations / Feedback	Head
Negativity	Heart	Quality Training	Head
Lack of leadership	Heart	Relevant Training	Hands
No motivation	Heart	Leadership Training	Hands
Common sense	Head	Consistent Discipline	Hands
Lake of Formality	Head	Understanding	Heart
Lack of Honest Criticism	Head	Less Busy Work	Hands
Poor communication	Hands	Calendar Time	Hands
Gossip / Hearsay	Hands	Leadership	Heart
Too many opinions	Head	Training Field	Hands
Dishonesty	Heart	Engagement	Heart
Bad Mentors	Hands	Less Micromanaging	Hands
Cliquish Culture	Hands	Standards	Head
Not Wanting to Train	Hands	Clear Mission / Goals / Expectations	Head
Poor Examples	Hands	More Personnel	Hands
Mentors judging mistakes during TRAINING	Hands	Instructions	Head
Complacency	Heart	Expectations	Head
Belittling Behaviors	Hands	Fewer Roadblocks	Head
Overcompensation	Hands	Humility	Heart
Lack of time	Hands	Open to Change	Head
Superiority Complex	Head	Calendar Time	Hands
Disconnect from Administration	Hands		
Check the Box Culture	Hands		

Lack of Accountability	Hands	Slide 45 - In a word or short phrase.... what are the threats if peer mentoring is ignored?	
Pencil Whipping	Hands		
Lack of standards	Head	Micro Themes	Macro Themes
Distracted	Hands	Status Quo	Head
Overreactive	Hands	Laziness	Hands
lack of participation	Hands	Burnout	Hands
Poor Follow Through	Hands	Injury	Hands
Selfishness	Hands	LODD	Hands
Being on light duty	Hands	Crappy Firemen	Hands
Not being on 48 96	Hands	Incompetence	Hands
Appearance over performance	Hands	Complacency	Hands
Narrow-Minded Thinking	Head	Customer Service / Mission Failure	Hands
Emotional maturity	Heart	Entitlement	Head
Lack of incentives	Hands	Loss of Public Trust	Heart
Not sharing information	Head	Poor Performance	Hands
Officers need to step up.	Hands	Poor Retention / Vacancies / Overtime Costs	Hands
		Lower Standards	Head
		Mental Health Challenges	Head
		Public Image Issues	Heart
		Low Morale	Heart
		Ignorance	Head
		Bad Habits	Hands
		Hating Work	Heart
		Toxic / Unsafe Work Environment	Hands
		Recruitment Suffers	Hands
		Bad Department	Hands
		Bad Officer Corps	Hands
		Bad Attitudes	Heart
		Lack of Forward Progress	Head
		Decline in Ability	Hands
		Increased Negativity	Heart
		Loss of Integrity	Heart
		Giving Up	Hands
		Added Governmental Oversight	Head
		Selfishness	Heart
		Repeating Past Mistakes / Preventable Mistakes	Hands
		Loss of Job / Career	Hands
		Cutting Corners / Taking the Easy Road	Hands
		Culture Shift	Heart

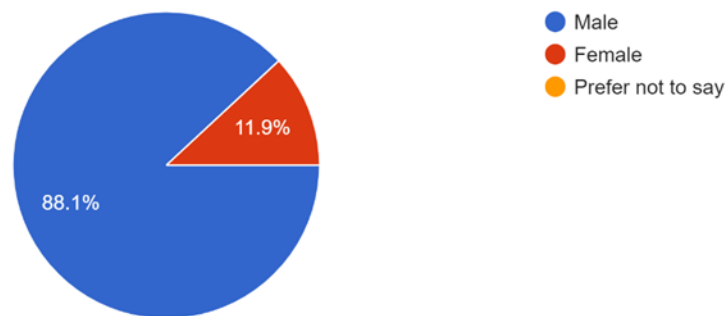
Discouragement	Heart
High Performers are Less Engaged	Heart
Stagnation	Hands
Fewer Mentors	Hands
Unsafe Environment	Hands
Mediocrity	Hands

List of Figures

The following describes the research participants from the San Marcos Fire Department who volunteered in the peer mentoring SWOT analysis. Eighty-three full-time employees from the San Marcos Fire Department were invited, and 42 full-time employees participated in the SWOT analysis. Thirty-four firefighters, five department administrators (fire chief, battalion chiefs, assistant chiefs), and three office administrators were involved in the research study.

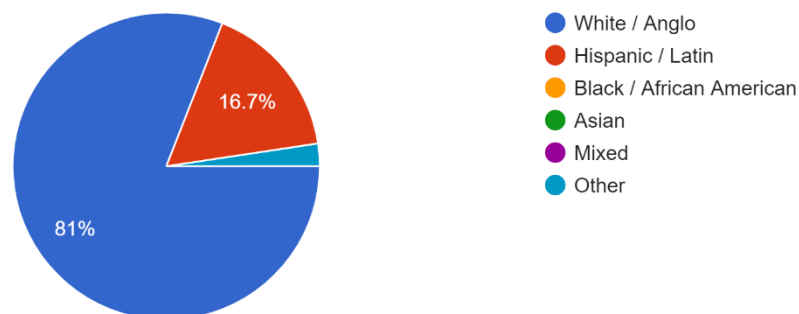
Thirty-seven males and five females self-identified as participants in the study. 34 Anglo/white, 7 Hispanic/Latin. 13 participants identified themselves as between the ages of 19 and 29. Fourteen participants in the study were between 30 and 39 years of age. Seven participants identified themselves as being between 40 and 49 years of age. Eight participants were over the age of 50 years old. The average age of the study participants was 37.2 years.

Gender
42 responses



Ethnicity/Race

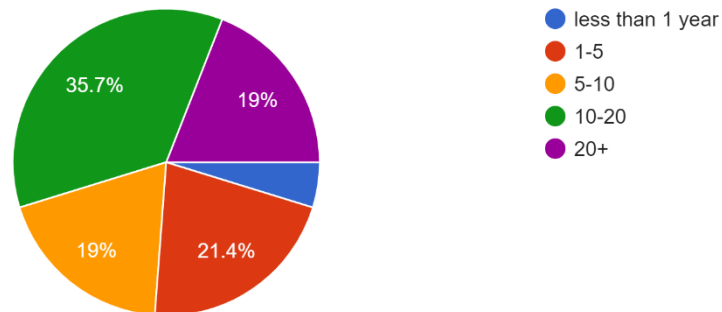
42 responses



Two study participants were new to the San Marcos Fire Department and fire industry with less than one year of service. Nine participants had 1 to 5 years of service in the fire industry, with 2 of these participants having less than one year of service in the San Marcos Fire Department. 9 participants were identified as having between 5 and 10 years of service within the fire industry, all of which with the San Marcos Fire Department. Fourteen participants in the study have between 10 and 20 years of service in the fire industry, 13 of these participants have served their entire career with the San Marcos Fire Department, and 1 participant has 1 to 5 years of service within the San Marcos Fire Department. 8 study participants shared that they have over 20 years of service within the fire industry, 6 of these participants have spent their entire career with the San Marcos Fire Department, and 2 participants have served 10 to 20 years of their career with the San Marcos Fire Department.

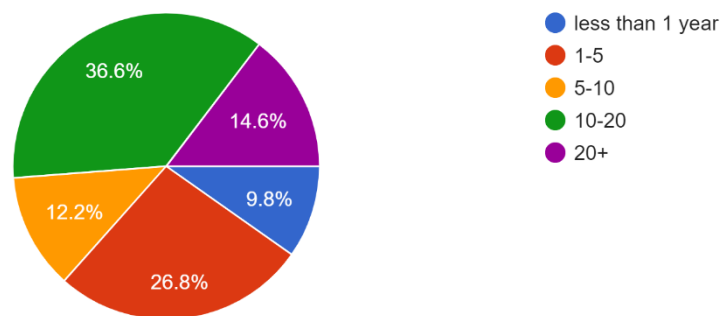
How many years have you served in the fire industry?

42 responses



How many years have you worked for the SMFD?

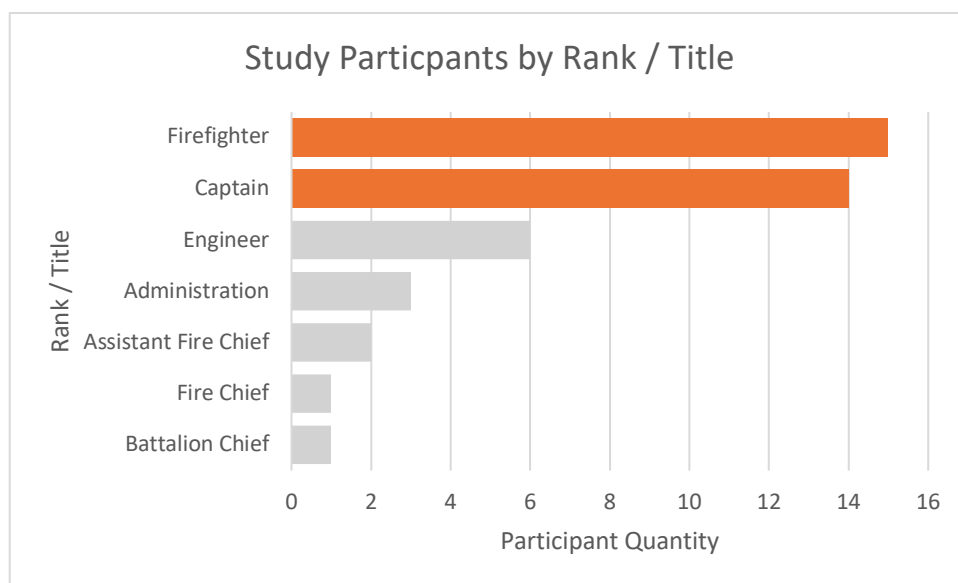
41 responses



Fifteen study participants identified their department role as a Firefighter or Probational Firefighter. Four participants serve as Chief, Assistant Chief, and Battalion Chief. Three of the participants identified themselves as operating in administrative office roles or non-operations-related roles. Fourteen study participants identified themselves as serving as a Captain, Paramedic Captain, Engineer, or Fire Marshall.

Fifteen study participants identified their role or rank within the fire department as entry-level, probationary, and firefighter. Six participants identified their role within the fire

department as an engineer. Fourteen participants identified their role within the fire department as an officer with the rank of captain or captain/paramedic. Three participants identified their role within the fire department as serving in non-operations and office administrators. 4 participants identified their role within the fire department as an officer with the ranks of either fire chief, assistant fire chief, or battalion chief.



In 2021, the San Marcos Fire Department opened its sixth firehouse within its district. Each firehouse was represented in the research study. Four participants were assigned to station #1, located in the city's center. Five participants were assigned to station #2, a residential neighborhood station. Six participants were assigned to station #3 near a residential neighborhood. Four participants were assigned to station #4, a newer firehouse in a hospital district. Twelve participants were assigned to central fire station #5, where the department's administrative offices and training classroom are located. Eleven participants were assigned to station #6, the newest firehouse in the service district.

Chapter 1

Introduction

People are attracted to Central Texas for its rich natural resources, abundant land, central location within the United States, and business-friendly environment. As a result, communities such as San Marcos, Texas, have become the fastest-growing cities. This rapid growth presents challenges for the future as governments work to manage their limited resources and personnel. As the state's baby-boomer population ages, municipal governments will place more demands on affordable housing, transportation, utilities, and emergency services (Petersen & Assanie, 2005).

While needs such as housing, health care, and transportation dominate policy discussions, most municipal budgets are dedicated to fulfilling operational investments in emergency services such as police and fire departments, equating 50% to 60% of a general fund budget essential to fulfilling a city's responsibility to safeguard health, safety, and welfare (Hurlbert, 2020).

To meet the community's needs, it is critical for the city to invest in firefighters' health, wellness, professional development, and training. However, fire departments contend with securing operational funding, retaining personnel, ensuring firefighter safety, enhancing department communication, and coordinating agency resources (Sartore, 2020). Maintaining personnel and ensuring firefighter safety is critical in the San Marcos Fire Department. As an emerging community between two metropolitan cities, the San Marcos Fire Department struggles to retain young talent requiring senior firefighters approaching retirement to extend their careers to fill critical vacancies (Brown, 2021). While their efforts are commendable, these decisions create dilemmas for fire chiefs who must decide if their senior firefighters can perform their jobs, ensure the safety of others, and protect their communities. These organizational

challenges make the recruitment, training, and retention of firefighters critical to the needs of the City of San Marcos.

Statement of the Problem/Issue

Fire departments have numerous assets, the most important of which is personnel (Guerrero, 2020). People require investments of time and resources to ensure functionality. The fire department must develop its personnel into a productive team to ensure mission function and safety. The training of these firefighters is generally good, but the need for more experience is a growing concern. According to Morgan, peer mentoring can complement firefighter performance and provide a conduit for building relationships among firefighters (Morgan, 2004). Firefighters must invest more time in mentoring because less experienced entry-level firefighters have different expectations, demands, and abilities. The fire service is also experiencing the retirement of many of its senior firefighters and officers. While the need for mentoring has increased, the supply of tenured firefighters to serve as mentors has decreased (Morgan, 2004).

Battalion Chief Howie Minor serves as the SMFD's fire training officer, responsible for determining the training needs of the department's staff through evaluating firefighters, formulating training plans, implementing comprehensive in-service programs, and providing new employee orientation for department personnel (Guerrero, 2020). While firefighters complete extensive state-mandated training to extinguish hazardous fires that threaten life, property, and the environment, mentoring is not a mandated aspect of personnel development. Chief Minor wants to change this aspect within his training programs by encouraging peer mentoring and enhancing relationships among his firefighters (Guerrero, 2020). San Marcos Fire Chief Les Stephens shares Minor's goal. The chief includes his personnel in critical decision-making processes by actively seeking involvement in designing firehouses and selecting

emergency apparatus (Guerrero, 2020). Chief Stephens has requested that this peer-mentoring study be completed with the input of the department's personnel. In addition, Chief Stephens has asked that the survey develop a simple, teachable mentoring model displayed in each firehouse for firefighters to view regularly (Guerrero, 2020).

History of the San Marcos Fire Department

According to the City of San Marcos, the San Marcos Fire Department was founded in 1884. Records from 1906 indicated that the fire department was composed of 50 volunteers, one paid employee, three horses, one hook and ladder wagon, two hose wagons, and 1600 feet of suitable hose. In 1914 the fire station burned down, killing the department's horses, and destroying much of the organization's equipment. Shortly after the fire, the department bought its first mechanized emergency vehicle, and the City of San Marcos built its first firehouse (Kuhlman, 2017).

The San Marcos Fire Department utilized volunteers and reserve firefighters (Kuhlman, 2017). By the 1940s, the department had grown to over 80 volunteers under the leadership of Chief Lewis Haynes. It took another 20 years before the City of San Marcos hired its first career firefighters in the 1960s. As of 2021, the San Marcos Fire Department comprises 83 full-time employees: 72 sworn firefighters, seven administrative officers, and four civilian staff administrators operating within six firehouses strategically constructed and placed throughout the community.

While the department has grown since its inception in the late 1800s, the San Marcos population growth has dramatically outpaced the city's emergency infrastructure and personnel (Hurlbert, 2020). San Marcos is currently growing at a rate of 1.65% annually, and its population

has increased by 49.13% since the most recent census, which recorded a population of 44,894 in 2010 (Hurlbert, 2020). With a 2020 population of 66,952, it is the 60th largest city in Texas and the 565th largest city in the United States.

The operation of a fire department is a costly investment for any city. The City of San Marcos budgets \$12.9 million for the fire department operation and \$11.9 million in personnel expenses. Approximately \$660,000 for equipment, training, and other contracted services (Hurlbert, 2020). However, fire departments across the nation need help to receive funding, hire qualified candidates, and retain talent. Fire departments function within an ever-changing environment of decreased revenue sources hampered by increasing service demand. Even though the core of the occupation—firefighting—occurs less frequently, when firefighters respond to fires, the events are more intense and toxic and spread faster due to the hydrocarbon-based products that fuel them. Firefighters are getting less hands-on experience, training, and mentoring critical for preparing the next generation of firefighters (Erdem & Aytumur, 2008). Add an underprepared, minimally trained firefighting professional, and you have a recipe for disaster.

Purpose of the Proposed Study

This study explores the existing and desired peer-mentoring behaviors within the San Marcos Fire Department. Firefighters in training development classes often indicate that their greatest fear of career advancement is a lack of mentorship (Carter, 2018). A peer-mentoring program allows firefighters to experience failure because the mentor does not judge them but helps them understand their growth potential. It will enable mentees to discover their strengths and weaknesses (Morgan, 2011). Firefighters often find that their books to prepare for

promotional exams have too much information to be clarified. Some data may not work in real situations within their community.

Whether in job shadowing or acting within the trained capacity, an individual's job ability, confidence, and satisfaction increase when peer mentoring is emphasized. During this study, San Marcos Fire Department members shared their strengths and weaknesses in building peer-mentoring relationships. These behaviors included but were not limited to a firefighter's understanding of peer mentoring, relationship expectations, and critical needs from this bond. The peer-mentoring behaviors may consist of communication preferences, efficient use of time, and the return on investment from the relationship.

The participating firefighters ranked the current and preferred behaviors, then aligned them with the fire department's asset hierarchy. An asset hierarchy is a logical index of all equipment, machines, and components and how they work together (Jafari, 2014). In this study, firefighters ranked peer-mentoring behaviors in a similar top-down hierarchy. The behavior will align with the asset hierarchy associated with a firefighter's protective equipment. The visual alignment between the asset hierarchy and mentoring behavior will serve as a graphic representing the expectations of peer-mentoring behaviors within the San Marcos Fire Department. The department will display the mentoring model to remind firefighters that peer mentoring is as essential to their profession as personal protective equipment.

Research Questions

This study explored peer-mentoring behaviors exercised within the San Marcos Fire Department. After additional review, the researcher created a mentoring model to determine the most effective design. The first step will be to assess the participating firefighters' concepts of

peer-mentoring behaviors to ensure comprehension of mentoring terminology. The participating firefighters will be surveyed to identify their essential peer-mentoring behavior. The researcher will build a mentoring model that aligns the highest-ranking peer-mentoring behaviors with the personal protective equipment asset hierarchy. The researcher will review existing literature to fulfill this intention, and participants will be surveyed to confirm this equipment hierarchy. They are developing a mentoring model to reinforce peer-mentoring behaviors.

The following questions will guide the study:

RQ1: What peer-mentoring behaviors are essential to the firefighters of the SMFD?

The purpose of the first research question (RQ1) guided the primary research objective of exploring the existing and preferred peer-mentoring behaviors observed and practiced within the San Marcos Fire Department. Research question 1 helped guide the SWOT analysis questions posed to the fire department's research volunteers. Battalion Chief Howie Minor played a critical role in developing the structure and sequence of the survey questions. Battalion Chief Minor and the primary researcher tactfully ensured that the questions were phrased and sequenced appropriately to maximize the research volunteers' response rate.

RQ2: In what ways does it make sense to assign the asset hierarchy of a firefighter's protective equipment to peer-mentor behaviors?

The researcher intended to explore the potential of assigning peer-mentoring behaviors to a firefighter's protective equipment hierarchy. The final survey question asked of the research volunteers was designed to identify a rank order for firefighters' tools and equipment when responding to an emergency. The firefighters did not respond to this inventory question as the researcher anticipated. The respondents shared comments regarding the value of people, teams, pride in their job, communication, and trust instead of sharing a ranked order of their tools. The

researcher interpreted these responses as demonstrating the firefighters' value for people over assets.

Rationale, Relevance, and Significance of the Proposed Study

A willingness to be mentored is not the problem. The problem is that firefighting is more complex than many other occupations when looking at future development. Unfortunately, more needs to be done within the fire service to institutionalize the mentoring that can help firefighters and make future leaders more effective. Mentoring occurs in firehouses across the country; however, this mentoring occurs due to the efforts of individual firefighters rather than the presence of formal departmental policies or behaviors fostering peer-mentoring opportunities. Instead, firefighters perceive the need to mentor as personal and not tied to the organization. If training, experience, and education are the building blocks of professional development, mentoring is essential to preparing members for success in their current roles.

Definition of Terms

Asset Hierarchy: a logical index of all your protective equipment, tools, and components and how they work together.

Firefighter: A firefighter is a rescuer extensively trained in firefighting, primarily to extinguish hazardous fires that threaten life, property, and the environment and to rescue people and, in some cases or jurisdictions, animals from dangerous situations.

Firehouse: another term for a fire station.

Formal Mentoring involves mentors and mentees meeting for frequent mentoring sessions over a specified period. A formal program is well-structured and organized and aligns with an organization's goals and objectives.

Informal Mentoring: a relationship between two people where one gains insight, knowledge, wisdom, and support from the other. Either person may initiate the mentoring relationship so that the mentee can gain understanding from a trusted person.

Mentor: someone who teaches or gives help and advice to a less experienced and often younger person. In an organizational setting, a mentor influences personal and professional growth.

Mentoring: the influence, guidance, or direction given by a mentor.

Peer-Mentoring: a form of mentorship usually occurs between a person who has lived through a specific experience and someone new to that experience.

Personal Protective Equipment: Personal Protective Equipment (PPE) is designed to protect firefighters from serious injuries or illnesses resulting from fire, hazards, etc. It covers a variety of devices and garments, such as respirators, turnout gear, gloves, blankets, and gas masks.

Models: uses pictures and symbols to represent the different components of a particular system. Visual models can vary in level of detail. Some charts may have realistic graphics to make the various parts easier to identify.

Assumptions, Delimitations, and Limitations

Assumptions within this study include trusting the honesty and accuracy of the participant's survey responses. Study participants will be encouraged to volunteer to complete an online survey using a mobile device or computer. The number of firefighters who choose to participate in the study is unknown. The study assumes that the firefighters of the SMFD value and understand the benefits of peer mentoring. While existing studies indicate that mentoring is essential to firefighters' development, retention, and safety, this study assumes that firefighters

want to be mentored. Another assumption is that firefighters may see this study as an exercise with limited value.

Limitations to this study of the SMFD include numerous personal relationships with the fire department's leadership and personnel. While these relationships have been beneficial in developing the research and providing access to the SMFD, the ties still pose researcher bias.

The San Marcos Fire Department is the only participating organization in this study. This variable is a significant limitation of the scope of this study. While the City of San Marcos is committed to hiring a diverse workforce, most of the fire department's personnel are white males. The potential lack of diversity of ethnicity, gender, and age are potential limitations. Additionally, the study is conducted using a methodology that will not interfere with the operational responsibilities of the firefighters. Since the data collection will take during the fire department's hours of operation, the availability of the participants to complete the study is a limitation that will be managed so as not to interfere with firefighter duties.

Summary

The fire department's leaders will be essential to accelerating peer mentoring and making it productive. Fire department leaders should be encouraged to provide training for mentors and mentees alike so that expectations are the same on both sides of the mentoring equation. In much the same way that company officers often exercise influence to assemble an optimal crew that works well together, the training officer should attempt to match mentors and mentees so that the mentoring relationship is anchored in an environment with a positive interpersonal dynamic between the two (Jenkins, 2020).

Formal mentoring and leadership development may seem daunting, but the SMFD should be reassured and encouraged. Resources for guiding a mentoring process can be found within the Center for Public Safety Excellence's (CPSE) credentialing program (Jenkins, 2020). An assessment of a mentee could begin simply by determining their immediate, short-term, and long-term goals. A skills and experience inventory could involve a review of the mentee's targeted designation, with the mentor and mentoring program coordinator using this information to craft a development plan. The SMFD cannot rely on luck to steer the department's direction. The SMFD must identify, recruit, and retain talent and do its best to invest in peer-mentored relationships. If done correctly, a peer-mentoring relationship will produce dividends in areas far beyond the mentee. The process will allow individual firefighters to bridge generational gaps, retain talent, and protect lives. The concept will signal to firefighters that the department is serious about its future regardless of its goals and aspirations.

Chapter 2

Literature Review

Fire departments are responsible for saving lives and protecting property within their communities. State and federal governments mandate firefighters receive education criteria, skill proficiencies, and training. While the fire industry values peer mentoring, it is challenging to practice mentoring behaviors, continuing education, asset maintenance, and physical fitness. There is a need for an essential tool that can corroborate the value of peer mentoring and other professional traits. This study examines the peer-mentoring behaviors observed within the San Marcos Fire Department and develops a mentoring model that correlates with the asset hierarchy of a firefighter's protective equipment.

Firefighters value peer mentoring. Numerous articles, peer-reviewed studies, and journals exist about peer mentoring within fire departments. In reviewing these resources, three succinct themes emerge from the authors. Peer mentoring is critical to developing relational and developmental skills. Peer mentoring is essential in nurturing relationships among colleagues. These themes align with challenges faced by fire departments throughout the industry. These challenges include increased resource costs on top of government funding losses, increased training mandates due to changes in professional standards, and governmental regulations. There is a deteriorating talent pool of qualified candidates who meet minimum academic criteria, pass an entrance exam, complete a physical agility test, and pass a criminal background check. In addition, smaller communities need help to compete with metropolitan fire departments with more significant resources and job opportunities that may be a safer alternative to emergency services.

Current literature reiterates that mentoring among firefighters can benefit the relational, practical, and behavioral challenges faced by fire departments. Peer mentoring should help align the department's personnel's heads, hands, and hearts through observing, assessing, and analyzing the firefighters' behaviors. This study intends to explore the existing and desired peer-mentoring behaviors of the San Marcos Fire Department and develop a mentoring model that aligns with the fire department's asset hierarchy for firefighters.

This study originated through a conversation with Battalion Chief Howie Minor, responsible for training and mentoring within the department. Chief Minor shared that the fire department does an excellent job adhering to the federal and state mandates for firefighter training. The department has adequate resources, trained personnel, and strategies to ensure its firefighters are current with procedures, equipment, asset maintenance, physical fitness, and technology. According to Chief Minor, mentoring is where his department and other fire departments; are challenged because of the behavioral aspect of the relationship.

By nature, firefighters are relationship-oriented. Firefighters regularly console people on the worst days when responding to events. Firefighters are perceived as more friendly and approachable than their law enforcement counterparts. A fire station is a firehouse. Firefighters routinely prepare and eat meals, work out, celebrate, train, and live together. Members of a fire department are, in a sense, a second family. These shared discussions are essential to individual and communal growth and development.

Literature Search Strategy

Resources were identified through a keyword search using the St. Edward's University library database and Google search engine. The keyword search was divided into three strategic approaches: peer-mentoring behaviors, San Marcos Fire Department data, and peer-mentoring

behaviors within fire departments. Additional keyword searches included a review of firefighter trust resources, Central Texas's fastest-growing communities, firefighter leadership, firefighter mentoring, and emergency services mentoring.

Theoretical Framework

Mentoring has been widely recognized as one of the key factors contributing to skills development, socio-emotional support, career advancement, and success (Montgomery, 2017). According to Montgomery (2017), effective mentoring can increase self-efficacy, expand skills, and improve competencies, supporting individual advancement, including educational and career domains. In essence, peer mentoring is one of the only ways to develop a shared vision of the future and help mentees realize their role in achieving their goals (Holmes et al., 2018).

Impactful mentoring focuses intensely on personal growth as one recognizes and considers the whole person and seeks to support a mentee's advancement (Montgomery, 2017). A holistic approach to peer mentoring is essential to the study's theoretical framework. The researcher intends to illustrate that firefighters' peer-mentoring behaviors result from a holistic equation of intellectual stimulation, practical demonstrations, and relational investments.

The themes of intellect (head), practice (hand), and relationship (heart) will play essential roles in the development of the peer-mentoring behavior hierarchy and mentoring model created for the San Marcos Fire Department. Intellectual behaviors include sharing valuable information (documents, strategies, resources) through discussions, feedback, and reflections, mainly focusing on firefighters and their learning needs (Holmes et al., 2017). Sharing learning resources is an essential practice in securing institutional knowledge and history. Firefighters routinely depart from their departments without sharing a download of their institutional lessons

learned or best practices. Once these relationships dissolve, recovering their knowledge is problematic.

Observed behaviors, oriented to physical action, refer to a mentor's willingness to demonstrate techniques, practices, and routines essential to a firefighter's performance in an emergency. These practices, shared in the field or firehouse, are critical to nurturing trust among firefighters, improving communications skills, and developing operational routines. Relational behaviors oriented to the heart promote trust and empathy among firefighters. Improving these relationships help firefighters share vital information during stressful emergencies, accept critical feedback, execute orders, and fulfill responsibilities on behalf of their team.

The behaviors identified through these themes will assist the researcher in creating an inventory of existing and preferred peer-mentoring behaviors. This data will also create a mentoring model to align peer-mentoring and a firefighter's protective equipment equally valuable to the San Marcos Fire Department.

Review of Research and Methodological Literature

According to MacLaughlin (2018), the word mentor itself was inspired by the character of the Mentor in Homer's *Odyssey*. When Odysseus left for the Trojan War, he asked Mentor, an elderly friend, to counsel his son Telemachus. Thus, Mentor's name has passed into our language as a shorthand term for a wise and trusted teacher or counselor. At the same time, Moed (2012) refers to the practice of mentoring as a relationship between two individuals, one a more experienced or senior person (mentor) and the other a less experienced person (mentee), who share information, practices, and guidance for the betterment of a community. There has been an increasing appreciation that mentoring centered on individuals' needs and personal aspirations

can empower individuals toward personally-defined career advancement. Such individual-centered mentoring is best served by developing a network of mentors within a community, such as a firehouse, to share their knowledge, skill sets, and influence (Holmes, 2018).

The relationship between the mentor and mentee should involve three classic components of mentoring: the educational, professional, and personal aspects of the learning process. According to Moed, mentors must weigh each of these components equally, helping the mentee to acquire and integrate new learning (educational), maximize the potential to become a successful practitioner (professional), and manage transitional states (personal) (2012).

Intellectual (Head)

From an intellectual stimulation perspective, Montgomery often engages the concept of a senior or experienced individual who provides advice and guidance to a novice, or individual with limited experience, in a particular domain (2018). Mentoring in this top-down framework emerges as interactions, primarily based on a one-way flow of information, between a mentor and an individual being mentored. The focus of the mentoring can include a range of goals, including skills or competency development, psychosocial or socio-emotional support, and career development.

The mentor must have core knowledge and skills in the field. It is not feasible to provide career guidance to a mentee if the mentor is unfamiliar with the requirements of the mentee's job (Holmes et al., 2018). Knowledge of the present and vision for the future state of a particular field is essential for the fire department to set goals and directions. McLaughlin talks about creating a safe space to give and receive knowledge as giving a gift of wisdom and having it

graciously appreciated and accepted by others who then carry it to all those within their sphere of influence (2008).

Practical (Hand)

In other settings, mentoring may focus on the behavior, knowledge, skills, reasoning, and attitude of the master teacher or the person most experienced with problem-solving (Holmes et al., 2008). Closely aligned is role modeling, a passive process for the mentor but 1 in which the mentee develops a sense of professional or personal attributes they may wish to emulate—Holmes et al. reference communication as an essential skill set. Mentors must commit time and grow with their mentees, emphasizing listening and active intervention (2008). This builds trust, is necessary for creating a long-term relationship, and allows for understanding the mentee's goals, strengths, and weaknesses.

Peer-mentoring relationships encourage mentees to commit time, energy, and effort to build new routines. These practical demonstrations include a mentor's willingness to show their mentee how to maintain and develop their skill sets. Physical fitness, equipment maintenance, organizational documentation, and rest are essential practices that can be overlooked.

Relational (Heart)

Hudson (2013) outlines that the mentor's attributes contribute to the mentoring process and includes: having the personal qualities for the mentee to be willing to reflect with the mentor, being supportive, being comfortable with talking, being an active listener, and instilling positive attitudes and confidence in the mentee. McLaughlin (2008) lists the behavioral characteristics associated with good peer-mentoring behaviors as intelligence, compassion, flexibility, empathy, patience, and being ethical and psychologically well-adjusted. A holistic

approach to peer mentoring is not about sharing knowledge and skills. An effective peer-mentoring relationship touches the emotional, spiritual, and relational undertones. Allowing that community, in this case, a fire department, to invest wholeheartedly in the needs of their firefighters.

Holmes et al. emphasize that mentors must commit selflessly and actively to peer-mentoring relationships. Exploitation, inattention, and passivity are anathema to effective mentoring. The goal always needs to be the mentee's growth, not the mentor's professional aggrandizement (2018). This essential component must be balanced in an era of highly compressed time to dedicate to a peer-mentoring relationship. Both parties must be committed to the realities of time, energy, transparency, honesty, and resources to foster success.

The mentee needs to be wholly engaged in the process by being punctual, communicative, respectful, and accepting criticism and the challenges posed by the mentor. A functional mentoring process is an essential component of medical education. Good mentoring is a mutual relationship that requires active maintenance (Moed, 2012). For the equative relationship among behavior (actions), intellect (heads), practice (hands), and relationships (hearts) to function, both sides of the equation must be committed.

Summary

Studies show that mentees are more satisfied with their experience and more likely to become mentors. However, McLaughlin (2008) says that there needs to move away from mentoring as a secondary duty to think of mentoring as a primary professional responsibility. To rethink, in essence, what it means to contribute to the community. This study intends to identify

the critical behaviors that connect firefighters' heads, hands, and hearts to support the City of San Marcos.

Chapter 3

Methodology

Current literature reiterates that mentoring among firefighters can benefit the relational, practical, and behavioral challenges faced by fire departments. The peer-mentoring hierarchy should help align the department's personnel's heads, hands, and hearts by observing, assessing, and analyzing the firefighters' behaviors. This study examines the peer-mentoring behaviors observed within the San Marcos Fire Department and develops a mentoring model that correlates with the asset hierarchy of a firefighter's protective equipment.

Research Questions

This study explores peer-mentoring behaviors that can be exercised within the San Marcos Fire Department. The participating firefighters will be surveyed to identify their essential peer-mentoring behaviors. The researcher will build a mentoring model that aligns the highest-ranking peer-mentoring behaviors with the personal protective equipment asset hierarchy. Participants will be surveyed to confirm this equipment hierarchy.

RQ1: What peer-mentoring behaviors are essential to the firefighters of the SMFD?

RQ2: In what ways does it make sense to assign the asset hierarchy of a firefighter's protective equipment to peer-mentor behaviors?

Purpose and Design of the Proposed Study

Fire departments are responsible for saving lives and protecting property within their communities. State and federal governments mandate firefighters to fulfill education credentials, skill proficiencies, and training. While the fire industry values peer mentoring, it is challenging

to practice mentoring behaviors, continuing education, asset maintenance, and physical fitness. A tool that can corroborate the importance of peer mentoring along with other professional traits is essential to align the behavioral (head), practical (hand), and relational (heart) elements of mentoring. This study intends to examine the peer-mentoring behaviors of the San Marcos Fire Department and develop a mentoring model that aligns the fire department's asset hierarchy with the peer-mentoring behavioral order for firefighters to follow.

Research Population and Sampling Method

San Marcos is regionally situated along the Interstate 35 corridor between the capital city of Austin and the military installations of San Antonio. According to the 2020 U.S. Census, the San Marcos population is approximately 63,220. San Marcos is the location of the flagship campus of Texas State University which hosts a Fall 2021 student enrollment of 38,077. The San Marcos population growth has dramatically outpaced its emergency infrastructure and personnel (Hurlbert, 2020). Understanding the demographics of a fast-growing county and city is vital in evaluating the fiscal, managerial, and operational challenges of the San Marcos Fire Department.

The San Marcos Fire Department comprises 83 full-time employees: 72 sworn firefighters, seven administrative officers, and four civilian staff administrators operating within six firehouses strategically constructed and placed throughout the community. The 72 firefighters that serve the department comprise two Anglo/White female firefighters and three Anglo/White civilian administrators employed by the department. The male personnel consist of 58 Anglos/White, 12 Latino/Hispanics, and 1 African American/Black firefighter. The youngest firefighter on shift is 25, and the oldest on duty is 63. The average age of a firefighter on shift is 36 years. The average years in service to the SMFD is approximately 9.7 years (over 30 years -

4; over 20 years – 2; over 15 years – 12; over ten years – 21; over five years – 17; less than five years -18). Many members of the fire department are transplants from other city departments.

Instrumentation

During this study, data from the participating firefighters will be captured using a SWOT (strengths, weaknesses, opportunities, threats) analysis and ranking the peer-mentoring behaviors. The researcher will use the Mentimeter online survey platform to introduce the assessment questions and capture participants' responses. Mentimeter is an interactive, online presentation tool that helps to engage study participation. The platform can gauge comprehension, test knowledge retention, and capture data. The researcher will use the online forum to ask critical questions regarding the strengths, weaknesses, opportunities, and threats associated with peer-mentoring behaviors of the fire department. The collected data and ranking will create a mentoring model aligning behaviors with personal protective gear asset hierarchy. The behavioral order will be aligned with the department's asset hierarchy and theoretical framework (behavioral–head, practical–hand, relational–heart).

A SWOT (strengths, weaknesses, opportunities, and threats) analysis looks at the fire department's internal and external factors. Internal factors are the fire department's strengths and weaknesses. External factors are threats and opportunities. It would be an external issue if an issue or situation existed, even if the organization did not (such as technological changes or a natural disaster). The analysis will help identify peer-mentoring behaviors that firefighters perform well and where opportunities for improvement exist. These critical success factors will give the fire department a competitive advantage in addressing firefighters' behavioral, practical, and relational challenges. Identifying these strengths can assist the department's leadership and personnel in nurturing these behaviors within the firehouse.

Growing relationships involves finding ways of using and building on these behaviors. A SWOT analysis can help the San Marcos Fire Department identify and improve weaknesses before they become a problem. When performing a SWOT analysis, it is essential to be realistic about the shortcomings of an organization and deal with them adequately. A SWOT analysis can help identify opportunities for the San Marcos Fire Department to improve the department. External factors create opportunities, such as new tools, behavior changes, and organizational expectations. Threats are external factors that could cause problems for a fire department, such as changes in leadership, funding challenges, or new government policy. A SWOT analysis can help a department identify threats and ways to counteract them, depending on the personnel's strengths and weaknesses.

Data Collection

Fire Chief Les Stephens and Battalion Chief Howie Minor have granted access to the facilities and resources of the fire department to complete the data collection of this study. Chief Les Stephens has offered to email the department's personnel an invitation to participate in the survey as a voluntary continuing education and learning session. The continuing education session will be scheduled during the first hour of three personnel shift changes (Shifts A, B, and C).

Chief Stephens' invitation will include a description of the peer-mentoring behavior study and confidentiality disclosure form. The identity of participating firefighters will remain anonymous. Copies of all collected materials will remain in possession of the researcher and Chief Les Stephens until the end of the project. Digital copies of all captured information and data will remain with the researcher and Chief Les Stephens. The data will be disposed of at the end of the study.

Data will be collected from participating firefighters in a focus group setting by completing a SWOT analysis using an online Mentimeter survey platform. The focus group will occur in a San Marcos Fire Department Central Station classroom. The researcher will use the online forum to ask critical questions regarding the strengths, weaknesses, opportunities, and threats associated with peer-mentoring behaviors of the fire department. Three shifts of firefighters from six firehouses will rotate through the classroom over three days to complete a Mentimeter survey using their cell phones or laptop computer.

The participating firefighter will sign a consent form and release the recording and confidentiality forms before the survey. The researcher will reiterate the purpose of the study and provide instructions to complete the SWOT analysis using their mobile phones or laptop computers. The questions associated with each category of the analysis will be projected onto a display screen and read aloud by the researcher. Participants will use their devices to respond to each question. Participants may respond to the questions multiple times. The responses will appear immediately on the display screen and be visible to the other participants.

SWOT Analysis Questions

Battalion Chief Howie Minor worked with the researcher to structure the wording, phrasing, and sequence of the SWOT analysis questions. The SWOT analysis was structured in phases to introduce the survey respondents to the concept of peer mentoring, behaviors associated with peer mentoring, and inquiries on how firefighters mentor each other. The survey then transitioned into an assessment of the observed and practiced peer mentoring strengths, weaknesses, opportunities, and threats within the San Marcos Fire Department. The following is a listing of questions asked of the survey respondents.

Category 1: Strengths

What are the peer-mentoring behaviors that the fire department performs well?

When it comes to peer mentoring, what are you doing well?

Describe a peer-mentoring behavior you excel at demonstrating.

Category 2: Weaknesses

What peer-mentoring behaviors does the fire department not do well?

When it comes to peer mentoring, where can we improve?

In a few words, describe a peer-mentoring behavior you need to demonstrate.

Category 3: Opportunities

What resources does the fire department provide to improve peer-mentoring behaviors?

What resources should the fire department provide to improve peer-mentoring behaviors?

What do you need to be a better peer mentor in the fire department?

Are there moments within your firehouse to practice or demonstrate peer mentoring?

Category 4: Threats or Consequences

What are the consequences to the fire department, firehouse, and firefighters if peer mentoring needs to be prioritized?

What is the associated cost to the fire department, firehouse, firefighters, and community if peer mentoring needs to be prioritized?

What threats exist to the fire department, firehouse, firefighters, and community if peer mentoring is not prioritized?

Data Analysis Procedures

After the assessments were completed, the data was transcribed to an excel spreadsheet for review. The researcher identified repeated key terms, behavioral descriptions, routines, practices, and reoccurring themes that emerged from the data. The emerging themes will be itemized into individual columns based on documented behaviors from the study participants. The behaviors within the reoccurring themes will be calculated to determine how often the study participants referenced each behavior.

Coding the attributes of intellect (heads), practices (hands), and relationships (hearts) will cultivate a holistic approach toward peer mentoring. Details that will be coded will align with the operational themes of intellect (heads), practices (hands), and relationships (hearts). Intellectual (heads) attributes engage intellectual peer-mentoring behaviors such as reflection, critical thinking, and education. Practical (hands) attributes are physical by nature, reflective of hands-on demonstrations of peer mentoring. These behaviors may include modeling behaviors and demonstrating routines. Relational (heart) attributes show emotional support, empathy, and personal behaviors that encourage the heart.

Limitations of the Research Design

Limitations

To manage the research sample, the study aims to explore the peer-mentoring behaviors of firefighters in the San Marcos Fire Department. The research timeline is limited to accommodate the academic expectations of the St. Edward's University doctoral degree

program. Before the survey, a study description was shared with participants; the data collection was limited to the in-class assessment.

Delimitations

The researcher will communicate regularly with the fire department's leadership and participants to address study limitations. Study participants will receive a project summary, including the study's purpose, SWOT analysis description, instructions to use the Mentimeter platform, participant consent form, and recording release form. Study participants will receive verbal instructions and an opportunity to ask questions before the focus group SWOT analysis. Chief Les Stephens and Howie Minor will review, edit, and approve the questions before the study.

Participants will input their responses to the SWOT analysis questions using the Mentimeter platform during the focus group. The answers will appear on a display screen in the classroom and be visible to the focus group participants. Participants will be able to share their thoughts with other participating firefighters as each question is presented. This approach intends to stimulate reflection, thought, and responses. Each focus group will be debriefed on the study's next steps at the end of the SWOT analysis. The researcher will prepare a final report of the raw data, compiled data, and assessment for the participants and fire chief.

The researcher will capture visual observations, questions, answers, and other critical details in a journal. The researcher will prepare a reflective journal entry to capture thoughts, process improvement details, and unanticipated themes during data collection. These research reflection journals will be valuable in improving the study processes.

Expected Findings

The San Marcos Fire Department is a high-functioning emergency response organization. The department is fortunate to be led by a seasoned fire chief whom firefighters trust. Chief Stephens and his team have worked diligently to cultivate a community of trust, honesty, transparency, fellowship, and collective growth. This study aims to identify the current and desired peer-mentoring behaviors that can be developed within the department to enhance strengths, address weaknesses, maximize opportunities, and understand the consequences of neglecting peer-mentoring.

Peer mentoring is essential to nurturing trust, open communication, and team development, relational development such as mentoring is neglected for mandated structured training. The researcher anticipates that the participating firefighters can recognize, identify, and articulate the peer-mentoring behaviors demonstrated within the department. Firefighters are relationship-oriented. Each crew within a firehouse is like a family that works, sleeps, eats, trains, and learns together. Each firehouse has its behaviors as a family: communicating, encouraging, sharing, disciplining, critiquing, and celebrating together. The data collected during the study will capture these relationship behaviors as peer-mentoring behaviors developed in firehouses. The SWOT analysis will allow the participating firefighters to categorize their behaviors as strengths, weaknesses, opportunities, or threats to their peer-mentoring relationships within the department.

Ethical Issues

Conflict of Interest Assessment

The study's principal researcher is a former elected official of the City of San Marcos and maintains a professional relationship with the San Marcos Fire Department members. Fire Chief

Les Stephens has written permission to conduct this study within the Firehouse #5 training facility and observe the study participants. Participating firefighters may choose not to participate in the research and may withdraw or choose not to respond to questions during the study. Data collected during the study is publicly accessible information. The demographic data used to describe the department was retrieved from a public website. The study materials, raw data, and summary will remain in the principal researcher and Chief Les Stephens's position. The researcher is not related to any City of San Marcos or the San Marcos Fire Department employees. While the San Marcos Fire Department provides free access to its training classroom, neither the City of San Marcos nor the San Marcos Fire Department has provided financial support for this study. The firefighters participating in the survey will receive coffee and snacks during the assessment but will not receive monetary compensation.

The study's principal researcher will purchase materials to complete the data collection. The study will not require additional financial support, and the principal researcher will not seek financial help. The researcher of this study does not compensate the dissertation committee members. The university may pay dissertation committee members who are full-time St. Edward's University employees.

Researcher's Position

The principal researcher is a doctoral student at St. Edward's University and a full-time professor of business management at Concordia University. The researcher previously served as an elected official for the City of San Marcos, where he established relationships within the fire department. Since leaving elected office, the researcher has maintained professional and social relationships with many fire department employees. The connections have provided insight and encouragement for studying peer mentoring within the fire department.

Ethical Issues in the Proposed Study

The ethical issues involved in this study include the personal disclosure of peer-mentoring relationships, trust and distrust, and perceptions of not being peer-mentored. The participants of this study will disclose the positive, negative, and critical needs and consequences of the peer-mentoring behaviors they have experienced within the fire department. These conversations can be challenging, sensitive, and intimate to disclose, especially if the fire department's behaviors are not shared. This study's concerns include favoritism, prejudice, and exclusivity.

Fire departments depend upon transparent communication and trusting relationships between their firefighters to protect their lives. Firefighters must share instructions, direction, criticism, praise, and encouragement at the firehouse and in an emergency. The study will explore peer-mentoring behaviors that can expose firefighters' lack of trust and transparency. The SWOT analysis questions regarding weaknesses of peer mentoring can generate comments related to distrust, lack of communication, and transparency issues. Non-participation both in the survey and the ongoing peer mentoring will be voluntary.

The study is dependent upon firefighters sharing observations of peer-mentoring behaviors. The researcher anticipates that firefighters will share their experiences. However, firefighters may not share their experiences because they cannot articulate their experiences or believe they are not mentored. This study's approach can risk firefighters' morale, who may feel neglected by their peers and leaders.

Summary

Throughout the study, the researcher explored the existing and preferred peer-mentoring behaviors among firefighters from the San Marcos Fire Department. The researcher will capture observations of the fire department's strengths, weaknesses, opportunities, and threats through an online assessment of participating firefighters. This data (peer-mentoring behaviors) will be captured within an inventory used to create a mentoring model aligned with the department's hierarchy of protective equipment. The intent is to use this participant-developed mentoring model to demonstrate the practical nature of the San Marcos Fire Department's peer-mentoring behaviors to the equipment that saves their lives daily.

Chapter 4

Introduction

The study aimed to explore the peer-mentoring behaviors of firefighters within the San Marcos Fire Department. As described in Chapter 3, a SWOT analysis was conducted with San Marcos firefighters to assess the strengths, weaknesses, opportunities, and threats associated with the department's peer-mentoring behaviors. Fire Chief Les Stephens and Battalion Chief Howie Minor were essential champions, encouraging firefighters to participate in focus groups to complete a survey using a Mentimeter mobile application. Mentimeter is a mobile application used to create presentations with real-time feedback. Mentimeter was used to engage with the study participants using live polls, word clouds, quizzes, and multiple-choice questions. The application tracks participants' responses to questions, creates real-time visual data impressions, and generates downloadable results in PowerPoint and Excel.

The following content is a description of the research methodology, participant demographics, data analysis, practical applications, and the limitations of the research study. There were minimal adjustments to the research methodology described in previous chapters. The study participants volunteered of their own free will and completed the appropriate consent releases and surveys to capture demographic information.

Before the assessment, study participants received an email from the researcher thanking them and sharing the purpose of the study. The email included a hyperlink directing participants to an online, fillable release of recordings, participant information survey, and consent form. Once the consent forms were received, the study participants received a confirmation email with

the defocus group's date, time, and location. Participants were encouraged to bring a wireless mobile device to the focus group to complete the SWOT analysis.

Of the 83 full-time personnel employed by the San Marcos Fire Department, 34 firefighters, five department administrators, and three office administrators participated in the peer mentoring SWOT analysis over four days. The participants were invited to the central fire station during a shift change to avoid interfering with their duties. Participants signed a volunteer roster and completed any missing consent forms as they arrived in the classroom. After a brief welcome statement and research summary from the principal researchers, the participants were directed to the Mentimeter website, using a numeric code to access the SWOT analysis questions. The principal researcher moderated the assessment and described how the Mentimeter platform would display the responses. At the end of each one-hour session, the researcher thanked the participants for their time and informed them that the reassessment results would be shared with the fire department.

Description of the Sample

The following describes the research participants from the San Marcos Fire Department who volunteered in the peer mentoring SWOT analysis. Eighty-three full-time employees from the San Marcos Fire Department were invited, and 42 full-time employees participated in the SWOT analysis. Thirty-four firefighters, five department administrators (fire chief, battalion chiefs, assistant chiefs), and three office administrators were involved in the research study.

Thirty-seven males and five females self-identified as participants in the study. 34 Anglo/white, 7 Hispanic/Latin. 13 participants identified themselves as between the ages of 19 and 29. Fourteen participants in the study were between 30 and 39 years of age. Seven

participants identified themselves as being between 40 and 49 years of age. Eight participants were over the age of 50 years old. The average age of the study participants was 37.2 years.

Two study participants were new to the San Marcos Fire Department and fire industry with less than one year of service. Nine participants had 1 to 5 years of service in the fire industry, with 2 of these participants having less than one year of service in the San Marcos Fire Department. 9 participants were identified as having between 5 and 10 years of service within the fire industry, all of which with the San Marcos Fire Department. Fourteen participants in the study have between 10 and 20 years of service in the fire industry, 13 of these participants have served their entire career with the San Marcos Fire Department, and 1 participant has 1 to 5 years of service within the San Marcos Fire Department. 8 study participants shared that they have over 20 years of service within the fire industry, 6 of these participants have spent their entire career with the San Marcos Fire Department, and 2 participants have served 10 to 20 years of their career with the San Marcos Fire Department.

Fifteen study participants identified their department role as a Firefighter or Probationary Firefighter. Four participants served as Fire Chief, Assistant Chief, and Battalion Chief. Three of the participants identified themselves as serving in administrative office roles or non-operations-related roles. Fourteen study participants identified themselves as serving as a Captain, Paramedic Captain, Engineer, or Fire Marshall.

Fifteen study participants identified their role or rank within the fire department as entry-level, probationary, and firefighter. Six participants identified their role within the fire department as an engineer. Fourteen participants identified their role within the fire department as an officer with the rank of captain or captain/paramedic. Three participants identified their role within the fire department as serving in non-operations and office administrators. 4

participants identified their role within the fire department as an officer with the ranks of either fire chief, assistant fire chief, or battalion chief.

In 2021, the San Marcos Fire Department opened its sixth firehouse within its district. Each firehouse was represented in the research study. Four participants were assigned to station #1, located in the city's center. Five participants were assigned to station #2, a residential neighborhood station. Six participants were assigned to station #3 near a residential neighborhood. Four participants were assigned to station #4, a newer firehouse in a hospital district. Twelve participants were assigned to central fire station #5, where the department's administrative offices and training classroom are located. Eleven participants were assigned to station #6, the newest firehouse in the service district.

The fire department personnel who volunteered for the research study responded well to the Mentimeter platform—the primary researcher abided by most of the data collection plan presented in Chapter 3. After the two focus groups, Battalion Chief Howie Minor asked for the inclusion of one additional question. The first two focus groups answered the question but received responses from groups 3, 4, 5, and 6. Besides this question, the primary researcher did not deviate from the data collection plan and captured responses from 42 volunteers.

Data Analysis

The Mentimeter survey platform allowed the researcher to display survey questions while participants responded to the questions with a mobile phone or laptop. The platform displayed real-time responses, with graphic aids reflecting the collective responses of the focus group. The platform also saves participants' quantitative and qualitative data. The qualitative and quantitative data provide critical insights into the strengths, weaknesses, opportunities, and

threats regarding peer-mentoring behaviors identified by the survey participants. Mentimeter allows the researcher to download a PDF image of qualitative data input by the participants and report quantitative data on an Excel spreadsheet.

During the survey, participants responded to questions about their familiarity with peer-mentoring behaviors, their behavioral practices, experiences as mentors and mentees, and mentoring behaviors observed as firefighters within the San Marcos Fire Department. The initial questions were followed by four phases associated with the strengths, weaknesses, opportunities or resources, and threats of mentoring behaviors observed within the San Marcos Fire Department. Survey participants responded to the following questions as part of the research study SWOT analysis.

Phase 1. Understanding Mentoring

- Do you currently have a mentor? (Poll survey)
- In a word or short phrase, what does mentoring mean to you? (Word cloud)
- What behaviors have you observed from a mentor? (Short answer)
- How does a San Marcos firefighter become a mentor? (Short answer)
- How do San Marcos firefighters mentor each other? (Short answer)

The participants involved in the research study have an in-depth understanding of peer-mentoring behaviors. Many survey respondents indicated that they are mentors, are currently serving a mentee, and have a mentor in their lives. The mentoring relationships within the San Marcos Fire Department were initiated informally, with most respondents crediting the rookie training academy as connecting mentors and mentees. The firefighters identified behaviors associated with sharing knowledge, modeling behaviors, encouraging the heart, providing

guidance, and being present as essential peer-mentoring behaviors of a mentor within the San Marcos Fire Department. The firefighters also commented on poor mentoring behaviors, including lack of involvement, complacency, disengagement, and gossip.

Phase 2. Firefighters as Mentors

- Are you a mentor? (open-ended, short answer)
- In a word or short phrase, what behaviors have you practiced as a mentor? (Word cloud)
- Describe the behaviors that you have practiced as a mentor. (open-ended, short answer)
- How have you developed your mentoring behaviors? (Short answer)
- How are mentoring relationships established in the San Marcos Fire Department? (Short answer)

Fire Chief Les Stephens reiterated the statements conveyed within the literature related to peer-mentoring behaviors of firefighters, and the survey respondents verified his statements. Firefighters value peer-mentoring behaviors associated with sharing information, modeling behaviors, learning collaboratively, and encouraging the heart. Firefighters depend on peer mentoring to share knowledge, improve skill sets, generate trust, build cohesion, and support one another. While firefighters may develop their operational skill sets through regulated, mandated training, peer mentoring is situational and organic and requires firefighters to share critical feedback with colleagues who depend on their performance.

Phase 3. Firefighters as Mentees

- Are you a mentee? Do you have a mentor? (Poll Survey)
- As a mentee, what mentoring behaviors have you observed from a mentor? (open-ended, short answer)

- In a word or a short phrase, what mentoring behaviors have influenced your growth as a firefighter? (Word cloud)
- Describe the mentoring behaviors that have influenced your growth as a firefighter. (Open-ended, short answer)
- If you have a mentor, how did your relationship start? (Open-ended, short answer)

According to the survey data, most firefighters consider themselves mentors and have mentoring relationships with other firefighters. However, the data also indicates that mentors within the San Marcos Fire Department are only sometimes sure when they are or have become a mentor. The survey respondents can identify and describe the peer-mentoring behaviors observed and practiced regularly by other mentoring firefighters. Firefighters who identified as mentors shared that their relationships began formally during a rookie training session or informally through mutual interests. The survey participants indicated that social activities, after-action conversations, and discussions about home life were contributors to establishing a beneficial peer-mentoring relationship.

Phase 4. SWOT Mentoring Strengths

- Describe the mentoring strengths of the San Marcos Fire Department. (Open-Ended, short answer)
- What mentoring behaviors have positively impacted you as a San Marcos firefighter? (Open-ended, short answer)
- What mentoring behaviors are most valued in the San Marcos Fire Department? (Open-ended, short answer)

Research participants identified several peer mentoring strengths practiced and regularly observed within the San Marcos Fire Department. These strengths include behaviors related to sharing guidance, advice, coaching, and experiences. Survey participants also acknowledged an enriched training culture established within the fire department. Firefighters specifically referenced the value of peer-to-peer training where another firefighter demonstrated behaviors and skills. The survey participants referred to the department as a success-driven environment with high standards and expectations for performance. The survey participants referenced emotional behaviors as strengths practiced by colleagues. Words of encouragement, positivity, love, and empowerment of others were referenced as critical strengths shared among firefighters. Examples were expressed regarding statements of encouragement, empathy, and motivation being shared during training sessions and repeated during calls for service. Firefighters also referenced the value of available budget resources to perform their job as a mentoring strength. The survey participants referenced the department administration's tenacity in pursuing funding and advocating for resources as a strength replicated within the training culture.

Phase 5. SWOT Mentoring Weaknesses

- What are the mentoring weaknesses of the San Marcos Fire Department? (Open-ended, short answer)
- Why do these mentoring weaknesses need to improve? (Open-ended, short answer)
- How can the San Marcos Fire Department improve mentoring among firefighters? (Open-ended, short answer)
- How have mentoring weaknesses influenced the San Marcos Fire Department? (Open-ended, short answer)

Research participants identified peer mentoring weaknesses practiced and observed within the San Marcos Fire Department. These weaknesses include behaviors related to complacency and laziness, a lack of accountability, unclear expectations, poor leadership, and ineffective communication. Firefighters referenced firefighters who did not embrace the training culture, mentors who did not model behaviors and were absent from training exercises, and the lack of a formal mentoring program and relationship expectations. Survey participants referenced mentoring weaknesses related to ego and whining. Poor attitudes, gossip, and belittling behaviors during training sessions were other behaviors referenced as behavioral weaknesses within the San Marcos Fire Department.

Phase 6. SWOT Mentoring Opportunities

- Do you feel mentoring is currently supported or promoted by the San Marcos Fire Department? (Poll survey)
- How does the San Marcos Fire Department encourage mentoring among firefighters? (Open-ended, short answer)
- How does the San Marcos Fire Department discourage mentoring among firefighters? (Open-ended, short answer)
- In a word or short phrase, what do you need from the San Marcos Fire Department to be a better mentor? (Word cloud)
- Describe the resources you need from the San Marcos Fire Department to improve your mentoring behaviors. (Open-ended, short answer)
- How can the San Marcos Fire Department support mentor behaviors among firefighters? (Open-ended, short answer)

Research participants identified resources and opportunities the San Marcos Fire Department should acquire or implement to maximize their mentoring strengths and address the department's behavioral weaknesses. These opportunities include functional, behavioral, and operational changes in shift assignments to provide more training, planning, and rest time. Firefighters recommended that the department dedicate more time to mentoring and relationship development and less online training. The survey participants suggested that the fire department's administration provide more help and support for mentors to spend with mentees. The recommended support included additional training in leadership, communication, listening behaviors, and group accountability.

The survey participants recommended that their peers hold a greater degree of accountability by demonstrating pride in their work and passion for the profession and making a more significant effort to nurture relationships by turning off the television and talking to each other. The survey respondents expressed a need to demonstrate positive attitudes throughout the firehouses.

Phase 7. – SWOT Mentoring Threats and Consequences

- In a word or short phrase, what are the threats if peer mentoring is ignored? (Word cloud)
- What are the threats to the San Marcos Fire Department if peer mentoring is ignored?
(Open-ended, short answer)
- What are the threats to the City of San Marcos if peer mentoring is ignored? (Open-ended, short answer)
- What are the threats to firefighters if peer mentoring is ignored? (Open-ended, short answer)

- What are the threats to you if peer mentoring is ignored? (Open-ended, short answer)

Research participants identified threats to San Marcos residents, the City of San Marcos, the San Marcos Fire Department, and individual firefighters if the fire department ignored peer mentoring. These threats included organizational complacency, laziness, and a culture of ineffective mentoring relationships. The participating firefighters expressed concern for the safety of residents, negatively impacted by poor service and a failure in the fire department's core mission to meet the health and safety needs of San Marcos. Firefighters expressed concerns about the loss of trust from the public if firefighters were unable to communicate, collaborate, and function cohesively.

The survey respondents identified threats specific to the city organization, including low morale, poor retention, increased personnel vacancies, and rising overtime costs associated with fire personnel losses. The most critical threat related to a lack of investment in peer-mentoring behaviors was potential firefighter injuries and line-of-duty deaths. The survey participants respect and acknowledge the dangers associated with their chosen profession. The safety of the residents of San Marcos and the lives of their colleagues are the greatest priority of the San Marcos Fire Department. These documented threats serve as a reminder of why peer mentoring is an asset in the relational development of the San Marcos Fire Department.

Phase 8. – San Marcos Fire Department Asset Hierarchy

- This is an image of a firefighter wearing elements of a firefighter's essential protective equipment. In your opinion, what are three crucial elements of equipment that a firefighter must use to protect themselves and others? (Open-ended, short answer)

As the researcher projected the survey questions, participants viewed each question and subsequent responses on the projection screen as answers were received. Respondents were allowed to share solutions in their own words or replicate answers from other respondents, like their perspectives. The methodology resulted in responses articulated using similar phrases with different word choices. The researcher reviewed the qualitative statements captured from respondents on an excel spreadsheet. Each answer was reviewed for content and replicated statements. Responses were then quantified and compiled as themes reflective of peer-mentoring behaviors observed by the participants.

While the research study explored the existing and preferred peer-mentoring behaviors within the San Marcos Fire Department, the respondents' data included notable outliers. The outliers included references to a 48/96 shift structure and developing a firefighter training field to practice emergency skills. Survey respondents referenced the outliers during multiple focus groups. These responses did not align with specific peer-mentoring behaviors but may serve as resources for future consideration.

Survey respondents

Practical Application of Findings

Part 1

The survey responses provided data describing the peer-mentoring behaviors each firefighter has observed, experienced, or practiced while serving the San Marcos Fire Department. The participants provided data that reflected their personal mentoring experiences. The questions asked if the participant is a mentor if they have a mentor, and how mentoring relationships are established in the San Marcos Fire Department. These questions are essential in

encouraging the participants to reflect upon their experiences as mentors and mentees within the fire department.

The researcher reviewed the data regarding mentoring behaviors and compiled them into micro themes reflecting the behaviors experienced by the responding firefighters. Three macro themes emerged through the data compilation process. The macro themes reflect the physical source of each micro theme behavior. The researcher chose to associate these macro themes with parts of the body: head, hands, and heart. Themes related to the head include micro-level intellectual behaviors such as learning, knowledge, listening, information sharing, and professional and personal development. Themes associated with hands included micro-level physical behaviors such as modeling, demonstrating, performing, teaching, and direct support. Themes associated with the heart included micro-level behaviors such as empathy, sympathy, care, love, emotions, friendship, compassion, and kindness.

Part 2

Research Question #1: What peer-mentoring behaviors are essential to the firefighters of the SMFD?

The data analysis indicates that individual firefighters observe a diverse range of behaviors perceived as peer-mentoring behaviors. Each behavior can be interpreted and described differently by the individual respondent, but the influence of mentoring behavior on the firefighter generates a consistent sense of value. The behaviors that appear to be valued most by survey participants include physical themes associated with the macro theme of hands. These behaviors include a mentor's literal presence, personal involvement, and physical actions. Firefighters highly value the behaviors of a mentor's presence to share workloads, demonstrate

actions, model behaviors, listen with empathy, and nurture relationships through conversations. The firefighting profession is intensely physical, requiring an essential, shared investment of energy and emotion from a crew of professionals. In return, firefighters expect their guides, mentors, and leaders to reciprocate these behaviors within their professional relationships.

The survey data highlighted a focus on behaviors associated with emotional support, as reflected by the macro theme of heart. The peer mentoring behavior related to the heart includes empathy, encouragement, love, support, and demonstrating interests outside the firehouse. Firefighters observed mentors showing vulnerability, and genuine concern for the well-being of others, openly displaying emotions of happiness, sadness, and frustration. Mentors willing to offer genuine realizations indicated a greater connection to their colleagues through honest communication and empathetic listening.

According to the data, San Marcos firefighters value mentors who invest in their mentees' intellectual and professional growth. These mentoring behaviors associated with the head are demonstrated through the sharing of knowledge through continuing education, knowledge sharing, constructive criticism, and lessons conveyed through storytelling. The practice of storytelling is not exclusive to the firefighting industry or the San Marcos Fire Department. However, firehouse kitchens and tailboard conversations have become synonymous venues within the profession. Firefighters value the time, vulnerability, and authenticity of lessons and critiques shared by a mentor individually or as a group.

Research Question #2: How does it make sense to assign the asset hierarchy of a firefighter's protective equipment to peer-mentoring behaviors?

Associating a firefighter's physical inventory with their mentoring behaviors is absurd. The researcher intended to develop a poster that could be used by the San Marcos Fire Department to align mentoring behaviors with the hierarchy of a firefighter's protective equipment. The researcher instructed the survey participants to review an image of a firefighter with essential protective equipment and assets. The firefighters were asked to rank the top three pieces of equipment essential when responding to an emergency. The researcher anticipated that the survey respondents would include a listing of equipment such as an axe, water hose, ladder, breathing apparatus, or protective clothing. However, the firefighters responded with terms associated with the macro heart theme of people and emotional intelligence. When the firefighters were asked to describe their top three physical assets, the majority responded with terms such as team, heart, communication, love for the job, commitment to others, and people. The survey responses were consistent with the SWOT analysis, which indicated that firefighters are drawn toward mentors who practice emotionally intelligent behaviors associated with relationships and compassion.

The survey responses encouraged the researcher to reflect upon the initial intentions to design a poster aligning specific peer-mentoring behaviors with essential assets. After reflecting on the responses, the researcher created a poster that aligns the macro themes of the head, hands, and heart with general mentoring intentions. To maximize the study's focus on people, the poster will feature three San Marcos firefighters: a female, a male, and a person of color to demonstrate the department's diversity. One firefighter will be featured holding their helmet while exposing their head. The statement, Teach Me, will be aligned by the head, articulating the mentoring behaviors of knowledge sharing, learning, and intellectual development. Another firefighter will be featured extending their hands while wearing fire-resistant gloves. The statement, show me,

will be aligned by the hands, articulating the mentoring behaviors of modeling behaviors, demonstrating actions, physical presence, and collaborative effort. The last firefighter will be featured with their hands extended in the shape of a heart over their chest. The statement, love me, will be aligned with their heart, articulating the mentoring behaviors of empathy, compassion, love, and encouragement.

The posters featuring San Marcos firefighters and the critical peer-mentoring behaviors identified through the research study SWOT analysis will be printed and displayed in each firehouse. The simplistic design is intended to stimulate discussions and mentoring relationships among the San Marcos Fire Department firefighters. The general nature of the terms is meant to encourage discussion about the mentoring behaviors that are currently practiced and those that need improvement.

Limitations of the Study

The researcher encountered anticipated limitations during the study. The City of San Marcos has invested resources to hire local, diverse talent. Despite these efforts, the fire industry is challenged to recruit female candidates and ethnic minorities. The San Marcos Fire Department also needs help to compete with neighboring communities offering higher pay and a more significant activity rate. While the San Marcos Fire Department does its best to hire and retain minority talent, it was challenging to recruit a diverse pool of research participants. The researcher extended invitations directly to Latino, black, female, and LGBTQ firefighters who participated in the research study.

Before the survey, Battalion Chief Howie Minor reviewed the survey questions and recommended minor edits. Chief Minor attended focus group sessions #1 through #6. He observed the SWOT analysis and shared feedback on the process. After the first focus group

session, Chief Minor shared that the survey was missing a question regarding the firefighters' perspectives on the current level of leadership support for peer-mentoring behaviors. Based on Chief Minor's request, the researcher added a question asking if firefighters felt supported by the department in developing peer-mentoring behaviors. The added question was included in the SWOT analysis of focus groups #3, #4, #5, and #6.

Summary

Research participants completed a SWOT analysis exploring the peer-mentoring behaviors observed and practiced within the San Marcos Fire Department. The survey participants identified behavioral strengths highlighting the fire department's training culture, leadership tenacity, emotional encouragement, and organizational resources. The participants identified mentoring weaknesses related to complacency, laziness, poor attitudes, a lack of leadership presence, unclear direction, and egos that can negatively influence organizational cohesiveness. In addition, the survey participants identified operational resources, behavioral improvements, and structural adjustments that can improve mentoring weaknesses. These opportunities include changes to how shifts are assigned, increased communication and relationship development training, and improved leaders being present during training exercises. The data also reflected threats to residents, the City of San Marcos, the San Marcos Fire Department, and firefighters if investments in peer-mentoring behaviors were ignored. These threats included a loss of public trust, recruitment and retention struggles, poor customer service, firefighter injuries, and line-of-duty deaths. While all threats are critical to the operation of the San Marcos Fire Department, threats related to injury and death are of the utmost importance to the fire department and the San Marcos community.

The research data from the SWOT analysis identified numerous micro-themed mentoring behaviors observed and practiced by members of the San Marcos Fire Department. Throughout the data review, macro-themed mentoring behaviors emerged and were aligned with three physical reference points.

Mentoring behaviors associated with learning, knowledge sharing, skills development, and education were related to the Head and assigned the theme - Teach Me. Behaviors indicative of physical activity, modeling behaviors, acting, and being present were aligned with the Hands and set the theme – Show Me. Finally, mentoring behaviors associated with emotions, empathy, compassion, encouragement, and love were indicative of the Heart and set the theme – Love Me.

The men and women of the San Marcos Fire Department want to receive new insights and are eager to share their knowledge. Teaching one another through training, shared experiences, and information is an essential mentoring behavior valued by the San Marcos Fire Department. The behavioral themes associated with Teach Me are present within the fire department, and firefighters want to see a more significant investment in intellectual resources.

Modeling behaviors are valued mentoring strengths within the San Marcos Fire Department. Research participants stated that witnessing a mentor demonstrates a task, skill, or behavior was critical to their professional growth and development. Demonstrating behaviors that peers can mimic helps nurture trust, encourages growth, and strengthens relationships. However, participants are dissatisfied with administrative leaders' lack of physical presence, visibility, and participation. This lack of involvement can erode trust within relationships and damage morale. San Marcos firefighters want to see their leaders actively involved and working alongside their peers.

The macro behaviors associated with the Heart are valued more than those aligned with the Head or Hands. While all the mentoring behaviors are valuable to the organization, the research data indicates that behaviors associated with kindness, love, compassion, empathy, and encouragement are the most important. Survey participants were asked to align what they perceived as essential mentoring behaviors with the most crucial protective equipment when responding to an emergency. Instead of selecting a vital tool or protective gear, most firefighters referenced the value of their fellow firefighters, passion for the job, and love for one another. According to the firefighters in the research study, people are an essential resource within the San Marcos Fire Department. This speaks directly to the people and family-oriented culture of the San Marcos Fire Department and the men and women who serve the city's residents.

Chapter 5

Introduction

The study aimed to explore the peer-mentoring behaviors observed and practiced by firefighters of the San Marcos Fire Department. The study participants completed a SWOT analysis to share the mentoring behaviors and practices they observed and demonstrated during their firefighting career with the San Marcos Fire Department. Macro and micro behaviors were identified within the data allowing the researcher to categorize the behaviors and align the practices to the physical aspects of a firefighter's head, hands, and heart. The alignment of these peer-mentoring behaviors to the firefighter will be used to produce a poster that can be used to teach firefighters how to practice peer-mentoring skills. The closing chapter will review the study results, implications for future use, and recommendations for a prospective study.

Discussion of the Results

Research Question #1: What peer-mentoring behaviors are essential to the firefighters of the SMFD?

The study participants shared behavioral descriptions that aligned with developing essential peer-mentoring skills such as information sharing, modeling behaviors, physical presence, and encouragement. These behaviors were aligned with the physical attributes of a firefighter that are focal points in developing relationships. These behavioral and physical alignments allowed the researcher to create a poster to guide firefighters in developing peer-mentoring relationships.

Research Question #2: How does it make sense to assign the asset hierarchy of a firefighter's protective equipment to peer-mentoring behaviors?

The researcher categorized the behavioral macro themes based on how the firefighters observed and practiced each behavior. The behavioral macro themes included Teach Me, Show Me, and Love Me, which are aligned to the physical attributes of a firefighter's head, hands, and heart. Aligned with the head, Teach Me emphasizes the importance of sharing knowledge and information with colleagues, reinforcing the beneficial practice of teaching and learning from fellow firefighters. Aligned with the hands, Show Me reiterates the value of demonstrating tasks through physical activity and presence. Physical activity, presence, and visibility are essential to building stronger peer-mentoring relationships within the San Marcos Fire Department. Love Me, aligned with the heart, demonstrates the crucial values of encouragement, empathy, and compassion. The firefighting profession is difficult, traumatic, and painful. Firefighters need an outlet and inlet to share and express their emotional needs. The research data shared by the participating firefighters indicated that people are the department's most essential resource and should be a resource of strength, encouragement, and support for others.

Discussion of the Results of the Literature

Previous research literature reiterates that firefighters value growth, knowledge, and mentoring. According to Carter (2018), firefighters want to be mentored by people who can improve their skills, situational awareness, and performance to serve their department. The firefighters participating in the research survey confirmed this value. For some San Marcos firefighters, peer mentoring relationships are established through a formal matching process during a rookie training session. In this scenario, the formality of the event's date, timing, and purpose gives the relationship an initial structure. The relationship's substance and continuity depend on the firefighters' compatibility. In an informal setting, peer-mentoring relationships develop organically and over time. Informal peer-mentoring relationships allow firefighters to

identify commonalities and shared interests. While the relationship's origin may lack structure, the firefighters nurture the relationship on a mutually shared set of interests that benefit the department.

The existing research literature indicates that firefighters want to improve their skills through formal training, team-oriented competition, and physical demonstrations. Erdem and Aytemur (2008) shared that firefighters work in collaborative teams, dependent on astute situational awareness, dynamic communication, and trusting relationships to ensure their teams' health and safety. These physical skill sets are collectively sharpened in classrooms, weight rooms, and training fields. Survey respondents shared that the San Marcos Fire Department has created a strong training culture. Firefighters highlighted training resources and opportunities as an organizational strength and potential for more significant investment. In October 2022, the San Marcos Fire Department broke ground on a new training facility. The new facility will allow firefighters to improve their skill sets by reenacting emergency scenarios, demonstrating best practices, and modeling skills.

Battalion Chief Howie Minor states that firefighters are relational public servants who meet people during emergency events on the worst days of their lives. These traumatic encounters require firefighters to serve in emotionally supportive and empathetic roles beyond their emergency-oriented responsibilities. According to the survey respondents, firefighters nurture relational skills such as empathetic listening, constructive communication, and encouragement through peer-mentoring relationships. Firefighters share best practices through storytelling and after-action reports, conveying suggestions to support fellow firefighters and community members.

The research literature and data reflect that firefighters depend on each other to improve their collective performance, improve skill sets, and nurture beneficial relationships. Peer mentoring behaviors play an essential role in cultivating relationships that lead to a firefighter acquiring knowledge, developing critical skills, and resources for emotional encouragement. The City of San Marcos and the San Marcos Fire Department are developing their people by investing in new training facilities, assigning Chief Howie Minor to oversee training and mentoring, and encouraging peer-mentoring relationships. In contrast, the San Marcos Fire Department has significant areas for improvement in enforcing leadership visibility, mentor accountability, and promoting peer mentoring best practices in the department. The formality of peer mentoring should be more comprehensive than a place and time when mentors and mentees are matched when the benefits of the relationship rest in the content and substance generated by the relationship.

Implications of the Results for Practice, Policy, and Theory

During the research survey, firefighters were asked to share the peer-mentoring behaviors and practices they observed or demonstrated within the San Marcos Fire Department. The firefighters were vocal, descriptive, thorough, and passionate about the well-being of the fire department. Their ability to identify and articulate these peer-mentoring behaviors is a positive example of organizational awareness. Each participant shared specific peer-mentoring behavioral examples that have positively influenced their career growth and were able to describe behaviors that have created challenges within the fire department. These narratives demonstrate the firefighters' comprehension of how peer-mentoring behaviors can positively and negatively influence their lives, careers, health, safety, professional development, demeanor, attitude, and peer relationships.

Practice

Firefighting is a relational profession dependent upon firefighters' ability to communicate, trust, anticipate, support, and encourage their peers. While firefighters receive mandated training to prepare for medical emergencies and fires, departments struggle to identify resources to address peer-mentoring skill sets. The data collected from the participating firefighters indicates that the firefighters are a practical resource for managing peer mentoring within the San Marcos Fire Department.

During the SWOT analysis, firefighters were asked if they had a mentor and if they were a mentee. The responses to these questions affirmed that mentoring relationships exist within the department at varying levels of engagement. Firefighters were asked how their mentoring relationships were established and if the San Marcos Fire Department supported peer mentoring. According to the respondents, peer mentoring relationships are established through formal and informal processes. Both processes were more successful than the other. However, establishing the relationship was also the end of the peer mentoring process, as there needed to be more direction beyond pairing a mentor with a mentee.

The survey respondents identified numerous behaviors that contributed to their professional growth. These behaviors included empathetic listening, storytelling, and modeling behaviors. Firefighters referenced a need for their leaders to be visible during training and work activities. From a practical standpoint, this gap in instruction provides the officer responsible for training and mentoring with an opportunity to encourage growth within the relationships. Encouraging officers and senior firefighters to participate in training classes, physical fitness, and team-building activities as a peer-mentoring practice can positively influence the morale and attitude of department personnel.

Policy

Fire Chief Les Stephens was critical in developing the study's methodology and emphasized the value of the firefighters' understanding of the threats involved in maintaining a status quo approach to peer mentoring. The data collected during the SWOT analysis demonstrates that the survey respondents understand the consequences of not addressing peer mentoring. According to the survey participants, the threats associated with ignoring peer mentoring included a loss of public trust, poor firefighter recruitment and retention, poor customer service, diminished performance, a toxic work environment, potential injuries, and line-of-duty deaths. While peer mentoring is not the remedy for all issues, firefighters can help one another to improve service, performance, communication, trust, attitude, and disciplinary concerns.

The San Marcos Fire Department may consider implementing peer mentoring best practices to encourage newly matched mentors and mentees to share knowledge, model behaviors, improve visibility, and demonstrate encouragement. The fire department's administration may consider adopting a policy providing funding for training in peer-mentoring best practices. Incentives in support of peer mentoring may also encourage mentors and mentees to model behaviors for others to follow. The survey participants understand the value of peer mentoring and the consequences of maintaining a status quo. The data indicates that the San Marcos Fire Department has existing practices and traditions that can be replicated within the organization. Ceremonial practices such as a team of firefighters presenting a custom leather helmet, signed by their peers, to a new firefighter exemplify how the San Marcos Fire Department is nurturing positive relationships. These best practices become traditional behaviors that influence cohesion, solidify retention, and strengthen relationships.

Theory

This chapter has identified potential changes to practices and policies that may influence peer mentoring for the future of the San Marcos Fire Department. These proposals could influence organizational dynamics and weaknesses that the City of San Marcos and the San Marcos Fire Department leaders should address. During the study, researcher captured data on the peer-mentoring behaviors observed and practiced by the San Marcos Fire Department survey respondents.

The survey respondents shared concerns regarding the struggles that the fire industry experiences in recruiting and retaining qualified professionals. Budget cuts, political infighting, service demands, and competing communities create real difficulties for fire departments to provide efficient services in a timely fashion. While emphasizing peer mentoring will not resolve a community's tax revenue hardships or political conflicts, peer mentoring can contribute to the firehouse culture and reinforce organizational cohesion among firefighters.

Throughout this study, Chief Les Stephens reiterated that a crew of firefighters is only as strong as their collective situational awareness. Firefighters depend on each other to communicate effectively, share information, and ensure the crews' safety. Training resources and curricula are essential to the protection of firefighters. However, empowering mentors with practical tools ensures that the department's best practices are received in the mentees' heads, hands, and hearts. In comparison, it influences the collective safety and well-being of the firefighters, firehouse, and department.

The data collected during the study indicates that peer mentoring is currently occurring within the San Marcos Fire Department. The survey respondents identified peer-mentoring

behaviors that strengthen relationships and weaknesses detrimental to organizational morale and firefighter performance. The San Marcos Fire Department has room to improve in peer mentoring and articulated an urgency to improve the department's training and mentoring culture. Theoretically, these changes could positively influence the city's financial investment in fire protective services through improved recruitment, retention, and morale. These investments may influence a firefighter's choice to stay in San Marcos, change professions, or transfer to a different community. According to Chief Les Stephens, replacing a firefighter who has been previously trained and equipped can cost the fire department over \$100,000 in recruiting, training, and equipment resources. Theoretically, the San Marcos Fire Department could refrain from spending tax dollars by improving the department's peer-mentoring practices.

Finally, the survey respondents clearly understood the consequences and threats of avoiding peer mentoring. While poor attitudes, toxic work environments, and retention of firefighters were threats to the department, firefighter injuries and line-of-duty deaths were the most urgent consequences. This study does not guarantee that an investment in peer mentoring would eliminate the threat of injury or death. However, the data indicates that peer-mentoring behaviors observed and practiced within the department have contributed to effective communication, situational awareness, and trust.

Recommendations for Further Research

The study was limited to observing peer-mentoring behaviors of a small pool of observers from one fire department in a short timeframe. The study experience presented several opportunities for further observation for other researchers to pursue in the future.

Areas for improvement

Technology platform

The researcher recommends that future researchers use the Mentimeter platform to capture, save, and assess data. The Mentimeter data platform was the ideal tool for sharing questions, capturing data, and allowing participants to view responses from peers. In addition, the researcher was introduced to the NVIVO software package by fellow doctoral student Melinda Rodriguez who used the resource to calculate observed behaviors from a recorded interview transcript. The researcher recommends that future researchers consider using NVIVO within the research methodology to improve the quantifiable data.

Peer Mentoring and Trust

Throughout the study, trust was referenced as a valued behavior within the San Marcos Fire Department. The researcher intended to focus the survey on an in-depth review of the influence of trust in the firefighting industry but instead chose to explore peer-mentoring behaviors to maximize the study's timeframe and available resources. Future researchers should pursue an in-depth study of trust within the firefighting industry. Trust is a belief in the probability that a person will behave in specific ways. Trust is central to all human relationships, including romantic partnerships, family life, business operations, politics, and medical practices. A review of trust within firefighter relationships would benefit firefighters, fire departments, and the greater community.

Participants

The researcher was fortunate to have an existing relationship with the San Marcos Fire Department. The department's leadership accommodated the researcher's requests, and firefighters were open to participating in the SWOT analysis. The firefighters volunteered to

participate in the research study and openly shared their observations of peer-mentoring behaviors. The volunteer pool was limited in elements of diversity, including gender, age, race, ethnicity, and years of experience. Identifying research participants from diverse populations would provide more perspectives on the observed peer-mentoring behaviors. Future researchers should consider recruiting a larger research population to capture more data.

Additional Recommendations

Firefighting is a unique profession where colleagues work, train, and live in a shared environment. Firefighters observe each other's behaviors and practices during emergencies, training scenarios, and while preparing meals in the firehouse. Alternatively, law enforcement officers, paramedics, and other emergency responders have similar responsibilities but significantly different environments. Future researchers should explore these different scenarios, relationships, and settings to understand how emergency responders can improve their relationships and services. Finally, the researcher encourages others to examine the role of peer mentoring in other emergency service professions, such as police, emergency medical services, and emergency management.

Conclusion

Peer mentoring is a form of mentorship between a person who has lived through a specific experience and someone new to that experience. More importantly, peer mentoring provides a team of support and helps others recognize that they are not alone. They have a trusted group of peers they can count on to listen and help them grow. The resulting sense of security and belonging allows people to thrive. Continued investment in enhancing peer-

mentoring behaviors and practices allow firefighters, fire departments, and communities to thrive.

The research data indicated that the peer-mentoring behaviors that allow San Marcos firefighters to thrive included skills such as information sharing, modeling behaviors, physical presence, and encouragement. These behaviors were aligned with the physical attributes of a firefighter that are focal points in developing relationships, such as the head, hands, and heart.

The researcher used the observed peer-mentoring behaviors and physical attributes to create a poster featuring three research participants from the San Marcos Fire Department. Each model represented an essential behavior, including a firefighter holding a helmet with an uncovered head representing the behavior of Teach Me—reflective of behaviors aligned with sharing knowledge and training. A model with gloved hands extending outward describes the behavior of Show Me. Reflective of behaviors aligned with modeling behavior and a mentor's visible presence. Finally, a model with hands clasped together forms a symbol of an open heart to represent the behavior of Love Me. They reflect behaviors aligned with demonstrating compassion, empathy, and encouragement between a mentor and mentee.

Initially, the researcher anticipated aligning peer-mentoring behaviors with tools and assets traditionally associated with firefighters. This asset inventory could have depicted the hierarchy of peer-mentoring behaviors to the significance of the firefighter's safety. However, when this question was posed during the SWOT analysis, the respondents unequivocally denounced the correlation. According to the data, a firefighter's greatest asset is another firefighter. A tool is only as effective as the firefighter using the asset. People and the relationships cultivated among their peers are the most crucial resource of knowledge, support, and encouragement within the San Marcos Fire Department. Continued support for the

relationship development of our emergency responders significantly influences the head, hands, and hearts of the people that protect property, lives, and the future of our community. Thus, the researcher recommends that the City of San Marcos and the San Marcos Fire Department continue to make every effort to invest in peer mentoring.

References

- Baker, C. (2020, December 3). *The value of mentorship - firefighter nation: Fire rescue - firefighting news and community*. Firefighter Nation. Retrieved February 6, 2022, from <https://www.firefighternation.com/2019/11/27/the-value-of-mentorship/>
- Brown, J. L. (2021, January 13). *Leadership and mentoring in the fire service - firefighter nation: Fire rescue - firefighting news and community*. Firefighter Nation. Retrieved February 6, 2022, from <https://www.firefighternation.com/leadership/leadership-and-mentoring-in-the-fire-service/>
- Carter, H. (2018, August 1). Command post: Building a culture of mentoring. *Firehouse*. <https://www.firehouse.com/careers-education/article/21009919/how-to-build-a-culture-of-mentoring-in-the-fire-department>
- Correia, A. (2017, September 22). Integrating mentoring with the formal educational process. *International Society of Fire Service Instructors*. <https://www.isfsi.org/blog/integrating-mentoring-with-the-formal-educational-process>
- Cosentino, M. (2017, November). *City charter city of San Marcos, Texas*. Statement of Goals. Retrieved February 6, 2022, from <http://www.ci.san-marcos.tx.us/DocumentCenter/View/8439/City-of-San-Marcos-Charter---with-Changes-Through-11-07-2017-Election-PDF?bidId=>
- Erdem, F., & Aytemur, J. Ö. (2008). Mentoring—a relationship based on trust: Qualitative Research. *Public Personnel Management*, 37(1), 55–65. <https://doi.org/10.1177/009102600803700104>

- Guerrero, D. (2020, July 18). Battalion Chief Howie Minor. Personal Communication.
- Guerrero, D. (2020, August 12). Chief Les Stephens. Personal Communication.
- Holmes, D. R., Warnes, C. A., O’Gara, P. T., & Nishimura, R. A. (2018). Effective attributes of mentoring in the current era. *Circulation*, *138*(5), 455–457.
<https://doi.org/10.1161/circulationaha.118.034340>
- Hudson, P. (2013). Developing and sustaining successful mentoring relationships. *Journal of Relationships Research*, *4*. <https://doi.org/10.1017/jrr.2013.1>
- Hurlbert, H. (2020, May 28). *Finance Department*. Finance Department City of San Marcos, TX. Retrieved February 6, 2022, from <https://www.sanmarcostx.gov/692/Finance-Department>
- Jafari, B. (2014, January 1). *Review of asset hierarchy, criticality assessment, and Risk Analysis Practices*. Academia.edu. Retrieved February 6, 2022, from https://www.academia.edu/66213602/Review_of_Asset_Hierarchy_Criticality_Assessment_and_Risk_Analysis_Practices
- Jenkins, T. (2020, November 12). *Mentoring the next generation of leaders*. Center for Public Safety Excellence. Retrieved February 6, 2022, from <https://www.cpse.org/2020/10/13/mentoring-the-next-generation-of-leaders/>
- Johnson-Bailey, J., & Cervero, R. M. (2004). Mentoring in black and white: The intricacies of cross-cultural mentoring. *Mentoring & Tutoring: Partnership in Learning*, *12*(1), 7–21.
<https://doi.org/10.1080/1361126042000183075>

Kuhlman, K. (2020, May 3). *San Marcos Fire Department history*. The City of San Marcos.

Retrieved February 6, 2022, from <https://www.sanmarcostx.gov/1583/Department-History>

McLaughlin, C. (2010). Mentoring: What is it? How do we do it, and how do we get more of it?

Health Services Research, 45(3), 871–884. <https://doi.org/10.1111/j.1475-6773.2010.01090.x>

Mikulan, V. (2019, June 4). How mentoring can foster officer development. *FireRescue1*.

<https://www.firerescue1.com/cod-company-officer-development/articles/how-mentoring-can-foster-officer-development-i6oBwpj9UWntI0nQ/>

Moed, B. R. (2012). Mentoring. *Journal of Orthopedic Trauma*, 26(Supplement 1).

<https://doi.org/10.1097/bot.0b013e3182642172>

Montgomery, B. L. (2017). Mapping a mentoring roadmap and developing a supportive network for Strategic Career Advancement. *SAGE Open*, 7(2), 215824401771028.

<https://doi.org/10.1177/2158244017710288>

Morgan, K. (2004, February 14). *Mentoring for the fire service firehouse*. Firehouse. Retrieved

February 6, 2022, from <https://www.firehouse.com/home/article/10524899/mentoring-for-the-fire-service>

Morgan, K. (2011, April 12). *Mentoring advances the quality of Future Fire Service leaders*. My

Firefighter Nation. Retrieved February 6, 2022, from

<https://my.firefighternation.com/profiles/blogs/mentoring-advances-the-quality>

Petersen, D. A. M., & Assanie, L. (2005, October 7). [PDF] *The changing face of Texas:*

Population projections and implications: Semantic scholar. Retrieved February 6, 2022,

from <https://www.semanticscholar.org/paper/The-changing-face-of-Texas%3A-population-projections-Petersen-Assanie/6478c72c153330b87aef451ffad6433df1bd6943>

Rubin, D. (2014, January 21). 5 rules to being a great mentor. *FireRescue1*.

<https://www.firerescue1.com/cod-company-officer-development/articles/5-rules-to-being-a-great-mentor-Hz6mkmArCHtusSPu/>

Sartore, M. (2020, February 10). *Fire science degree programs in Texas: Firefighter training*.

FireScience.org. Retrieved February 6, 2022, from <https://www.firescience.org/fire-science-degrees-and-programs/texas/>

Thompson, S. (2017, January 21). Five steps for mentoring success. *Station Pride*. <https://stationpride.com/2017/01/21/five-steps-for-mentoring-success/>

Vita

Daniel Guerrero is a Distinguished Alumnus of San Marcos High School. He holds multiple certificates from Austin Community College, a Bachelor of Mass Communications from Texas State University, a Master of Science in Organizational Leadership and Ethics from St. Edward's University and is pursuing his Doctor of Leadership and Higher Education from St. Edward's University.

Daniel has served INROADS/Central Texas, Inc. and led the San Marcos Education Foundation fundraising campaigns. Daniel has served as the Assistant Dean of Students for Leadership Programs and taught Global Business and Leadership at the McCoy College of Business at Texas State University. Daniel is an assistant professor of management and the MBA Program Chair at Concordia University - Texas. He is excited to share his experiences in government, leadership, business, and global relationships at Concordia University.

Daniel served six years as mayor of San Marcos and is currently appointed to the Texas State Board of Pharmacy. Daniel is a 40-year cancer survivor, an avid world traveler, a Blue October fanatic, a certified NAUI scuba diver, and enjoys spending time with his rescued pets, Winter (dog), Poquito (tortoise), Chiquito (tortoise), and Diego (tortoise).