

DISSERTATION

THE ROLE OF DEVELOPMENTAL EXPERIENCE IN THE CAREER
DEVELOPMENT OF FIRE CHIEFS IN THE UNITED STATES

Submitted by:

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In partial fulfillment of the requirements

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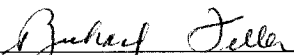
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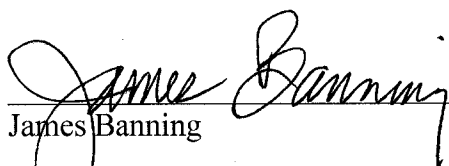
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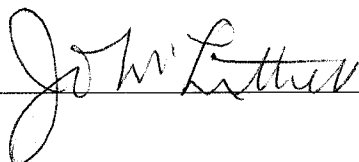
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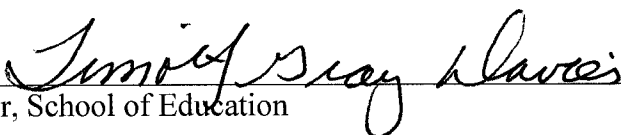
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ABSTRACT OF DISSERTATION

THE ROLE OF DEVELOPMENTAL EXPERIENCE IN THE CAREER
DEVELOPMENT OF FIRE CHIEFS IN THE UNITED STATES

This study examined the career experiences of fire chiefs. It goes beyond an examination of the traditional technical competencies and time in position elements of a fire chief's career development by focusing on specific experiences that produced change in their leadership and management behaviors. These are called developmental experiences.

The audience for this study is fire chiefs, those that aspire to this position and other fire service professionals seeking to better understand the career development of fire chiefs. The research approach used was qualitative and the methodology was multiple case study using narrative analysis technique.

Developmental experience has emerged as an experiential learning strategy that improves a leader's ability to adapt to and positively influence organizational success under conditions of change. The literature indicates that positive changes in leadership and management behaviors derived from developmental experience come from challenging on-the-job experiences, which result in personal learning and changes in leadership and management behaviors.

The results of this study indicate that the 14 participants described nine common themes that met the definition of developmental experience in accordance with the Center for Creative Leadership developmental experience model. The participants furthermore described 26 examples of personal learning in seven developmental experience themes and 23 examples of changes in leadership and management behavior in four

developmental experience themes. Two developmental experience themes, (1) the first fire chief and (2) hardship produced the strongest learning and change in leadership and management behaviors.

The results of this study challenge the conventional fire service career development systems in place today. It recommends that (1) developmental experience opportunities be made available to fire service personnel much earlier in their careers, especially for those who display leadership talent; (2) that more focus be placed on leadership and management experience in the early career; (3) that learning from hardship be incorporated into leadership development; and (4) that more opportunities be provided to learn political skills outside the confines of the internally focused fire service world.

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CHAPTER 1: INTRODUCTION

This study examines the career development of fire chiefs. These managers are a unique subset of public service managers. They have benefited from a well defined progression of technical training and experience in the firefighting profession, but may be less well prepared to address the management and leadership challenges of the future. The career development patterns of fire chiefs are shaped by the fire service culture and, like management development in general are driven by the technical competencies of their profession.

In recent years the concept of developmental experience has emerged as an experiential learning strategy that improves manager's abilities to adapt to and positively influence organizational and personal success under conditions of change. The literature indicates that positive changes in leadership and management behaviors derived from developmental experience come from challenging on-the-job experiences, which is too often an underutilized management and leadership development strategy. This study described how developmental experience has contributed to the career development of fire chiefs, as well as the personal learning and leadership and management behavior changes that resulted from those experiences.

Management and leadership are two separate although related qualities and functions. John Kotter (1998) defined management as coping with complexity and

leadership as coping with change. He defined this more specifically by describing management as the processes of planning and budgeting, organizing and staffing and controlling and problem solving. He contrasted these descriptors with the leadership functions of setting direction, aligning people, motivating and inspiring. While each is different both are needed in any organization. A fire chief must exhibit both leadership and management skills to be successful. This study further assumed that management and leadership development activities were so inter-twined that it would be fruitless to separate them. For this reason the term executive development was used to describe management and leadership development in this study.

Background

The Fire Service in the United States is made up of 26,354 fire departments with 1,088,950 active volunteer and career firefighters (National Fire Protection Association [NFPA], 2002). These organizations provide fire protection, emergency medical, hazardous materials response, specialized rescue, wildland fire suppression, fire prevention, public education and other related emergency services to cities, towns, counties and special districts.

Each fire service organization is headed by a chief executive officer; commonly know as the fire chief, executive fire officer (EFO) or chief executive fire officer (CEFO). Throughout this study this position is referred to as the fire chief. It is important to recognize that less than 15% of the fire chiefs in the United States are career employees of the jurisdiction they serve (NFPA, 2004). The vast majority serve as a volunteer. The duties of a fire chief are similar to the chief executive officer of any organization. These include the development and articulation of organizational mission,

management of personnel and facilities, long-term planning, and strategic interaction with stakeholders including customers and governing bodies. Because fire departments are public organizations, a fire chief must also navigate within the political environment of the open public policy process. This requires not only well honed managerial and leadership skills but also well developed diplomatic skills. In smaller fire service organizations the fire chief must also be able to directly manage emergency incidents (Grant & Hoover, 1994).

Career development in the fire service has been described by fire service leaders as fragmented and disorganized (Bennett, 2003; Onieal, 2003a). Driven almost entirely by local conditions and culture, there is a lack of consensus on what a nationwide fire service career development system should include and how it should operate. Advancement and promotion systems, including those used for the selection of fire service managers, use a variety of civil service tests, demonstration of technical competency, experience, and seniority (Athey, 1994). The career development journey of a fire chief typically takes many years of progressive experience in a number of positions within a fire department. These positions almost always include first line supervision of fire companies and management of major organizational units and may also include technical specialty and staff positions. This career progression is often accompanied by formal education, specialized training and the attainment of professional certifications.

Like executive development in general, a fire chief's career is also heavily influenced by organizational culture (Bal & Quinn, 2001; McCall, 1988). Fire departments are relatively closed and internally focused. Adherence to the values of public service is paramount, but so is maintenance of internal norms of behavior, beliefs

and attitudes. These norms are driven by a rich tradition of self-sacrifice combined with a unique work environment within a historically male-dominated culture (Chetkovich, 2001). The career of a fire chief almost always begins as an entry level firefighter and stays within the confines of the fire service. Career fire chiefs seldom serve in management positions in other public organizations or the private sector. This internal focus is supportive of the fire service culture but less conducive to developing the strategic management skills required of a fire chief today.

Preparation to assume administrative duties has been the subject of discussion in the fire service since the 1950s. These discussions, supported by the Wingspread Conferences beginning in the 1960s and studies conducted at the National Fire Academy (NFA) in the 1970s and 1980s identified the need to provide incumbent and future fire chiefs with greater administrative and managerial skills (Athey, 1994). The skills that were seen as particularly lacking were personnel administration, budgeting and finance, and political awareness. In general, fire chiefs were not viewed as public administrators by administrative superiors, political leaders or within the fire service itself. While these discussions resulted in the establishment of a number of undergraduate programs in fire service-related disciplines, it has been only within the last 10 years that higher education programs have shifted away from the technical aspects of firefighting. More recent programs place a greater emphasis on administration, management, and leadership. More recent studies (Athey, 2004; Haverty, 2003; Hoover, 2003) have begun to explore the role that experience plays in learning managerial skills and, more importantly, building adaptive leadership behaviors that help fire chiefs lead during times of external and internal change. This linkage between experience and adaptive change, however, is

mentioned only briefly in the most recent studies (Wakeham, 2003) and fire service career development literature (IAFC, 2003; USFA, 2004).

Experience and experiential learning play an important role in fire chief preparation in four areas, (1) knowledge and skill acquisition (2) rapid decision making, (3) managerial decision making within a known and stable environment and (4) the personal changes in leadership and management behavior that are required in an evolving environment. Early in his or her career a firefighter must acquire and master a vast array of skills and knowledge. This is what Kolb (1976) defines as the first goal of experiential learning, learning the specifics of a particular subject. Historically these have been the technical skills of operating the machinery and tools of firefighting and knowledge of building construction, fire behavior, and industrial processes. More recently this has expanded to include the interpersonal and social skills required to provide medical, education, and regulatory services. Continually practicing these skills in the field or in simulated exercises is a common application of experiential learning at the firefighter, supervising, and managing officer levels. In this regard experience strengthens skills, reinforces knowledge, and confirms prior learning. Mezirow (1994) defines this as instrumental learning. It involves clearly defined needs and objectives, anticipated learning outcomes, well defined behavioral objectives, competency based training and measurable learning gains. A particularly important role of experiential learning is the development of the ability to make quick and accurate decisions during fast moving emergency operations. It involves recognizing patterns between observed events and past successful or unsuccessful approaches to a solution. Thus experience builds the internal mental files for rapid pattern recognition and is called Recognition Primed Decision

Making. This type of decision making has been observed as a method used by military company officers, airline cockpit crews and hospital emergency room nurses (Klein, 1998) who, like fire officers, must respond quickly to fluid and uncertain conditions. This type of experiential learning is common to much fire service training at the operational level.

The third role of experiential learning is the preparation of a fire service manager within the more controlled environment of day-to-day operations, managing personnel and facilities, and short and medium term planning. Supervisors and managers spend much of their time on these activities applying organizational policies, past practices and known knowledge to routine situations. This is what Argyris (Smith, 2001) defines as “single loop” learning. An example is the use of experience in comparing an organizational problem with a policy or past practice and making a decision based on past practice without questioning the underlying foundation for the policy. In this way experience supports routine decision-making without new learning. However, it does require logical and analytic thinking, the ability to carefully examine a situation, draw on relative experience, weigh alternatives, and make an accurate decision. Duchesne (1996) calls this a “confirmatory relearning” process where experience is required to correctly apply a solution to a well structured problem but where no new learning occurs. Decision making within this context is based on a relatively stable environment where the vast majority of the information needed to solve a problem is known. It does not require managers to question or change their attitudes or behaviors. A person progressing through positions prior to becoming a fire chief gains a great amount of this type of experience in developing and applying organizational policy. In most routine problem

solving situations “single loop” learning is all that is required (Argyris, 1991). Formal education and conventional training programs emphasize this type of experiential learning (Bassett & Jackson, 1994; Brookfield, 1987; Mann, 1999).

The forth role experience plays is developmental. This is experiential learning that leads to changes in personal attitudes, beliefs and behaviors (Mann, 1999). This requires people to view a situation or problem from different and new perspectives. It causes them to question root causes and circumstances and pursues a deeper understanding of cause and effect relationships. In his model of experiential learning Kolb (1976) describes a continuous cycle of concrete experience, observation and reflection, abstract conceptualization, and finally experimentation. Similarly Argyris’s “double loop” learning focuses on the underlying assumptions that impact a problem rather than just the relationship between actions and consequences (Smith, 2001). When applied to leadership, Heifetz (1994) calls this “adaptive work,” the ability to mobilize people’s capacity to reconcile values with reality. Duchesne (1996) describes reflective judgment or a developmental learning model that requires the reconciliation of ambiguous, uncertain and often controversial dilemmas. Similarly Bartunek and Louis (1988) describe a complex thinking model that requires managers to act flexibly to reconceptualize problems based on entirely new information. Behaviors ascribed to complex thinkers are the abilities to (1) view problems from different perspectives, (2) consider a variety of responses and (3) be cognitively and emotionally flexible in the implementation of innovations and organizational strategy. Finally, developmental learning draws directly from Brookfield’s critical thinking model that calls into question assumptions underlying customary and habitual ways of thinking and acting (Brookfield,

1987). This type of learning is mentioned in the fire service career development literature only briefly and little guidance is given on how to use developmental experience to build greater management and leadership capacity.

Narrowing the role of developmental experience even further, research suggests that developmental experience is instrumental in developing “learning agility.” This is the ability to make sense of the work and personal experiences that promote changes in personal beliefs, attitudes, values, and behaviors that allows managers to adapt themselves and their organizations to new environments (Eichinger, Lombardo & Raymond, 2004). Managers who are agile learners have shown to be more successful in producing positive results in organizations undergoing change than leaders with other characteristics such as intelligence, education and position experience (Davies & Easterby-Smith, 1984).

Research on learning agility also indicates that learning from challenging managerial experiences such as developing new business directions, managing diversity, managing from positions with no formal authority, turning around failing business units, making large jumps in personal responsibility, dealing with difficult employee issues, overcoming adverse business conditions and working in foreign environments have shown to be fertile grounds for personal learning and change (McCall, Lombardo & Morrison, 1988; McCauley, Ruderman, Ohlott & Marrow, 1994). These are developmental experiences, and differ from the other career experiences in novelty, scope, intensity, and risk. Even though on-the-job learning is important to all positions, garnering knowledge from experience that produces change in leadership and management behavior is not common. McCall, et al (1994) further indicate that few job

experiences are truly developmental and that individuals do not learn equally no matter how powerful the experience. While some individuals have the natural talent for learning from developmental experiences or already display learning agility characteristics, the vast majority do not (Williams, 1997). However, most can learn how to recognize and benefit from developmental experiences. Organizations can likewise learn to identify developmental experiences and help managers move in and out of these assignments for the betterment of the organization and the individual. This is the developmental nature of learning agility as an individual and organizational development strategy. Understanding the role of developmental experience in building greater management and leadership capacity in fire chiefs is the primary focus of this study.

Research Problem

This study addressed the gap between the use of developmental experience as a career development strategy and the current career development patterns of fire chiefs. The vast majority of information on the career development of fire chiefs focuses on the acquisition of technical, interpersonal and organizational skills. It is heavily dependent on position experience that supports a well defined and strong internal culture rather than the personal learning that leads to change and the ability to adapt to a changing external environment.

Organizations are under great pressure to adapt to rapidly changing external environments influenced by intense business competition, uncertain and shifting markets, advancing technology, and unstable political relationships (Daudelin, 1996; Martinette, 2002; Williams, 1997). Internally, organizations are also challenged by changing generational workforces, greater diversity, and differing expectations of organizational

members. Managerial success within this environment requires the ability to adapt to and lead change as well as the tried and proven abilities of communication, organization, interpersonal skills and business acumen (Bader & Calarco, 2003).

Generally the fire service is not subject to the intense competitive pressures that characterize many private sector organizations. However, fire departments are subject to increasing demands for new and expanded services, decreasing community financial support, increasing employee needs, and rapidly evolving technology (Compton & Granito, 2002; Grant & Hoover, 1994). In a recent survey of its membership, the International Association of Fire Chiefs (IAFC) found that funding, staffing, and new service demands were the three most common issues challenging fire service leaders (IAFC, 2004). Fire chiefs are at the forefront of this evolving and often unpredictable environment and are key players in helping fire departments cope with change. Improving their abilities to lead and manage within the context of external and internal change should be an important goal of any fire service management development strategy.

The learning agility literature places great emphasis on the importance of developmental experiences in building leadership and management capacity. These experiences are often direct work experiences outside a person's technical specialty and work environment. While fire officers sometimes serve in roles outside direct emergency response, these assignments are not popular and often undervalued for the learning potential they provide in preparation for advanced management responsibilities. The current literature on fire chief career development provides only weak linkages between learning agility that can come from work experiences outside the routine fire

management roles and the personal development capacity required to develop new managerial and leadership skills. The quest for management and leadership development strategies which enable incumbent supervisors and managing officers to make the transition from internally directed and culturally influenced operational leadership to externally focused strategic leadership is a high priority of national fire service leaders (Compton & Granito, 2002).

There are a number of resources that professional fire chiefs and prospective fire chiefs draw upon to improve their knowledge and skills as managers and leaders. These include, but are not limited to, higher education programs in fire service and related management disciplines at the baccalaureate and masters levels; advanced training programs at NFA, most notably the *Executive Fire Officer Program*; certification as a Chief Fire Officer Designate; and a wide array of specific training opportunities offered by state agencies, educational institutions, professional associations and private sector organizations. Although many of these resources provide a solid grounding in management theory, administrative practice and leadership development, none provide a strong linkage between experiential learning and improved leadership and management success. The inclusion of a research based model on how developmental experiences impact the careers and performance of successful professional fire chiefs can improve these linkages.

Purpose

The overall purpose of this study was to examine how developmental experience impacts the ability of fire chiefs to lead and manage more effectively. A more specific purpose was to construct a model of developmental experience within the fire service

culture that can assist incumbent and future fire chief's use of developmental experience as a career development strategy. The literature, primarily research conducted by the Center for Creative Leadership (CCL) and Lominger, Inc., indicates that there are a number of specific career experiences that lead to improved individual learning agility and enhanced organizational performance. Based on the literature it was expected that some career experiences would be more developmental and thus more effective in building leadership and management capacity. It was also expected that the fire service culture provides unique opportunities for developmental experience but may also constrain the use of developmental experiences that have been found to be important in other organizations.

From an application prospective this study will provide guidance to incumbent and aspiring fire chiefs on how to seek and get the most from career experiences to increase their ability to lead fire service organizations through change. It will help incumbent and future fire service managers better understand the relationship among experiences that primarily replicate past practices and developmental experiences that prepare them for the uncertainties of the future. It will also help in the selection of career experiences that hold the most promising potential for building learning agility from the opportunities offered within the fire service culture.

Research Questions

The research questions provided a starting point that helped focus the research process. They were drawn from the literature review and personal knowledge of and passion for the subject of leadership and management development in the fire service. Janesick (2000) described research questions as a product of the researcher's intellectual

curiosity that is interwoven with the lives of the participants. While they were a logical starting point I did not fully know what the best research questions would be until after I had established relationships with the study participants. These questions changed as the experience of the participants, the information learned through the literature review, and my own experience combined thorough the data collection and analysis process. The research questions that ultimately became the focus of this study were:

1. What do successful fire chiefs describe as critical experiences that are their strongest developmental experiences?
2. What learning and change in leadership and management behaviors do they describe as a result of these developmental experiences?
3. What developmental experiences provide the most powerful experiential learning?

Research Stance

My research stance represented my personal philosophy of the nature of reality, knowledge and how knowledge is acquired. Early in my fire service career in the 1970's I was trained in the application of engineering principles to fire protection problems. Knowledge was gained thorough objective measurement of clearly observable conditions and rarely considered the relationship among people or the influence of the larger society. Even in areas of administration and management, the fire service was dominated by the concepts of management-by-objectives, zero-based budgeting, administrative efficiency, and cost-benefit analysis. Given my early training and the context of the environment at the time, my early research stance was heavily centered in the positivist or quantitative tradition.

Over time my research stance evolved as my recognition of and appreciation for the complexity of life has increased. As the fire service changed from the single function of fire fighting to a wide array of public safety and even social services so has my research stance. As my own life journey progressed from a technician to a manager, to an educator, and now a fire chief, I came to recognize and appreciate the great diversity and complexity of life within organizations and society. I came to believe that there is little, if any, absolute truth, that reality is relative and unique to each individual, and that knowledge can be gained from a wide variety of sources and is not solely the province of traditionally defined scientists. I have also come to believe that each person's experience is intricately interwoven with the lives of others, their personal histories, and the world in which they live. Even more important, I have come to believe that while a person's experience can be described and observed, it is really only what that experience means to him or her that provides insight into their behavior. My research now leans increasingly towards the constructivist tradition and qualitative research methods.

As a researcher it was my responsibility to always be aware of how my own history and experience impacted this study. I took specific and affirmative actions to disclose my personal interest and experience to participants. I also paid close attention to the data collection methods, data analysis and trustworthiness procedures and maintained a constant awareness of my own role in the study as a quasi-participant

Based on my research stance the research approach of this study was qualitative. It was about a small number of fire chiefs and their career experiences in their journey to the position of fire chief. The specific focus was on a small number of events that seemed particularly powerful in developing their leadership and management behaviors. The

phenomenon of developmental experience was described from their perspective and in their words. The primary audience for the study is fire chiefs, those that aspire to this position, and other fire service professionals who want to better understand the career development of fire chiefs. It is hoped that the results will provide new insight into the value of experience in building management and leadership capacity in this highly specialized profession. This methodology began with only the minimal expectation that fire chiefs experience critical events that shape their approach to management and leadership. It did, however, expect that a number of lessons learned would emerge from the data as relayed by the fire chiefs who participated in the study. This study was not intended to be generalized to all fire chiefs. However, the value of the developmental experiences described by this small group of fire chiefs may be helpful to future fire chiefs.

Significance

The fire service in the United States is undergoing change, both externally imposed and internally generated. Fire chiefs must not only be competent managers and inspiring leaders, they must be capable of leading and managing their organizations during times of change. This requires operating in new and varied environments for which they may have not received adequate preparation in regard to developmental experiences and learning agility. The current career development progression and preparation of fire chiefs provide the experience, knowledge and skills necessary to function within a relatively static and bureaucratic environment. These same career development patterns may not be adequate for preparation to adjust to and lead change.

Research in leadership and management clearly indicates that the ability to lead in an environment of change requires the skills of adaptability, flexibility and the application of entirely new knowledge. This study will add to the body of knowledge regarding executive development in the fire service. It will provide guidance in applying developmental experiences within the fire service culture to improve the preparation of fire service officers to manage and lead in the future. For the fire service, it will demonstrate the need to explicitly incorporate experiential learning into executive development programs to “capture” executive learning for the future (Hall, 1995). It will help fire service organizations understand the importance of providing and managing developmental experience for its members. Specific positive results described in the literature are a better balance among the immediate operational needs of certain positions and the long-term development opportunities offered and a shift of the entire workforce towards a more encompassing culture of organizational learning (Martinette, 2002).

CHAPTER 2: LITERATURE REVIEW

Introduction

Six areas form the foundations of this study. The first is executive development. This section defines executive development and describes common models in use today. The second defines experiential learning and describes the role it plays in personal learning as an element of executive development. In the third section the concept of learning agility is described as a unique subset of learning that has predictive value in individual leadership and management performance. Section four defines developmental experience and describes how it is used as an executive development strategy to improve learning agility. This includes a discussion of the categories of developmental experience and how they are used in application.

The last two sections focus directly on the fire service and fire chiefs. Section five describes the fire service, its roles and responsibilities, typical organizational structure, culture and career development systems. The sixth section covers the roles and responsibilities of the fire chief as a fire service chief executive officer, the typical career progression of a fire chief and the executive development systems in use today.

Executive Development

Management and leadership development efforts, called here executive development programs, fall into two broad categories, competency driven and change driven. In this section executive development will be defined and the two types of executive development programs described. Competency based programs are the most common and provide for the current and consistent production of an organization's

product or service. Change based programs are intended to prepare leaders and managers for the uncertainties of the future. Most contemporary authors concede that competency based executive development programs are necessary but also believe change type programs offer the best opportunity for insuring positive organization performance today and in the future where environmentally imposed change has become and will continue to be the norm (Cranton & King, 2003; Hall, 1995; Mailick & Stumpf, 1998; McCall, 1992; Paauwe & Williams, 2001). This section concludes with a discussion of the impact organizational culture has on executive development programs.

Management and leadership development is generally accepted to be an important ingredient in producing and maintaining organizational effectiveness. In competitive situations some authors go so far as to identify leadership capacity as the only renewable resource that cannot be duplicated by competitors and as such is the only competitive advantage under organizational control (Williams, 1997). Even though the actual, quantifiable impact of leadership and management development is weak, it is often taken for granted as a matter of faith that development efforts are a positive influence on individual and organizational performance (Kamoche, 2000). For this reason most organizations provide some form of executive development opportunities for their incumbent and future executives.

In general executive development refers to the nearly synonymous terms leadership and management development and management development and training. Mailick and Stumpf (1998) define management development as an organized effort to develop and improve managerial competencies with three specific outcomes of (1) providing knowledge, (2) impacting attitudes and (3) changing behavior. They extend

this to also include efforts to motivate and help managers change their behavior through education, training, experience, and feedback (Mailick & Stumpf, 1998). Similarly McCauley, Ruderman, Ohlott, and Morrow (1994) identify the primary goal of management development as helping managers learn, grow and improve their abilities to perform effectively. Kamoche (2000) adds personal development, socialization and competencies to improve behavioral outcomes to this definition. VanVelsor and McCauley (2004) represent all these definitions in their view of executive development as the skills and perspectives necessary to be effective in executive roles. At an organization level executive development is seen as a collective strategy of preparing entire organizations for change (Lincoln, 2003).

Competency based executive development is grounded in the acquisition and practice of technical and business skills necessary to accomplish specific sets of managerial duties. These are the “platform skills” that form the foundations for day-to-day managerial decision making (McCauley, Lombardo & Usher, 1989). These skills focus on the specific competencies associated with the traditional management functions of planning, organizing, staffing and controlling as well as communications and the application of technical and content knowledge. Integral to competency based programs is the conceptualization of training as efforts to equip individuals with knowledge, skills and attitudes that are securely grounded in the specific work requirements of a specific position and the expectations of the organization (Rothwell, 2002). These types of programs focus primarily on the “how to” of business operations and attempt to simplify and narrow the learning process as much as possible to the tasks at hand (Cranton & King, 2003). In competency based programs most learning is centered on the passive

instructional techniques of lecture, discussion, reading and case studies at the individual level (Mailick & Stumpf, 1998). Paauwe and Williams (2001) describe competency based programs as a product of the larger western culture based on individualism. They call these “push” type programs that provide executive training to people in predetermined position or time of service categories in the hope that some individuals will benefit. These types of executive development programs are common in most organizations where executive development focuses primarily on improving specific competencies (Mailick & Stumpf, 1998). Some authors estimate that traditional executive training programs consume as much as 2% of organizational resources resulting in only 10% of the development that executives receive (Robinson & Wick, 1992).

In contrast to competency driven programs change driven executive development programs place a greater emphasis on personal development, change and adaptability. This draws directly from the assumption that managers and leaders must be able to adapt to a changing environment to produce positive organizational results (Hall, 1995; Paauwe & Williams, 2001). The wider and more inclusive definition of executive development used in change based systems includes a strong focus on personal development and adaptability (Hall, 1995; Bader & Calarco, 2003; Kotter, 1998; McCall, 1992).

Adaptability in particular is a frequent concept described in current executive development literature. It is defined by Hall (1995) as the ability to be open to and implement change and being personally open to and willing to incorporate new ways of viewing oneself. McCall (1992) adds to this definition by including an awareness of strengths and weaknesses, the ability to seek out and use feedback, and the propensity to learn for experience. Related to adaptability is the ability to engage in complex thinking

that is also associated with higher levels of managerial performance and ultimately better organization performance (Bartunek & Louis, 1988).

Change based executive development programs go beyond the short-term goals of improving instrumental knowledge and skills. Van Velsor & McCauley (2004) divide leadership into two distinct categories; leader development which focuses on personal development and leadership development which integrates individual capability with the collective capacity of an organization to address change. This is what Senge (1994) believes is an important ingredient of building a learning organization. In this regard individual development precedes and serves as a building block for true organizational change.

An example of a change based model is one that Van Velsor and McCauley (2004) at the Center for Creative Leadership (CCL) describe as based on three distinct functions; (1) assessment, (2) challenge and (3) support. Assessment in their model helps people understand their strengths and weaknesses, current performance and effectiveness and their personal development needs. Challenge moves people away from their personal comfort zones and forces them to develop new skills and perspectives. This is a particularly important concept of developmental experience discussed later. The support function is directly related to the positive and sometimes negative influence of other people; superiors, coworkers, family and colleagues as well as the norms and behaviors of the organization. This includes the impact of organizational culture as a method of transferring organizational values, maintaining loyalty, and encouraging behavioral changes (Kamoche, 2000). Even though the impact of organizational culture is strong it is often an underappreciated factor in executive development (Van Velsor & McCauley,

2004; Bal & Quinn, 2001; Cranton & King, 2003). The specific components of the CCL leader development model are shown in Table 1.

Table 1

Leader Development Model

Self-management capabilities	Social capabilities	Work facilitation capabilities
Self-awareness	Ability to develop others	Management skills
Ability to balance conflicting demands	Ability to build and maintain relationships	Ability to think and act strategically
Ability to learn leadership values	Ability to build effective work groups	Ability to innovate and implement change
	Communication skills	Ability to think creatively

The CCL model is similar to the executive development strategy Paauwe and Williams (2001) describe as a “Pull” strategy. In contrast to the “Push” executive development strategy they described as common in most organizations the “Pull” strategy is individually designed and applied at the time an individual can best benefit from a learning experience. It is oriented towards targeted learning experiences rather than broad based awareness aimed at categories of people based on position or time of service.

In change based programs there is a direct connection between executive development and learning. As an example, Brown and Posner (2001) describe the theory of transformational learning as the linkage between learning and leadership. In this theory individuals are transformed by the learning process, over and above the acquisition of new skills and knowledge. They develop new perspectives, new attitudes and new

behaviors. To make executive development truly transformative Brown and Posner (2001) believe executive development programs need to reach leaders at a personal and emotional level triggering critical thinking and self-reflection.

Important to any executive development effort is the recognition of organizational culture as both ally and an impediment to executive development (Bal & Quinn, 2001). Schein (1985) defines organizational culture as “a pattern of basic assumptions, invented, discovered or developed by a given group as it learns to cope with problems of external adaptation and internal integration that worked well enough to be considered valid and therefore taught to new members as the correct way to perceive, think and feel in relations to these problems.” At its most visible level organizational culture can be observed in the rituals, logos, symbols, totems and stories told by members (Kamoche, 2000). At a deeper level organizational culture influences how members decide what is important and how they ultimately react to customer and client needs (Rothwell, 2002). In its most extreme manifestation it can control the relationships between members and in some cases impair the ability of an organization to adapt to new environments. In a recent study of the sexual misconduct at the United States Air Force Academy, Callahan (2005) observed that the overwhelmingly male oriented “warrior” culture may influence dysfunctional sexual behavior as a function of their training system which inculcates new members into a strict and controlling internal culture. As will be described later a similar culture exists within the fire service.

To be successful any executive development effort must take into consideration the impact of organizational culture. Where there is a close alignment between an organization’s mission, the environment, and the needs and desires of its member’s

traditional executive development programs have good potential to improve organizational performance (Kamoche, 2000). Likewise in organizations with stable and non-competitive environments executive development programs based on technical skills, and analytic and problem solving routines, executive development programs based on the competency model can suffice (Berke, 2003; Rothwell, 2002). However, in organizations that operate in fast changing environments with much competition and less alignment between organizational mission and member needs, executive development programs based on technical mastery may be sufficient to build executive skills. In these situations change oriented executive development models are better suited to develop more flexible executives. In these cases the role of organizational leadership, and executive development programs, is to not only help the organization adapt to a new and changing environment but also help the culture adapt as well (Bal & Quinn, 2001).

Schein (1996) describes two sets of methods whereby leaders and managers can influence organizational culture. The first set is the behaviors leaders' exhibit. These include what situations and events leaders pay attention to; how they react to cultural events, their ability to model new roles; teaching and coaching others; how they allocated rewards and status; and how they recruit, select, and promote members. The second set is more directive and aligned with the management function. These include changing the organizational structure and design; changing systems and procedures; redesigning physical space; relating new stories, legends, and parables; and making formal organizational statements. While all of these are possible leadership behaviors and actions that may influence organizational culture, Schein (1996) is careful to point out

that the management interventions of the second set must follow and be consistent with the leadership behaviors of the first set.

In summary, most organizations provide some form of executive development for their emerging managers and leaders although most are primarily competency based. These are driven by the instrumental learning of skill development and provided to all managers at certain points in their careers. Most programs also recognize that personal development is an integral component of executive development and include personal development elements. To be more effective in developing the ability to cope with the challenges of the future, executive development programs must transcend their focus on the platform skills described by McCauley, et al. (1989) to what they describe as meta-learning. Contemporary authors also recognize the impact of organizational culture on personal development and executive development and stress the need to incorporate a greater emphasis on the socialization aspects of executive development. Change based executive development programs draw strongly from learning theory, especially transformative learning, and leverage the benefits of experiential learning in developing advanced leadership and management capacity by increasing adaptability and by being able to engage in complex thinking. Finally, any executive development effort must take into consideration organizational culture. How well an executive development program prepares leaders and managers to interact with the organizational culture may well influence the success or failure of executive led change strategies.

Experiential Learning

Experiential learning is an important cornerstone of all executive development. It reinforces skills and behaviors learned in competency based executive development

programs but more importantly leverages the learning that occurs in the workplace. Experiential learning has two primary goals: (1) to learn the specifics of a particular subject and (2) to learn ones own strengths and weaknesses as a learner (Kolb, 1976). Given that up to 75% to 80% of all the knowledge and skills that workers acquire comes from direct on-the-job experience and contact with coworkers the need to maximize the effectiveness of experimental learning is critical for sustained organizational performance (Marsick, 1988; Brown & Posner, 2000).

Kolb's two goals of experiential learning provide a good structure to differentiate between experiential learning that supports previous learned skills and knowledge and the experience that promotes individual growth, change and new learning. Traditional education and training focuses on the acquisition of information and problem solving (Bassett & Jackson, 1994). Mann (1999) describes this as primarily learning before doing. Mezirow (1994) further extends this to instrumental learning where needs and tasks are clearly defined. This type of learning involves clearly defined needs and objectives, anticipated learning outcomes, well defined behavioral objectives, competency based training, and measurable learning gains. In this respect experiential learning serves an important function of refining previously learned skills and confirming previously learned knowledge. It is the basis of many traditional training and executive development programs that reinforce routine problem solving that are inherent in the day-to-day operations of producing a product or service. This is particularly important in organizations where some skills are not used often. This is the case in the fire and emergency services where many skills are used infrequently but when they are used tasks

must be done correctly. In this respect refining and confirming previously learned skills is central to experiential learning in the fire service.

Chris Argyris illustrates this first goal of experimental learning in his model of “single loop” learning (Smith, 2001). Argyris describes three sets of variables in his model, (1) governing variables, (2) action strategies and (3) consequences. The governing variables are the underlying beliefs about a given situation that are taken for granted and in an organizational setting are often represented by policy, precedent and tradition. They may also represent personal and organizational values that underlie organizational culture (Marsick, 1988; Smith, 2001). Action strategies are the things people do or behaviors they exhibit to achieve personal and organizational objectives consistent with their governing variables. The consequences are the results of these actions strategies. In single loop learning, if the consequences are not as intended adjustments are made to the action strategies without questioning the governing variables. In this way any learning is single loop because it describes only an interaction between the action strategies and consequences. In well defined and stable environments this type of experiential learning is often all that is needed to meet organizational objectives and may be the only form of leaning that is required (Brookfield, 1987; Mann, 1999).

Even though Mezirow’s instrumental and Argyris’ single loop learning theories may appear simplistic, they both require rigor in application, especially as problems become complex. Both may require the application of logical thinking, complex analysis, and multi-level decision systems. Duchesne (1996) describes this as a model of problem solving that seeks to match a workplace learning experience with past experiences. If there is a match a person may engage in analytic thinking but no new learning. He calls

this “confirmatory relearning” process that corroborates a past learning (Duchesne, 1996). These skills are important to the day-to-day operations of organizations and are frequently the content of traditional executive development programs (Bassett & Jackson, 1994; Brookfield, 1987; Mann, 1999). Similarly, Heifetz (1994) describes a model of leadership that includes three levels; (1) technical work, (2) a combination of technical and adaptive work and (3) fully adaptive work. His description of technical work includes the application of known information by a skilled person to a well defined problem. Even though a problem may be complex, if the problem can be defined, a known solution exists and a clear responsibility for solving the problem can be established it does not require new learning or questioning of past assumptions. Conversely, if the problem is not well defined, there is disagreement about what may be influencing the problem, there is no clear locus of responsibility to solve the problem, and there is few technical solutions, then adaptive work or learning is required. In Heifetz’s, view adaptive work, or more specifically, learning, requires personal change to reach new solutions (Heifetz, 1994).

Instrumental, confirmatory and technical experiential learning is sufficient in many executive settings where conforming and refining previously learned skills and knowledge is important to consistent organizational operations. Many day-to-day managerial tasks take advantage of full information and require only matching a situation with a known solution. However, it is not generally seen as adequate to anticipate and address the impacts of change (Argyris, 1991).

Kolb’s second goal of experiential learning requires that experience produce personal change. His four stage model of experiential learning illustrates the linkage

between experience and change. The four steps in his model are (1) having an experience (concrete experience), (2) reflecting on the experience (observation and reflection), (3) integrating the experience into a theoretical framework (abstract conceptualization) and (4) use that theoretical framework to solve problems (active experimentation) (Kolb, 1976). The two key components of Kolb's model are reflection and abstract conceptualization. In these stages active thinking and learning must occur in applied settings for personal change to occur. Skipping from the concrete experience directly to the actions stages may solve an immediate problem but produces no new learning to apply to the next problem.

Important to Kolb's model is critical thinking and reflective learning. Brookfield (1987) defines critical thinking as the process of questioning the assumptions underlying customary and habitual ways of thinking. This is sometimes a painful process because it challenges personal and organizational values. Executive development systems that promote critical thinking create an atmosphere of disequilibrium and thus promote the potential for individual growth and change (Brookfield, 1987). Reflection is also a cognitive process akin to critical thinking in that it requires the personal examination of experience through the filters of personal biases and past experiences (Daudelin, 1998). In an employment setting reflecting on job experiences promotes the likelihood that managers will restructure their framing of issues and problems and change their understanding of a situation (Dechant, 1994).

Similar to Brookfield's description of critical thinking is Bartunek & Lewis' (1988) description of people who are "complex thinkers." In their view complex thinking requires the ability to differentiate and integrate. Differentiation is the ability to perceive

several dimensions of an issue and to think non-linearly. Integration is then the ability to identify multiple relationships among different characteristics, discern patterns of relationships and make connections where none were seen before. This is similar to the observation and reflection and abstract conceptualization steps in Kolb's experiential learning model.

Returning to Argyris' model of single loop learning the process of critical thinking and reflection become prime ingredients of Argyris' extension of his model to "double loop" learning. In double loop learning the most important connection is between the consequences and governing variables. In order to produce new and more productive consequences it is often necessary to challenge the governing variables rather than only adjusting action strategies. Moving from consequences to the governing variables is the second loop. Argyris would argue that double loop learning is necessary for individuals and organizations to make informed decisions in rapidly changing and uncertain environments (Smith, 2001).

In summary, experiential learning is an important cornerstone of executive development. Kolb's (1976) two goals of learning specific subjects and learning about oneself are illustrative of the competency and change based executive development strategies respectively. Critical thinking, reflection and double loop learning are likewise extensions of experiential learning into more advanced forms of executive development.

Learning Agility

Learning agility is an extension of experiential learning theory that directly applies learning gained through experience to individual and organizational performance. It was developed from the research at CCL and refined by Michael Lombardo and Robert

Eichinger at Lominger Inc. It is similar to transformational learning in that it requires reflection and critical thinking to improve individual capacity to recognize and manage change (Brown & Posner, 2001). It is directly related to tacit or practical knowledge and is independent of intelligence and personality as a predictor of executive success (Connolly, 2001; Sternberg, Wagner, Williams & Horvath, 1995; Williams, 1997). It recognizes that effective managers learn and change over time and that individuals with high learning agility characteristics display more advance personal learning strategies (Lombardo & Eichinger, 2000; Eichinger, et al. 2004).

There is a growing body of knowledge that indicates that managers must be able to function within new and unanticipated situations where their past and current skills may not produce success (Connolly, 2001; Eichinger & Lombardo, 2000; McCall, et al. 1988). This literature indicates that the successful managers of the future must increasingly rely on their ability to learn in a variety of new roles (Lombardo & Eichinger, 2000). This ability does not come from the classroom, from mentor relationships or from traditional executive development activities (McCall, et al. 1988). It comes from direct on-the-job experience. This experience encompasses significant roles in challenging job assignments that require managers to learn new skills and to change their attitudes and behaviors as a result (Eichinger, et al. 2004; Martinette, 2002). The ability to make sense of work and personal experience is called learning agility.

Eichinger, et al, (2004) describe people who are high in learning agility as:

1. Critical thinkers who examine problems carefully and make fresh connections.
2. Know themselves better and are able to handle tough people situations deftly.
3. Like to experiment and can deal with the discomfort that surrounds change.

4. Deliver results in first-time situations through teambuilding and personal drive.

Learning agility as a distinct construct is related to a number of other practical learning theories. Among them are “functional flexibility,” and “emotional intelligence” (Goleman, 1995), and “tacit intelligence” (Sternberg, et al. 1995). All require individual learning and adaptation. The defining difference is the learning and change from what Eichinger and Lombardo (2004) calls a “stretch experience.” This is experience in a position that requires a person to develop and exercise new skills and knowledge that essentially pushes people outside their comfort zone. It is where the ability to learn and adapt is more important than the application of technical skills. It is not simply an exposure to something different; it is actually doing something different. Agile learners seek out learning opportunities and through that learning are better prepared to respond to and manage change (Eichinger, et al. 2004; Lombardo & Eichinger, 2000). This is the essence of developmental experience described in the next section.

The connection between learning agility and tacit knowledge is important. Sternberg, et al (1995) found that only 25% of job performance is explained by traditional intelligence tests and the traditional academic and structured training methods that support intelligence testing. Tacit knowledge refers to knowledge gained from practical experience that is procedural, relevant to people’s specific individual goals and is achieved without help from others (Connelly, 2001, Sternberg, et al, 1995). It is not codified, involves pattern recognition, operates unconsciously and is unique to an individual’s experience. Like learning agility, it requires sophisticated individual learning

techniques, particularly the development of perception skills (Berman, Down & Hill, 2002). Within the literature this is often referred to as “street smarts” (Williams, 1997).

Leaders who are agile learners have shown to be more successful in producing positive results in organizations undergoing change than leaders with other characteristics such as intelligence, education and position experience (Davies & Easterby-Smith, 1984). The study of learning agility has produced two instruments intended to identify agile learners. The first is the *PROSPECTOR* assessment tool developed by Gretchen Spreitzer, Morgan McCall Jr. and Joan Mahoney at the University of Southern California and now marketed by CCL. This instrument is a 360-degree assessment first developed to identify individuals who had strong potential to be successful as international executives (Spreitzer, McCall & Mahoney, 1997). The original instrument measured eight dimensions of end-state competencies required of international executives and six learning-oriented themes. Refinement by CCL reduced this to 11 dimensions measuring personal openness to learning and willingness to engage in growth opportunities (Center for Creative Leadership [CCL], 2005).

1. Seeks opportunities to learn: Has demonstrated a pattern of learning over time.
2. Seeks and Uses Feedback: Pursues, responds to and uses feedback.
3. Learns from mistakes: Able to learn from mistakes.
4. Open to Criticism: handles criticism effectively.
5. Committed to making a difference: Demonstrates a strong commitment to the success of the organization and is willing to make personal sacrifices to contribute to that success.

6. Insightful: other people admire this person's intelligence, particularly his/her ability to ask insightful questions, identify the most important part of a problem or issue, and see things from a different perspective.
7. Has the courage to take risks: Will take a stand when others disagree, go against the status quo; persevere in the face of opposition.
8. Brings out the best in people: has a special talent with people that are evident in his/her ability to pull people together into highly effective teams.
9. Acts with integrity: Tells the truth and is described by others as honest.
10. Seeks broad business knowledge: Has an understanding of the business that goes beyond his/her own limited area.
11. Adapts to different cultures: Enjoys the challenge of working in and experiencing cultures different from his/her own (CCL, 2005).

The second learning agility assessment is the *CHOICES ARCHITECT*® instrument developed by Lominger Inc. Like the *CCL PROSPECTOR* it is also is a multi-rater assessment measuring four aspects of learning agility. These are;

1. People Agility: Describes people who know themselves well, learn for experiences, treat others constructively, and are cool and resilient under the pressures of change.
2. Results Agility: Describes people who get results under tough conditions, inspire others to perform beyond normal, and exhibit the sort of presence that builds confidence in others.

3. Mental Agility: Describes people who think through problems from a fresh point of view and are comfortable with complexity, ambiguity, and explaining their thinking to others.
4. Change Agility: Describes people who are curious, have a passion for ideas like to experiment with test cases, and engage in skill-building activities (Lombardo & Eichinger, 2000).

In their research, Lombardo and Eichinger (2000) found that the four aspects of learning agility measured by *CHOICES* are significantly associated with two other measures of executive success; high potential as described by ratings by an independent performance/potential assessment and the ability to stay out of trouble. These aspects were also found to be highly reliable across gender, age, levels of management, individual contribution and line and staff positions.

Lombardo and Eichinger (2000) identify two primary uses for learning agility, (1) for the selection of future leaders and managers and (2) as a basis for developing current and future leaders. In the selection role individual learning agility can be assessed along with other traditional dimensions of performance that have predictive value of executive success. It can also be used to identify individuals who can make the most of developmental experiences to learn competencies for future success (Spritzler, et al. 1997). Both the CCL *PROSPECTOR* and Lominger *CHOICES ARCHITECT* instruments can be used in this manner. Early research into learning agility has found that approximately 10% of the population is endowed (Williams, 1997). Given the high cost of executive recruitment and selection the ability to identify individuals with a high potential to successfully deal with change and to lead during times of uncertainty this

assessment can provide distinct advantage by identifying the individuals who already have learning agility tendencies.

The second and possibly more important use in bureaucratic public sector organizations is the use of learning agility as a development strategy. Both *PROSPECTOR* and *CHOICES* identify learning agility characteristics in different categories and at different levels. This can help an individual develop very specific personal development plans to increase his or her ability to improve their ability to cope with change. It can help those interested in developing higher levels of learning agility to identify, choose and benefit from experiences that build learning agility. It can also help managers develop training and development programs that leverage developmental experience opportunities for personnel in accordance with their personal needs as identified by these instruments (Connelly, 2001)

A current application of leaning agility is Lominger's *Talent Management* program. Eichinger, et al, (2004) have distilled learning agility into a personal development strategy based on the four types of learning agility identified in the *CHOICES* instrument. This strategy suggests a number of improvement actions individuals can take to improve their learning agility. These include improvement strategies, substitution strategies and work around strategies (Eichinger, et al, 2004).

In summary, learning agility as a subset of experiential learning can be measured and developed. Based on the CCL and Lominger research it can improve personal and organizational performance. While some people already exhibit learning agility characteristics, as evidenced by the CCL *PROSPECTOR* and Lominger *CHOICES*

instruments, the most important use of learning agility is as a development tool to improve management and leadership capacity.

Developmental Experience

The previous sections have described executive development, experiential learning and learning agility. The constant in these discussions is that learning through experience is a critical; some say the most important aspect of experiential learning in the development of future leaders and managers (Berke, 2003; Brown & Posner, 2001; Cranton & King, Dechant, 1994; Lincoln, 2003; Lombardo & Eichinger, 2000; Martinette, 2002; McCall, 1988; Paaauwe & Williams, 2001). This section describes the concept of developmental experience; what it is, how it works, how it is impacted by different organizational cultures and how it can be used as an executive development strategy. This section concludes with a description of the *Developmental Challenge Profile* developed at CCL by Cynthia McCauley, Lorrina Eastman and Patricia Ohlott.

Developmental experience can be defined as those on-the-job experiences that provide the opportunity to learn skills and behaviors in situations where results really matter (McCauley, et al. 1994). Developmental experiences also provide two important ingredients of a learning situation, opportunity and motivation (McCauley, Eastman & Ohlott, 1995). Since research on experiential learning in general and learning agility specifically finds that the 75% of new learning for managers and leaders occurs on the job, understanding how developmental experience builds executive capacity is important to using developmental experience as an executive development strategy (Brown & Posner, 2001).

Davis and Easterby-Smith (1984) identify three essential components of developmental experience. These are (1) novelty, (2) action and (3) self-initiation. For an experience to be developmental it must be new to the person experiencing it. An essential ingredient in novelty is that a person must acquire a new set of skills to solve a problem (Lombardo & Eichinger, 2000; McCall, 1988). It is not a developmental learning experience if a person applies only current and past skills (Davies & Easterby-Smith, 1984). This often requires not only learning new skills but also the acceptance of new and different perspectives. For an experience to be truly developmental it requires critical thinking and reflective learning (described earlier) as elements of experiential learning (Bartunek & Louis, 1988; Brookfield, 1987; Daudelin, 1988; Dechant, 1994). The second component is action. It is not enough to observe others or to gain a greater awareness or appreciation for the complexity of a problem. For an experience to be developmental a person must actually grapple directly with a new task and apply new skills (McCall, et al. 1988). They must directly face the uncertainties and often take personal risk to address their new responsibilities. Lombardo and Eichinger (2000) take this even further by requiring a person to be fully responsible for the outcomes thereby inducing the possibility of failure and subsequent learning from hardship. The third component is self-initiation. In their study Davies and Easterby-Smith (1984) found that the majority of managers who described developmental experiences initiated the experiences themselves and were not part of a structured executive development process.

Similar to Davis and Easterby-Smith's three components of developmental experience, Morgan McCall, Jr., while at CCL, investigated the importance of overcoming adversity as a developmental experience. This concept of overcoming

adversity is a common thread in the developmental experience literature (Bartuck & Louis, 1988; Duchesne, 1996; McCall, et al, 1988; McCauley, et al. 1995; McCauley, et al. 1994). McCall (1988) describes the impact unsupportive superiors, incompetent and resistant subordinates, high stakes problems, business adversity and major changes in scope of responsibilities as particularly challenging experiences. McCall (1988) also believes that personal responsibility for results and action are central elements of a successful developmental experience, not just exposure. In their studies Lombardo and Eichinger (2000) at Lominger Inc. found that successful executives have twice the number and variety of challenging experiences as unsuccessful executives. Similarly Moxley and Pulley (2003) describe six common hardships that produce learning and development as (1) mistakes and failures, (2) career setbacks, (3) personal trauma, (4) problem employees, (5) downsizing and (6) racial injustice. McCauley, et al (1994) observed that challenging situations also provide several sources for motivation for learning. They believe this may come from a desire to reconcile gaps between actual and desired levels of competencies, seek outcomes with reward potential, avoid negative outcomes or reduce the discomfort of painful situations.

In the early-1980s Esther H. Lindsey, Virginia Homes and Morgan McCall Jr., at CCL conducted a study of developmental experience in the lives of successful executives. This study was titled *Key Events in Executives' Lives*. The findings of this study were that the major events in the lives of the 191 executives interviewed fell into three major categories of (1) assignments, (2) hardships and (3) other people (Lindsay, Homes, & McCall, 1981). Each major category included the demands of the category and the lessons learned. These are shown in Table 2 below.

Table 2

Major Event Categories, Demands and Lessons

Category	Assignments	Hardships	Other people
Demands	New groups of people	Sense of responsibility	Watching an exceptional person
	High stakes and visibility	Sense of aloneness or lack of control	Strong emotional reactions
	Personal stress and strain	Confrontation with self required	Confronting and accepting or rejecting values
	Needing new skills immediately		
Lessons learned	How to survive the managerial assignment	Coping strategies	Human values
	Getting necessary cooperation	Recognition of the need to be prepared	Management values
	Business and organizational knowledge	Needing to gain control of the situation	Political insights
	Understanding and using systems		
	Taking charge		

This original CCL study and its results later became the basis of the book *The Lessons of Experience: How Successful Executives Develop on the Job* by Morgan McCall Jr., Michael Lombardo and Ann Morrison. This book confirmed the definitions of developmental experience investigated earlier by CCL and extended the developmental experience concept into a more defined model. This model confirmed the following qualities of developmental experience.

The first is that there is timing parameters associated with developmental experiences. McCall, et al, (1988) found that it took 10 to 20 years for a manager to fully develop and to have sufficient opportunities to engage in developmental experiences. They also found that successful executives had at least one developmental experience early in their management career, usually before the age of 30. Second, they found that there were distinct differences between how individuals reacted to developmental experiences between those who were ultimately successful and those who were not. They later developed these differences into the concept of “derailed” executives (McCall, 1998). Third, developmental experience teaches people that executive behavior is more about relating to and with people than the application of technical skills. This is often a key learning from early developmental experiences. Forth, dealing with change, ambiguity, and risk are inherent in any leadership situation. Lastly, developmental experiences build the confidence that they can survive even the most daunting challenges.

An important consideration in the application of developmental experience is an understanding that not all jobs are developmental even if they are difficult, that different experiences have differing levels of developmental potential, that not all people learn equally from developmental experiences and that the availability of developmental experiences is driven to some extent by the culture and functions of an organization. Jobs that are within the expertise of an individual, that use past knowledge and well developed technical skills, and where past experience can be used as a guide are not developmental. Many, possibly even most, managerial jobs fit this definition and while they may be critical to an organization’s mission, they do not necessarily have developmental potential. When faced with a job that has developmental characteristics, i.e. novelty and

challenge, individuals will take away varying levels of learning. People have different learning styles and may be blocked from learning due to a mismatch between the potential developmental learning available and their personal learning styles as well as distraction in their work and personal situations (Williams, 1997; Lombardo & Eichinger, 2000). When used as an executive development strategy, attention must be paid to the matching of the experience, the individual, and the timing to maximize the value of the experience in producing personal change. Davis and Easterby-Smith (1984) observe that stable organizations in monopoly and dominant positions with strong norms of organizational behavior provide fewer developmental opportunities. Characteristics of these organizations they found are clear rules and procedures, slow managerial maturity, gradual acquisition of experience, and rigid career ladders.

In the early 1990s CCL developed a new instrument intended to assess the developmental components of managerial jobs (McCauley et al, 1994). This instrument is called the *Developmental Challenge Profile* (DCP). While it was originally intended to be a research tool, it has value in helping managers understand the learning potential of different jobs and potential developmental opportunities. In developing the DCP McCauley et al, (1994) constructed a number of components and scales based on the previous research on the experiences that McCall, et al (1988) described in their study of successful executives. These components and scales were then tested and retested with two large samples of managers in a number of different organization and at different levels of management responsibility. Through their analysis they were able to identify 15 distinct scales that represent components of developmental jobs. These 15 scales are further grouped into three categories of (1) job transitions, (2) task-related characteristics

and (3) obstacles. These 15 scales in the three categories are shown below in Table 3. A detailed description of the DCP scale names, descriptors and sample items is shown in Appendix A.

Table 3

Developmental Challenge Profile Categories and Scales

Job transactions
Unfamiliar responsibilities
Proving yourself
Task-related characteristics
Creating change/developing new directions
Inherited problems
Problems with employees
High level of responsibility/high stakes
Managing business diversity
Handling external pressure
Non-authority relationships/influencing without authority
Obstacles
Adverse business conditions
Lack of top management support
Lack of personal support
Difficult boss

In summary, developmental experience is the primary method of building learning agility. Developmental experiences have definable and observable characteristics that differentiate them from routine managerial and leadership experiences. These revolve around novelty, challenge and learning. The *Developmental Challenge Profile* (DCP) describes common developmental experiences that can ultimately lead to improved learning agility and can be used in applying experiential learning effectively as an executive development strategy.

The Fire Service in the United States

Fire Service Description

The Fire Service in the United States is made up of approximately 26,354 fire departments with 1,088,950 active volunteer and career firefighters (NFPA, 2002). In addition to the traditional responsibility of fighting fires, many fire departments today are deeply involved in providing emergency medical and community health services, fire prevention, community safety and emergency preparedness education, regulation of hazardous materials, the fire safety aspects of new buildings, and, most recently new responsibilities in homeland defense. Although the number of fires has declined in recent years, the number of other emergency and non-emergency responses such as medical emergencies, other types of hazardous conditions and citizen service assists are increasing (NFPA, 2004).

The responsibilities of the fire service are evolving and growing and the fire service itself is changing (Athey, 1994; Compton & Granito, 2002; Coleman, 1978; Granito, 1996; Haverty, 2003; Kramer, 1996; Paulsgrove, 1997). While fighting fires continues to be a physically intensive endeavor requiring a high degree of manipulative

skill, technical knowledge, and personal courage, new skills and knowledge are needed to serve the complex and diverse communities of today. These include advanced cognitive knowledge beyond traditional fire behavior, critical thinking, decision making, communication, and administrative skills and relationship building outside of the fire service culture. The fire service is growing beyond its trade oriented roots towards a profession (Clark, 2004, Coleman, 2003, Onieal, 2003a). Today many firefighters and especially fire service leaders see the fire service as an increasingly professional organization and themselves as professionals in their own right (Clark, 2004; Onieal, 2003b).

Fire Service Organization

Modern fire departments in the United States evolved from a loosely organized network of volunteer associations in the pre-civil war era that began as an outgrowth of the insurance industry (Paulsgrove, 1997). It was the responsibility of early fire departments to protect the economic interests of insurance subscribers by limiting fire spread. Until the mid-1880s fire departments were all volunteer organizations relying on a keen sense of inter-organizational competition and the physical labor of many people. This rivalry was often manifest in poor firefighting performance driven to some extent by their inability to adapt to the use of steam pumping engines, the technological innovation of its day (Paulsgrove, 1997). By the mid-1800s most large cities began converting their fire fighting forces to professional organizations to control for the competition of the volunteer organizations and to take better advantage of new fire fighting technology. Today only about 12% of all firefighters serve in a professional capacity as full paid employees of their jurisdiction, although they serve over 61% of the total population that

live in cities and metropolitan areas. The remaining 88% of all firefighters serve on a volunteer basis in small cities, villages, towns and rural areas (NFPA, 2004).

The fire service in the United States is a national service in name only. It is more accurately described as a network of separate and distinct local and state organizations providing similar services with similar organizational structures and procedures. Fire departments are generally functions of local government and are a service unit of a city, town or county the same as law enforcement, public works, recreation and similar governmental services. Some fire departments operate directly under state statute as independent special districts. The military and some federal government agencies maintain fire departments on large military and governmental installations with federal government employees, contractors, or active duty military personnel. Some states provide direct fire protection services in conjunction with forestry fire protection. In some areas, primarily the northeastern states, some volunteer fire departments are independent non-profit organizations that are not connected to local government. Some large industrial organizations maintain their own fire departments. In very small number of cases, local jurisdictions contract with private fire departments.

Except for the few states that provide direct fire protection, the role of state and federal government in fire protection and related emergency services is limited to the support of training, education, and certification. Most states provide a fire marshal function that provides regulatory programs. At the federal level the United States Fire Administration (USFA) and its training arm, the National Fire Academy (NFA) support the national fire service network with research and development and training and educational support (USFA, 2005a). The USFA is a subunit of the Federal Emergency

Management Agency (FEMA) which itself is a unit of the Department of Homeland Security. Both the USFA and NFA are relatively small organizations. The USFA has only 171 full-time employees and one national campus shared with the FEMA National Emergency Training Center. Of this total there are only 55 full-time employees assigned to the National Fire Academy and its National Fire Program Division (USFA, 2005b). The federal government plays a role in local fire protection through a number of regulatory functions. For example, the Occupational Safety and Health Administration (OSHA) promulgate a number of safety standards that impact fire fighting operations and the Environmental Protection Administration regulates many aspects of hazardous materials response.

The fire service is served by a number of professional organizations. The International Association of Fire Chiefs (IAFC) represents the interests of both volunteer and professional fire chiefs on a national level (IAFC, 2005). This organization provides professional support for their members and lobbies within the national political system for interests important to the fire service. One growing function of the IAFC is the overall career development and more specifically the leadership and management preparation of fire service officers. Professional fire firefighters are generally represented by the International Association of Firefighters (IAFF). This is a labor organization affiliated with the AFL CIO. Like the IAFC, it provides a number of support services to its members primarily in contract negotiations involving compensation, benefits, working conditions and safety and political lobbying (International Association of Firefighters, 2005). Volunteer firefighters are represented by the National Volunteer Firefighters Council (National Volunteer Firefighter Council, 2005). Each of these national

organizations has state and regional sub-organizations with various levels of intensity and impact on fire service issues. Lastly, the National Fire Protection Association (NFPA) supports many fire service activities through its code and standard process and educational and publishing services (NFPA, 2005). The NFPA is a non-profit organization with its roots in industrial and special hazards fire protection dating back to the late 1800s and early 1900s. It develops and publishes a wide variety of codes and technical standards that are either adopted by local and state governments or used as a standard of practice that influences many fire service operations.

All fire departments; professional and volunteer, and public and private; are organized along paramilitary lines with a defined system of command and responsibility. Emergency operations are much like military operations where quick and decisive action is required to fight fires and provide related emergency services. In almost all fire and emergency operations time is at a premium, the actual work is very physical and requires the use of a number of tools and mechanical equipment. Fire departments are typically hierarchal organizations shaped like a pyramid with the fire chief at the top supervising subordinate officers and who supervise firefighters.

The structure of a particular fire department depends on the size and complexity of the organization (Coleman, 1978). The largest commitment of organizational resources and biggest piece of the organizational structure is the emergency response function. Other organizational units typically include fire prevention and administrative support, training, facility and equipment maintenance, personal administration and similar administrative duties. In general, fire departments provide uniform service levels 24 hours a day, 7 days a week from facilities geographically located throughout a

jurisdiction. This resource deployment is intended to minimize the response time to an emergency and to maximize the effectiveness of fire fighting and emergency operations. In career fire departments the emergency operations workforce usually works some form of rotating 24 hour work days with three work groups typically called shifts or platoons. This separation of the workforce into distinct work schedules and geographic locations impose profound management and leadership challenges.

The basic unit of fire service delivery is called the fire company (Paulsgrove, 1997). This is a group of firefighters who respond together on a piece of fire apparatus to fires or other emergencies. The members of this company all have defined responsibilities depending on the type of emergency and the specific function of the company. Each company is supervised by a company officer, typically called a Lieutenant or a Captain. In career fire departments this group works together as a unit for a defined work period and responds together from a fire station. In volunteer fire departments company members assemble at a fire station or meet at a fire or emergency scene. Larger fires and emergency incidents require the commitment of many fire companies in coordinated actions. When multiple fire companies operate together an additional level of supervision is added in the form of a chief officer, usually called a battalion or assistant chief. If a fire or emergency is very large it will encompass a number of supervisory levels and functions. Supervisory direction during emergency operations is governed by a tight chain of command under the paramilitary model.

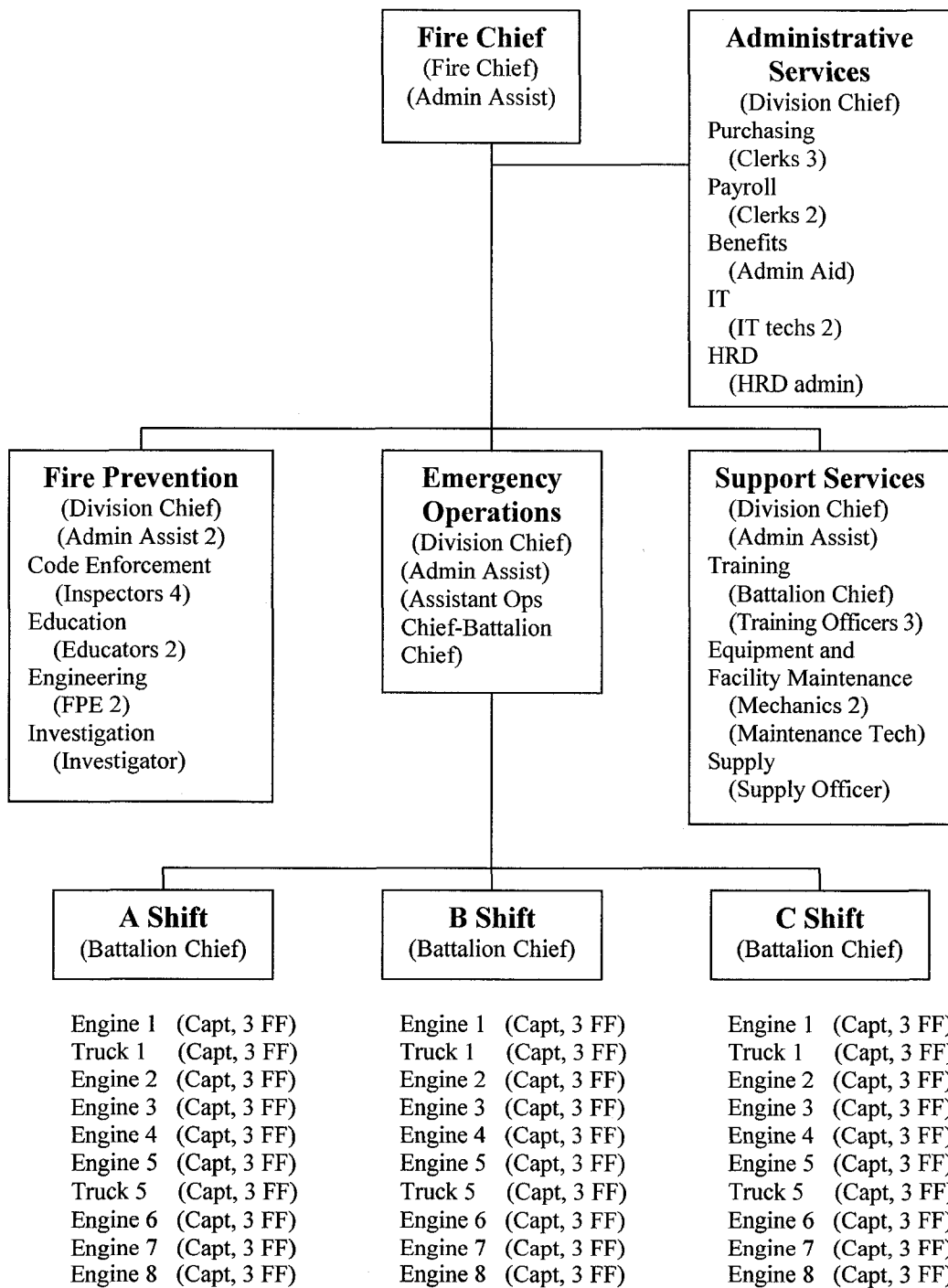
The amount of time spent on emergency response, especially structure fires, is comparatively small so the majority of fire service time within the emergency response portion of the organization is spent on training, equipment and facility maintenance, fire

prevention and education, physical fitness, and administrative duties. Like emergency scene supervision the non-emergency company management is a responsibility of the company officer who supervises all company operations within his or her duty time. Likewise chief officers are responsible for non-emergency supervision of multi-company geographic or functional areas. The management, leadership and supervisory skills used in the non-emergency environment are similar to other organizations and require greater interpersonal skills than typically employed during an actual emergency. Like the geographic and work period separations of the workforce this dichotomy of supervisory, management and leadership styles pose significant challenges to fire service leaders that are not faced by many other organizations (Carter & Rausch, 1989).

Shown in Figure 1 is a typical organizational chart of the fire department of a mid-sized city with approximately 180 employees. There are three major organizational functions under the fire chief, emergency operations, fire prevention and support services. There is also an administrative support function. Each of these four major functions is headed by a senior chief officer, for this example called a division chief. Emergency operations comprise the vast majority of the department's personnel and resources. It is responsible for around the clock response to fire and emergencies. It includes three work groups called shifts each under the command of a battalion chief. Each shift has 10 fire companies in 8 fire stations located strategically throughout the community. Fire prevention is responsible for all fire protection engineering, code enforcement, investigation, and education functions. The support service function provides training to emergency operations personnel, maintains the department's fleet and facilities, and manages the supply function. The administrative function includes purchasing, payroll,

benefit administration, information technology, planning, and human resources. Unlike the emergency operations personnel, fire prevention, support, and administrative personnel do not have separate work groups and work a normal business week schedule. This dichotomy of work schedules is another unique feature of the fire service that poses management challenges. As described earlier the size and complexity of a fire department will dictate its organizational structure. The organizational chart in Figure 1 would be much smaller and simpler in a smaller organization and conversely much larger and complex in a larger organization.

Figure1. Typical fire department organizational chart



Fire Service Culture

The fire service culture is characterized by an intense commitment to the firefighting profession, citizen service and to coworkers (Lee & Olshfski, 2002). It is a culture that for many individuals is all consuming and in many instances rivals traditional family and social structures (Chetkovich, 1997). While the fire service has branched into several new service areas in recent years it is still dominated by traditional structure firefighting (Chetkovich, 1997; Paulsgrove, 1997). With rare exceptions all firefighters, including those who rise to the position of fire chief, begin as firefighters. This insures that all members “pay their dues” as part of the acceptance into the culture (Chitsika, Funchien, Jones & McGee, 2002). Early in this career the training regimen acculturates newcomers into the fire service culture by instilling a new identity which bonds an individual to the fire service in general and often to a particular fire department. This is similar to the early training of military officers that seeks to strip newcomers of an old identity and form a new one based on the dominant values, attitudes and behaviors of the organization and its members (Callahan, 2005). The fire service culture is driven by three factors, (1) the nature of the firefighting work itself, (2) the unique work environment and (3) the historically male dominated workforce (Chetkovich, 1997).

The work of a firefighter is physically demanding in the extreme under very hostile environmental conditions. This is exacerbated by the fact that in structure firefighting, rescue and medical emergencies the physical tasks occur in short but intense bursts with little time for physical, mental and emotional preparation. All emergency operations require quick thinking, decisive actions, quick reactions and awareness of what is happening beyond the task at hand at all levels of the operation (Chetkovich,

1997). Trust among coworkers in this environment is essential. This tends to breed an intense reliance on team members in situations where an individual may suffer injury or even death if the team fails.

The work schedules and working conditions of career firefighters, including company officers, battalion and assistant chiefs create a unique working environment. They commonly work 24 hour shifts living together not only as a work group but as a unit that is sometimes likened to a family setting (Chetkovich, 1997). This includes sharing meals several times during a work shift, sleeping within close quarters, exercising together and sharing entertainment. In most fire departments up to a third of their total life is spent with their work group often for many years. The impacts of these working conditions on cultural acceptance are profound. The ability to get along well with coworkers, hinges on things like a well developed sense of humor, good social skills, having an appealing personality. These are highly valued behaviors and when not in evidence can put an individual at a distinct disadvantage in fire service life (Chetkovich, 1997). In a study of a moderate sized urban fire department Chitsika, et al (2002) observed that aspects of this work environment were high communication among coworkers, high collegiality and egalitarianism, strong pressure to conform to team norms and expectations and a high desire to maintain peace, save face and reduce conflict. In this fire department the official hiring process included a strong element of applicant screening for just these values and behaviors.

An important aspect of these working conditions that is illustrative of the impact of culture is the relationship between firefighters and company officers in their role as supervisors. Fire service leaders have long recognized that this is a pivotal but very

difficult position in all fire service organizations (Carter & Rausch, 1989; Caulfield, 1985; Paulsgrove, 1997). Company officers are typically promoted directly from firefighter ranks and are immediately responsible for supervising people who previously had been coworkers. This is usually not an issue with the emergency response portion of the job; most firefighters who are eligible to be promoted to officer positions already have highly developed emergency response skills. The conflict in roles comes in the non-emergency supervisory situations of monitoring and correcting work, administration, and personnel evaluation. Chitsika, et al (2002) observed that company officers were reluctant to initiate formal behavior correction or disciplinary actions and relied more on informal but culturally approved informal coaching.

The third factor in the fire service culture is the influence of the historically male workforce. The percentage of women in the career firefighter workforce in the United States is approximately 2.5% (Women in the Fire Service, 2005). In her study of a large traditional urban fire department Chetkovich (1997) found that being a firefighter is associated with being a man with the attributes of size, strength, coolness, aggressiveness, competitiveness and self-confidence being seen as important factors in cultural success. Chetkovich (1997) also observed that for women to be successfully accepted as firefighters they had to assume at least some of these male characteristics, sometimes at the loss of their own individuality. This is similar to what Callahan (2005) observed in military officer training.

Fire Service Career Development

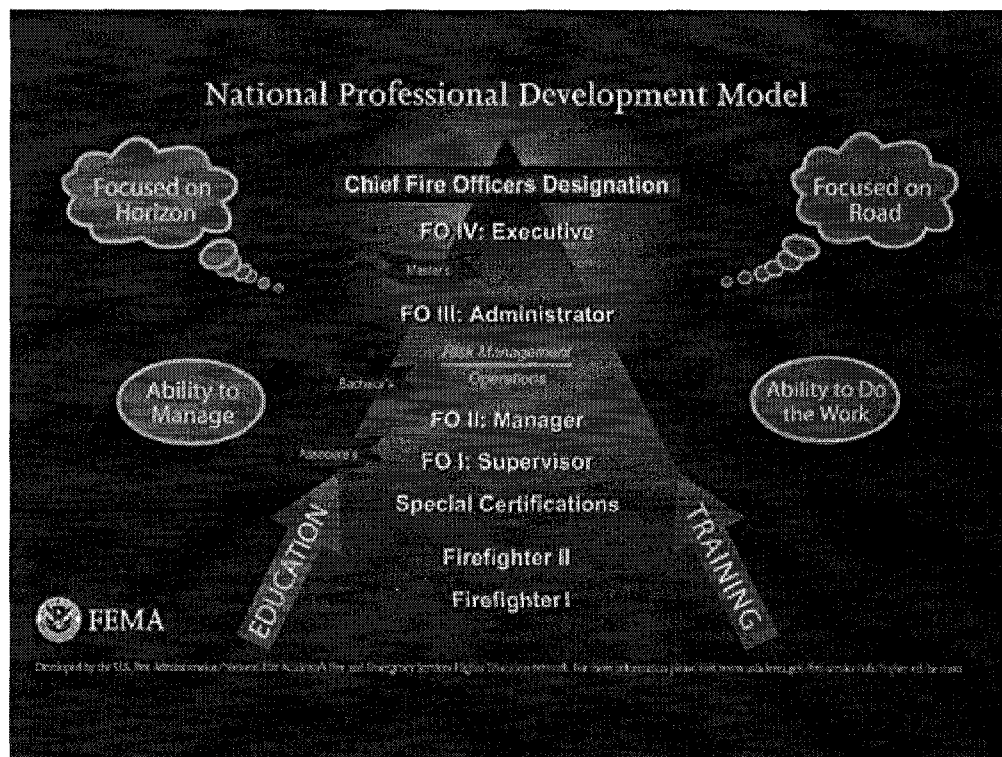
Career development in the fire service has been described by fire service leaders as fragmented and disorganized (Bennett, 2003, Onieal, 2003a). This system has been

driven almost entirely by local conditions and needs as well as a lack of consensus on what a nationwide fire service career development system should include and how it should operate. Advancement and promotion systems, including those used for the selection of fire service managers, use a variety of civil service tests, demonstration of technical competency, experience and seniority (Athey, 1994). Even though efforts have been underway since the 1950s to build a national career development model for the fire service until recently they have been mostly unsuccessful.

Much of fire service career progression is driven by acquiring and demonstrating technical proficiency in firefighting and emergency response duties. In all but the smallest fire departments this technical training begins in a fire academy for all new members. During this experience firefighter recruits receive the basic knowledge necessary to perform firefighting and related emergency response duties. While some of this training is cognitive; such as memorizing fire behavior formulas, understanding how firefighting equipment operates, learning common building terminology; the vast majority of training is manipulative, as in learning how to use the firefighter tools of the trade. This involves demonstration followed by practice and application to many different situations. This training and experiential reinforcement are continuous throughout a firefighter's career after completion of the initial training. This training system has been supported at the state and national levels by a certification system. This system is based on NFPA professional standards and spans a number of technical specialties. In most states firefighters must be certified as firefighters as well as a number of technical specialties within the larger emergency services areas such as emergency medical technician (EMT) or paramedic, and rescue technician.

In recent years a more comprehensive career development model has emerged. This is the *Career Development Model* developed by the National Fire Academy (USFA, 2004). This model encompasses an entire fire service career and illustrates how a person can progress both vertically and horizontally within the fire service over the course of his or her total career (Figure 2). Viewing this model holistically a firefighter can visualize how his or her career can develop along vertical and horizontal lines.

Figure 2. National Fire Academy Career Development Model



Note: From US Fire Administration (2004). *Professional Development for the Fire Service: Transforming to a National System*, retrieved April 8, 2004

Fire Chief Career Development

The preparation of fire chiefs to assume administrative duties has been discussed in the fire service since the 1950s. These discussions, supported by the Wingspread Conferences of the 1960s and studies commissioned by the National Fire Academy in the 1970s and 1980s, identified the need to provide incumbent and future fire chiefs with

greater administrative and managerial skills (Athey, 1994; IAFC, 2003; Strickland, 1996). The skills that were seen as particularly lacking were personnel administration, budgeting and finance, and political awareness. In general fire chiefs were not viewed as public administrators by administrative superiors, political leaders and certainly not within the fire service itself (Hoover, 1993). These discussions resulted in the establishment of a number of undergraduate programs in fire service related disciplines and specialized fire service management programs such as the NFA *Executive Fire Officer Program*. However, it has been only within the last 20 years that the managerial education programs have shifted away from the technical aspects of firefighting and related service provision to a greater emphasis on administration, management and leadership. More recent studies have begun to explore the role that experience plays in learning managerial skills, and more importantly, building adaptive leadership behaviors that help fire chiefs lead during times of external and internal change (Haverty, 2003). This linkage between experience and adaptive change, however, is mentioned very briefly in even the most recent studies and fire service career development literature.

As discussed earlier, virtually all fire chiefs begin their career as entry level firefighters and work their way up thorough one or more fire departments to the position of fire chief. There is no national data base that shows how long individuals serve in different positions, how often chiefs move from one department to another in their career journey, the average age of fire chiefs, educational attainment levels and other career related factors. However, two recent small scale studies provide an indication that higher education at the fire chief level is growing. A recent study of South Carolina fire chiefs (Kassekert, 2004) shows that the average age of a fire chief in that state is 50 years old

with over 20 years experience in the fire service. In this study approximately 30% of these fire chiefs reported higher education at the associate degree level or beyond with a combination of bachelors and masters degree at 15%. A similar study of 117 of the largest metropolitan fire departments in the United States in 2002 found that 25% of these fire departments had over half of their chief officers with at least a bachelor's degree (Training Resource and Data Exchange Network, 2002).

The literature on fire chief career development is shallow. The third edition of the *Fire Chiefs Handbook* (Casey, 1968) devoted only 23 pages in one chapter to the administrative and management duties of the fire chief. The remaining 428 pages (or 95% of the handbook) were devoted to technical aspects of fire department operations. There was no mention of career development. In the more recent fifth edition (1996) of this same handbook the number of pages devoted to administration, management and leadership increased to 175 pages in four chapters or 16% of the total (Bachtler & Brennen, 1996). In this edition there was some mention of career development although it defines the career development process as primarily the accumulation of technical certifications with some mention of higher education and a small section on training in disciplines outside the fire service (Strickland, 1996).

The literature does show an increasing recognition of the evolution in the duties and responsibilities of the fire chief from pure technical knowledge and command of firefighting operations to administration. In the past, fire chiefs were seen as the "lead firefighter" who was described as calm under pressure, steady and brave (Kramer, 1996). Over time, as the management responsibilities of fire departments became more complex, the management functions of fiscal, personal and productivity management and the

leadership functions of vision and change became more prominent (Athey, 1994; Carter & Rausch, 1989; Hoover, 1993). In a study of the knowledge, skills and attitudes required of fire service leaders, Athey (1994) found that the categories of command and administration, safety, personal administration, decision making under pressure, working with other public officials and the public, judgment and communication were all rated highly by incumbent fire service managers. In a more recent study Haverty (2003) extended this list by adding efficiency and conformance with applicable standards and statutes.

Within the last 20 years there have been important advancements in the opportunities for fire chiefs to develop greater administrative capacity. The four most prominent are the NFA *Executive Fire Officer Program*, the Harvard Fire Executive Fellowship, the Chief Fire Officer Designation process of the Commission on Fire Accreditation International and the IAFC *Officer Development Handbook*.

The NFA *Executive Fire Officer Program* targets current and emerging fire service leaders from all types of fire service organizations (USFA, 2005c). The total program is a series of four, two-week courses at the National Fire Academy with an applied research paper required at the conclusion of each class. The stated objectives of this program are to provide senior fire officers with an understanding of the need to (1) transform fire and emergency service organizations from being reactive to proactive with an emphasis on leadership development, prevention and risk management, (2) transform fire service organizations to reflect the diversity of America's communities, (3) value research and research application to the profession and (4) value lifelong learning (USFA, 2005c).

The Harvard Fire Executive Fellowship provides the opportunity for eight senior fire service executives to attend the Harvard Senior Executives in State and Local Government Program each year (USFA, 2005d). This program is jointly sponsored and funded by the IAFC, the International Fire Service Training Association, the NFPA and the USFA. It is a three-week program that is designed to challenge assumptions and broaden perspectives. Curriculum areas include strategy and political management, public value and policy analysis and internal capacity. Selection to this program is based on demonstrated experience in facilitating change within a public sector setting with preference given to graduates of the NFA *Executive Fire Officer Program* and applicants with graduate level academic training.

The Chief Fire Officer Designation (CFOD) is one of the two programs administered by the Commission on Fire Accreditation International, Inc. (Commission on Fire Accreditation International [CFAI], 2005a). This organization grew from a cooperative effort by the IAFC and the International City/County Management Association (ICMA) in 1996 but today is a separate self-governing organization. The CFOD program supports enhanced professionalism by conferring the CFOD designation on chief officers who have met an extensive set of academic, professional, technical and management experience criteria established by the commission. So far 442 chief officers have completed this program and have received the CFOD designation. The commission publishes an extensive *Candidate Guide and Application* that evaluates 20 technical competencies (CAFI, 2005b).

The most recent addition to fire chief career development is the IAFC *Officer Development Handbook*. This handbook is the result of many years work by the IAFC

Professional Development Committee and was first published in 2003 (IAFC, 2003). It describes four critical elements of career development that are intended to prepare fire service members for the position of Executive Fire Officer (IAFC, 2003). These are education, training, experience, and self-development. These four elements are further described in each of the four levels of fire officer; supervising (Lieutenants and Captains), managing (Battalion and Assistant Chiefs), administrative (Division and Deputy Chiefs) and executive (Fire Chief). In this model, education is well defined as specific courses at the associate, bachelor and graduate levels in higher education settings. Training is equally well defined as a progression of technical and professional certifications from the preceding levels of supervising, managing and administrative fire officer. Experience includes a variety of roles requiring administrative competency in such areas as finance, planning and organizational development, managing major functions within a fire department, leading across functions within the department and participation in interagency and professional organizations. Self-development is defined as the awareness, personal attributes and attitudes that are individually developed and refined over time.

The IAFC model incorporates the NFA career development model described earlier and recognizes the CFOD as a terminal objective of the self-development portion of the executive fire officer level. It also provides direct linkages to the NFPA Standards for Professional Fire Officer described earlier. Most important for the purposes of this study the IAFC *Officer Development Handbook* extends the concept of experiential learning beyond the context of perfecting technical skills. It specifically encourages aspiring officers to engage in self-development activities beyond the traditional technical

competencies and experience within traditional fire service organizations. Within the experience section of the executive fire officer level there are suggestions that fire officers gain experience in managing diverse functional areas, manage organizational change efforts, develop strategic direction and participate in community organizations. In the history section it specifically refers to the role of leadership defined in the 1996 Wingspread IV Conference on Fire Service Administration, Education and Research. At this conference the role of future fire service leaders was described as, “Leadership: To move successfully into the future, the fire service needs leaders capable of developing and managing their organizations in dramatically changing environment” (IAFC, 2003, p. 2). However, even though the IAFC *Officer Development Handbook* begins to extend experiential learning, most of the career experiences it describes are within the closed, bureaucratic and relatively stable fire service culture.

Fire Service Summary

In summary, the fire service in the United States has and continues to become a multi-dimensional public service organization. While there is some national organization the fire service is predominantly a local government function with strong roots in public service within an intense internally focused culture. Fire departments have traditionally been organized along paramilitary lines and will likely to continue to be so organized even as the services provided by fire departments expand and diversify. While it has strong roots in the physical and vocational trades the fire service is expanding into social services, education and all risk hazard reduction and as such does appear to be shifting to a higher level of professionalism. The fire service workforce is overwhelmingly male and this male oriented culture is evident in all fire service activity. While the workforce may

be changing to reflect the diversity of the country, in general this change is very slow. The internal culture, in fact, permeates all organizational activity and has a distinct influence on fire service career development at all levels.

Career development in the fire service is heavily influenced by the technical nature of the job. Although the number of structure fire continues to drop the emphasis on structural firefighting continues to be the cornerstone of the fire service culture and its training, education and support systems. Only recently has an overall career development model beyond technical training and certification emerged. The career development system for fire chiefs in particular has been oriented towards operational and technical training. Fire chiefs work almost entirely within the confines of the fire service and are not viewed as generalist public administrators. The preparation of fire service officers to become fire chiefs has been a topic of discussion within the fire service for many years but only recently has comprehensive career development systems begun to emerge. The role of experiential learning in particular is dominated by technical decision making and routine management and leadership behaviors. The IAFC *Officer Development Handbook* and one recent study allude to the importance of developmental experience but do not mention learning agility or executive development strategies based on developmental experience.

CHAPTER 3: METHODOLOGY

Research Design

The research design of this study was qualitative and exploratory. Within this design a multiple case study as described by Yin (2003) was used as the specific method of inquiry. It was exploratory because the phenomena of developmental experience had not been investigated in the unique fire service environment. Personal interviews were the primary means of data collection with a small element of document review. The participants, or cases, were purposively selected because they had an intimate knowledge of the research subject but more importantly because they had a rich and lived experience with the phenomena in their own lives. The within case data analysis used the holistic-content perspective described by Lieblich, Tuval-Mashiach & Zilber (1998) to identify critical career development experiences and specific developmental experience themes. The participant interviews produced detailed and rich narrative data and the analysis strategy identified common emergent themes in the form of critical career and later developmental experiences. In keeping with the qualitative approach no specific variables were proposed for testing or experimentation. However, because the literature review indicated that common developmental experience themes would emerge, the data collection instrument was structured to elicit information that would be consistent with the developmental experience concepts described in the literature.

Qualitative Approach

I chose the qualitative approach due to its capacity to examine and draw meaning from complex relationships within the lived experiences of study participants, in this case

successful fire chiefs. As described by Strauss and Corbin (1998) qualitative methods provide a distinct advantage when exploring the nature of personal experiences based on feelings, thought processes, and emotions. In this study the focus was on the individual experiences of successful fire chiefs within the context of their personal and professional lives which were further bounded by the fire service culture in which they work and live. This is an example of the use of constructivism as a way of examining how a person makes sense of the world around them. More specifically constructivism implies that there are multiple realities, that knowledge is developed collaboratively by the research participant and the researcher, and that data is gathered in the natural world (Denzin & Lincoln, 2000).

Creswell (2003), Janesick (2000), Marshal and Rossman (1999) and Rossman and Rallis (2003) all describe the important tenants of qualitative research as holistic, naturalistic, process oriented, participant focused, interpretive, and emergent. This study was holistic in that it considered all of the participants' experience with the research phenomena. It allowed participants to draw from all of their life experiences across their entire life span within and outside of their immediate employment environment. It was naturalistic in that it examined the experience of the participants in their actual life setting as they defined it. It did not put them in a clinical environment or ask them to speculate on what the experience of others would be or even what their own experience would be in a different setting. The focus of the study was on the evolving data as it is collected from the participants in the form of personal narratives. The data collection procedures had some degree of structure in that they were sensitive to the process of collection and analysis and changed as meaning and themes emerged. While the research questions

foreshadowed where this inquiry could lead they were not locked in on any specific end result. In this way the focus of the inquiry was on the process rather than the result. A common thread in the qualitative approach was the role of the researcher as closely engaged with the participants, data collection and data analysis. As a researcher I played a role as a participant observer but the bulk of research process relied on the fire chiefs who contributed their personal experience. Since I didn't know what exactly to look for, the study relied on meaning to emerge from the data provided by the participants through interviews and, where available, their writings or writings about them. In this study all of these tenants applied and added value to the examination and understanding of the participant's experience.

Multiple Case Study

The use of case study as a research strategy to understand social phenomena is a common method of social science inquiry. Merriam (1990), Stake (2005) and Yin (2003) all define case study research as a holistic method of understanding individual and group behavior within complex environments. Stake (2005, p. 444) finds that "case study concentrates on experiential knowledge of the case and close attention to the influence of its social, political and other contexts." Similarly, Merriam (1990, p. 2), who specializes in educational case study, asserts that "case study research, and in particular qualitative case study, is an ideal design for understanding and interpreting observations of educational phenomena." Yin (2003, p. 2) more specifically says "The case study method allows the investigator to retain the holistic and meaningful characteristics of real-life events, such as individual life cycles, organizational and managerial processes, neighborhood change, international relations and the maturation of industries." In

addition to description, case study research also provides for the interpretation of the case in relation to literature and researcher analysis. Merriam (1990, p. 27) describes this as an interpretive case study “used to develop conceptual categories or illustrate, support or challenge theoretical assumptions.”

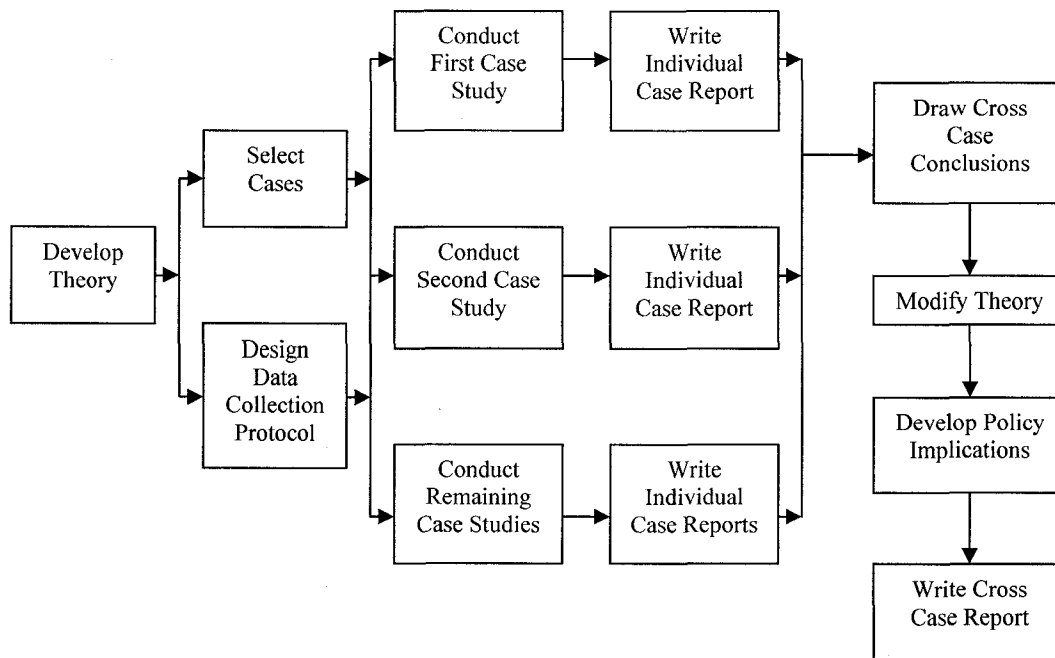
I chose case study for two reasons. The first was that it was compatible with my research purpose and research questions. This study was centered on the lived experiences of the participants within their individual worlds and within the unique fire service culture. My intent within the research purpose was to examine how developmental experience influenced the acquisition of successful management and leadership behaviors. I did not intend to generate a definitive theory but did hope to produce enough evidence that meaningful relationships exist between developmental experience and professional success. This is consistent with naturalistic generalization defined by Stake (1995, p. 82) as “conclusions arrived at through a personal engagement in life’s affairs or by vicarious experiences so well constructed that the person feels as if it happened to themselves.”

The second reason was more pragmatic. As an educator, researcher and practitioner I was concerned with the practical application of knowledge. Case study has a long reputation as a teaching method (Stake, 2005). As a potential new fire service career development strategy I wanted to make this research as understandable as possible to a fire service audience. Case study teaching (Yin, 2003) is a common method used in management and leadership education and as such would be more recognizable to this audience. This is also compatible with the learning strategies already used by the fire service that rely on vicarious learning. Stake (p. 87) explains that for vicarious experience

to be successful as a teaching tool it must be personal, “a narrative account, a story, a chronological presentation, emphasis on time and place provide rich ingredients for vicarious experience.” This exemplifies the essence of my choice of an interview based data collection strategy and narrative analysis method.

Within the larger case study strategy I choose the multiple case study design described by Yin (2003). By using multiple cases the evidence of the influence of the phenomena would be expected to more compelling than if a single case were used alone. Yin (2003) uses an analogy of experimental replication in a more positivist approach to illustrate the value of multiple cases. The individual cases in this study were selected because they were bounded within the fire service, career experience, and most important, within a definition of professional success. Yin (p. 50) says that “each individual case study consists of a whole story, in which convergent evidence is sought regarding the facts and conclusions for the case, each case’s conclusions are then considered to be the information needing replication by other individual cases.” The construction of rich individual case narratives and interpretations into the case reports illustrated this focus on each individual case. Only after a thorough description and interpretation of each individual case was a cross case analysis attempted. Figure 3 illustrates Yin’s multiple case study process that served as a model for this inquiry.

Figure 3. Multiple case study process



Source: COSMOS Corporation, in Yin (2003)

Participants and Case Selection

The cases, or participants, were purposely selected from fire chiefs who had been awarded the Fire Chief of the Year Award by *Fire Chief Magazine* since the inception of this award in 1996. This award was given each year to one professional and one volunteer fire chief who had demonstrated outstanding leadership and commitment to the fire service. The selected cases were 14 fire chiefs who had received the Fire Chief of the Year award between 1996 and 2005. The other six awardees did not reply to the initial request to participate, could not be contacted due to a lack of current contact information or could not attend the 2005 IAFC conference. The case selection was purposive because of the participant's ability to contribute to the evolving theory (Creswell, 1998). It was

also a convenience selection due to the need for the participants to be accessible at a specific point in time and location (Gliner & Morgan, 2000).

The focus of this study was on fire chiefs who had demonstrated success in the totality of their careers. The literature review did not discover a definition of success in the position of fire chief and I did not attempt to construct a model of success. For this reason I accepted the Fire Chief Year of Award as a valid indication of fire chief success within the context of available literature and research resources.

Individuals who were nominated for this award must have demonstrated a career of progressive leadership in the fire service. Specific selection criteria for this award emphasized leadership, innovation, professional development, integrity, service to the public and contributions to the fire service as a whole (Fire Chief, 2005). This selection criterion is described in Appendix B. It is important to note that selection was not based solely on a single event such as command of a major emergency incident. In addition to nomination for this award three other selection criteria specific to this study were applied to the recruitment of participants. These criteria were:

- 1) The participant must have had at least 20 years of total fire service experience and at least 10 years of management experience as a chief officer. The literature on developmental experience indicates that individuals must have had an adequate amount of professional experience to have a reasonable opportunity to participate in developmental experiences and to fully develop as a manager (McCall, Lombardo & Morrison, 1988; Robinson & Wick, 1992).
- 2) The participant must have been able to participate in a personal interview during the International Association of Fire Chiefs Annual Conference in Denver

Colorado, in August 2005. The participant must also have been available for a telephone follow-up interview as well as able to review interview transcripts and case reports.

- 3) The participant must have been willing to participate given the risk/benefit and confidentiality precautions of the study as approved by the CSU Human Subjects approval process. While all the consent and confidentiality requirements were followed some of the participants are widely known figures in the fire service and may be recognizable in the data representation.

Research Purpose

The overall purpose of this study was to examine how developmental experience influenced the ability of successful fire chiefs to build leadership and management capacity. Another purpose was to construct a model of developmental experience within the fire service culture that may assist incumbent and future fire chief's use of developmental experience as a career development strategy.

Research Questions

The research questions provided a point of beginning and focused the research process. They were drawn from the literature review and my knowledge of and passion for the subject of leadership and management development in the fire service. Janesick (2000) describes research questions as a product of the researcher's intellectual curiosity that is interwoven with the lives of the participants. Although these questions were a logical starting point I did not fully know what the best research questions would be until after I had established relationships with the study participants. These research questions changed as the experience of the participants, the information learned through the

literature review, and my own experience combined through the data collection and analysis process.

1. What did successful fire chiefs describe as critical experiences that are their strongest developmental experiences?
2. What learning and change in leadership and management behaviors did they describe as a result of these developmental experiences?
3. What developmental experiences provided the most powerful experiential learning?

Interview Guide and Questions

The interview questions were modeled on a study by McCall, Lombardo and Morrison in their 1988 book *The Lessons of Experience: How Successful Executives Develop on the Job*. The interview questions were organized in three sections. The first asked participants to describe three or more experiences, events, or episodes that led to lasting change in how they lead and manage today. These were followed by a second set of questions that helped participants elaborate and better describe these experiences. A third set of questions asked participants to describe their career in regard to education, training, experience, certifications and other similar aspects of career development. These questions are detailed in Appendix C.

The interview questions and directions were pilot tested with two fire chiefs who met the same recruitment criteria as the case selection process. Pilot testers were asked to read all the directions, informed consent form and the interview questions. Information sought during the pilot tests included, but was not limited to, the average length of interview, clarity of the questions and the ability of participants to recall critical events.

The interview questions, directions and procedures were adjusted based on the input of the pilot testers.

Data Collection Procedures and Analysis

The data collection took place in the summer of 2005 and in early 2006. This included a two-cycle interview process and document review described in more detail below. Data analysis began concurrently with data collection and the majority of data analysis was done in February and March of 2006.

Interviews

Each participant who agreed to participate was asked to take part in a two cycle data collection process. The interview procedure followed what Fontana and Frey (2000) describe as unstructured interviewing. Each participant was asked the same set of questions. The three primary questions were all open ended and allowed participants the ability to move in any direction they felt best illustrated their experience. The questions in sections two and three were more definitive but are also open ended. My experience as a fire service officer enhanced my ability to establish rapport with the participants as well as understand the vocabulary and culture.

Each participant was interviewed in-person once and asked to participate in one follow-up telephone interview. In the first interview cycle each participant who agreed to an in-person interview was given an interview time and location at the IAFC conference in August, 2005 in Denver, Colorado. Each participant was provided with an introductory letter (Appendix D), procedures (Appendix E), consent form (Appendix F), and sections one and three of the interview questions. In keeping with the open-ended interview format the second set of questions were not given to the participants prior to the interview

in the hope that that the participant would not feel compelled to confine their narratives to the specific questions in section two. The consent process was explained to each participant and the consent forms were signed by the participants at the beginning of the in-person interview. The interviews were audio recorded and transcribed.

Each participant was offered the opportunity to review their transcript from the first interview. The participant's were instructed to remove any information they wished. A self-addressed and stamped envelope was provided for return mailing of the corrected transcript for those participants who requested a transcript.

After a preliminary reading of each individual transcript I developed an integrative memo. This integrative memo included a brief description of the developmental and other critical experiences the participant described as well as my own reflections and notes for follow-up. After the integrative memo I reread the transcripts and preliminary documents and constructed a preliminary case report. Each preliminary case study described the critical career experiences relayed by each participant with the direct quotations relative to each experience. An important part of this preliminary case report was my reorganization of the interview data into a common chronological progression. In this way the case reports reflected a better feel for the time and place of each participant's experience. The preliminary case report was mailed to each participant for his or her review along with a cover letter (Appendix G) and a second set of questions for the follow-up interview. Each participant was contacted by e-mail and telephone with a request for a follow-up telephone interview. Three follow-up interview requests were made. The follow-up interview questions were tailored to each individual participant in regard to the information provided in their first interview. In this way the participant's

story gained depth, detail and resonance (Charmaz, 2003). Like the first interview this follow-up interview was tape recorded and transcribed. As with the first interview, each participant was offered the opportunity to review the transcript using the same procedure.

After transcription of the follow-up interviews I updated the preliminary case report with new information provided in response to the follow-up questions and any new insights and observations made by the participants. I also included information gleaned from the document review. I mailed the updated case reports to the participants who provided a follow-up interview for review with a self-addressed and stamped envelope with directions to make changes, additions and deletions as necessary (Appendix H). The updated case reports became the primary source documents for individual case theme identification and later cross-case analysis, comparison with the developmental experience model, comparison to the definitions of experiential learning, and change in leadership and management behaviors.

Document review

In addition to the interviews I reviewed the biographical article published in *Fire Chief Magazine* on each participant if available. The purpose of this review was to provide insight from another perspective into the lived experiences of the participants, in this case the actual words of the participants and interpretations of another interviewer (Hodder, 2000). Analysis of this document followed the same analysis procedures described below for the interview data.

Analysis

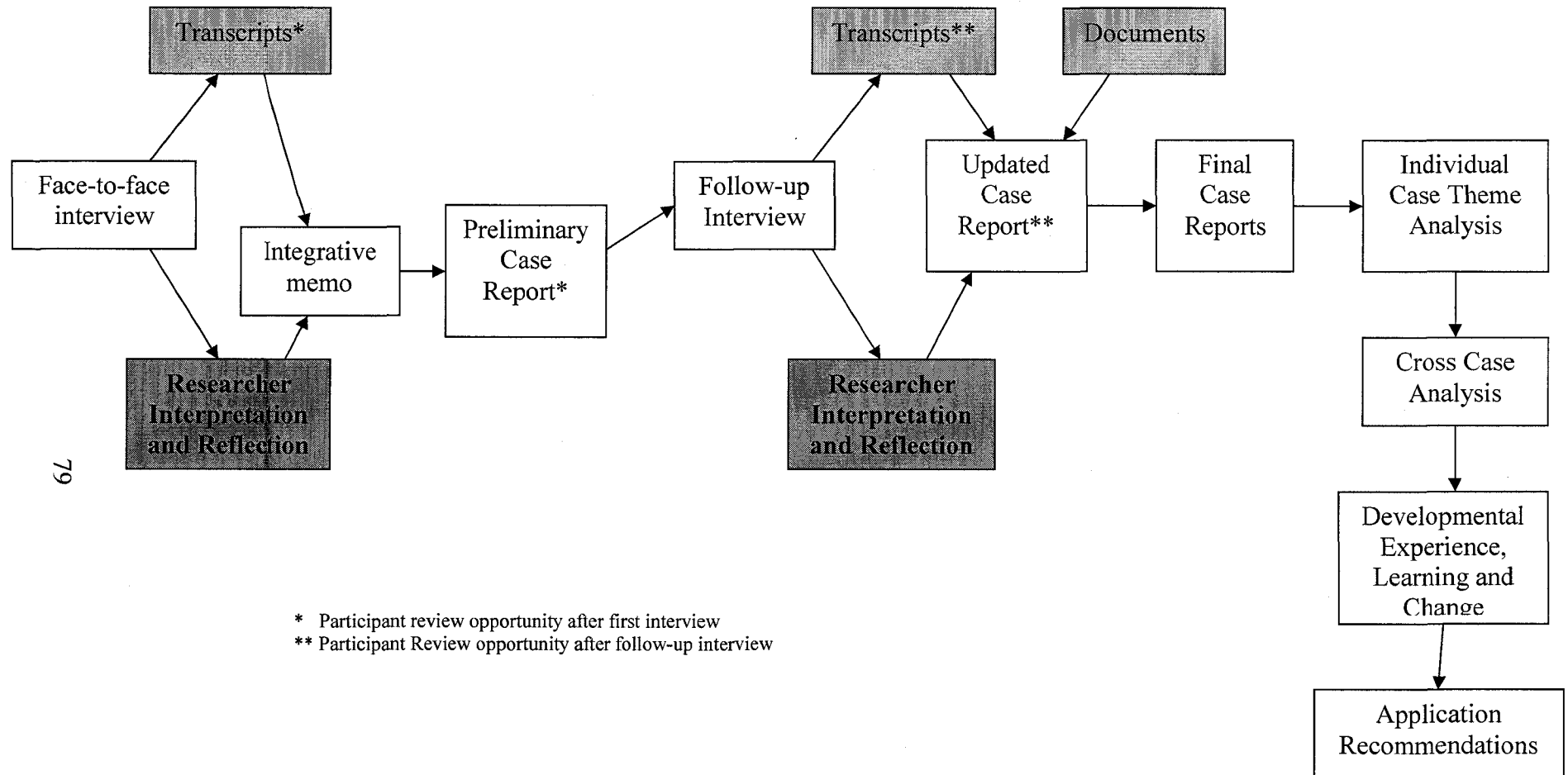
My analysis strategy consisted of three phases that generally corresponded to the first three research questions. Because the data was collected in the form of narrative

stories, I chose the holistic-content perspective of Lieblich, et al (1998). They described this process as commonly used in case study (p. 87). In the within case analysis I considered each participant's narrative as a whole and identified the major themes of critical career experiences. I did not attempt to dissect each narrative into defined categories as would be done in a categorical-content approach. Consistent with the holistic-content perspective, I read each narrative multiple times with the intent of determining the explicit features of each participant's unique experience. Generally these included what happened, when did it happen, who was involved, how they reacted, how they experienced change in their leadership and management behaviors, what was learned and what environmental and cultural factors influenced the situation. In this phase I identified one or more major themes of experience that emerged from each participant's narrative. For each theme I assigned a qualitative value of the strength; weak or strong in each participant's total narrative. While I did consider the frequency of mention of the themes as one component of strength I did not develop or apply quantitative selection criteria for my decision process. An example of this within case analysis is provided in Appendix I.

In cross case analysis I developed a set of common themes and critical career experiences across all 14 cases. This analysis was straightforward using the general cross case analysis techniques described by Stake (2006). In this phase I identified a number of common experience themes that appeared strong across a number of cases. From the cross case analysis I compared these common themes with the model of developmental experience, the definitions of learning described in the literature and evidence of changes

in leadership and management behavior. The data collection and analysis flow chart shown in Figure 4 illustrates this entire process.

Figure 4. Data collection and analysis flow chart



Trustworthiness

Trustworthiness refers to the accuracy and credibility of the study findings (Creswell, 2003). Guba & Lincoln (2005, p. 205) describe this more succinctly in relation to my research purpose by asking two questions:

Are these findings sufficiently authentic (isomorphic to some reality, trustworthy related to the way others construct their social worlds) that I may trust myself in acting of their implication?" and "Would I feel sufficiently secure about these findings to construct social policy or legislation based on them?"

In this study I used the trustworthiness strategies described by Creswell (2003) of triangulation of data sources, member-checking for the accuracy of data and interpretation from the participants, rich and thick description of the data, and clarification of my own researcher biases. Stake (1995) described four triangulation protocols; data source, investigator, theory and methodological. In this study I used data source and methodological triangulation. The data source triangulation used the two interviews approximately six months apart as well as the document review. The second interview asked the participants to elaborate on information provided in the first interview. The information provided by the participants on the same experiences at two different times was consistent. Information found in the document review on the same experiences was also consistent.

During the member checking process all participants were offered the opportunity to review transcripts at both the first and follow-up interview stages. Only one participant requested a transcript. No changes were requested from the transcript review. Each participant was mailed a preliminary case report. During the follow-up interview none of the participants requested substantive changes. Each participant that provided a follow-up

interview was mailed a final cases review with a self-addressed envelope and postage with directions to return the case report with changes or deletions. None of the participants requested changes. The detailed case reports, including lengthy quotations, provided rich and thick descriptions of participant experience. Each step of the process was documented and can be demonstrated. Finally, my own researcher bias was clearly described in my researcher stance, correspondence with participants, and during my conversations with them.

Human Subjects Approval

This study was conducted under the approval of the Colorado State University Human Subjects protection system. The *H-100* form was completed and submitted as an expedited review Category 7 (Colorado State University, 2000) for research on individual and group characteristics or behaviors using surveys and interviews. Human Subjects approval was granted in June of 2005. This approval was renewed in 2006 and 2007. The actual participants were known only to the researchers although due to the very small number of Fire Chief of the Year recipients and their attendance at the IAFC conference it was not unreasonable to expect that participants may have known one another and may have discussed their participation among themselves or with others. Special attention was paid in the HRC and the informed consent process to insure that participants were aware that due to their small numbers and their notoriety in the field that their identity could be observable in the data and final report.

CHAPTER 4: FINDINGS

The findings were derived directly from the narratives of the 14 fire chiefs who participated in this study. Their demographic information is presented below as is their condensed narrative, or case summaries. These summaries do not do full justice to the rich and often personal descriptions of their career experiences but they do capture the most important aspects of their careers. From the large number of career experiences nine experience themes emerged that met the definition of developmental experience. Within these nine themes personal learning was displayed in seven and changes in leadership and management behavior in four. This filtering through the analysis process demonstrated that while these 14 people had many important career experiences only a few contributed to significant changes in leadership and management behaviors.

Participants

The 14 participants were purposely selected from 20 fire chiefs who had been awarded the Fire Chief of the Year Award by *Fire Chief Magazine* 1996 through 2005. The focus of this study was on fire chiefs who had demonstrated success in the totality of their careers as defined by their peers in the award selection process. The literature review did not discover a definition of success in the position of fire chief and I did not attempt to construct a model of success. For this reason I accepted the Fire Chief Year of Award as a valid indication of fire chief success within the context of available literature and research resources. In addition to nomination for this award three other selection criteria specific to this study were applied to the selection of participants. These criteria were:

- 4) The participant must have had at least 20 years of total fire service experience and at least 10 years of management experience as a chief officer.
- 5) The participant must have been able to participate in a personal interview during the International Association of Fire Chiefs Annual Conference in Denver Colorado, in August 2005. The participant must also have been available for a telephone follow-up interview as well as able to review interview transcripts and case reports.
- 6) The participant must have been willing to participate given the risk/benefit and confidentiality precautions of the study as approved by the CSU Human Subjects approval process.

Of the 14 participants 13 are male and one female. The average age was 56 and the average time of service in the fire service was 35 years. The average tenure as a manager was 25 years with 19 years as fire chief. At the time of interview all were well into their professional careers with several nearing retirement. One was retired from active service. Within this group eight were professional fire chiefs in that they were full time employees of their jurisdictions. The other six were volunteers. Of the volunteer chiefs all but one had professional careers related in some way to fire protection and safety. Of the total participants all but two reported having formal higher education experience with nine possessing associate degrees, 10 holding bachelor's degrees and seven with masters degrees. One has a PhD. In keeping with the Human Subjects protection in the research protocol all participants were identified by a fictitious first name only. With the exception of one, all of the participants held at least one professional fire service management

certification or had attended one prestigious management development program. The data in Tables 3 and 4 show the participant data.

Table 3

Participant Summary Data

Name	Age	Gender	Current status	Total years fire service experience	Total years management experience	Total years as fire chief	Number of fire service employers	Organization type	Population
Richard	74	Male	Retired	53	30	30	1	Volunteer	57,000
Stan	54	Male	Fire Chief	35	29	28	1	Combination	50,000
Clark	58	Male	Fire Chief	34	28	18	1	Career	165,000
Jack	53	Male	Fire Chief	37	25	25	7	Career	45,000
Bob	59	Male	Fire Chief	40	31	25	4	Career	252,000
Barry	59	Male	Fire Chief	37	20	13	3	Career	160,000
Frank	55	Male	Fire Chief	35	20	15	3	Volunteer	47,000
Ben	54	Male	Commissioner	36	32	20	2	Volunteer	25,000
Sam	57	Male	Fire Chief	40	27	16	6	Career	500,000
Tom	53	Male	Fire Chief	30	25	16	1	Volunteer	9,000
John	55	Male	Fire Chief	31	21	13	2	Career	100,000
Megan	60	Female	Fire Chief	31	20	11	2	Combination	420,000
Randy	44	Male	Fire Chief	24	17	10	1	Volunteer	7,500
Jerry	53	Male	Fire Chief	35	32	30	1	Volunteer	

Table 4

Participant Education and Certifications

	Higher education	National Fire Service Management Education/Certification	Special management certification
Richard		Chief Fire Officer Designate	
Stan	1-2 years, no degree		
Clark	Associate, Bachelors (Political Science), Masters (Public Administration)	Harvard Executive Program Chief Fire Officer Designate	
Jack	Bachelors (Fire Service Management), Masters (MPA)	Executive Fire Officer Harvard Executive Program	
Bob	Associate, Bachelors (Fire Administration), Masters (Human Relations)	Harvard Executive Program Chief Fire Officer Designate Fellow Institute of Fire Engineers	Certified Emergency Manager
Barry	Associate, Bachelors (Business)	Chief Fire Officer Designate	
Frank	Associate	Executive Fire Officer Chief Fire Officer Designate	
Ben	Associate, Bachelors (Business Administration), Masters (Education), Doctorate (Behavior Management)	Chief Fire Officer Designate Certified Fire Protection Specialist	Certified Safety Specialist Certified Security Specialist
Sam	Associate, Bachelors (Business Administration), Masters (Public Service Administration)	Executive Fire Officer Chief Fire Officer Designate	
Tom	Bachelors (Organizational Development and Management)	Chief Fire Officer Designate	
John	Bachelors (Business Administration), Masters (Business Administration)	Chief Fire Officer Designate	Certified Public Manager
Megan	Associate, Bachelors (Business Administration), Masters (Organizational Leadership and Administration)	Harvard Executive Program Chief Fire Officer Designate	Certified Leadership Coaching
Randy	Associate (2), Bachelors (Fire Administration)	Chief Fire Officer Designate	Certified Emergency Manager
Jerry		Executive Fire Officer Chief Fire Officer Designate	

All 14 participants were interviewed in person in August 2005 in accordance with the approved protocol. 10 participated in the second round of telephone interviews in the

spring of 2006. Four of the participants were not able to complete a second interview. Published documents were found and reviewed for 10 participants.

Case report summaries

Below are case summaries of the 14 participants. They generally describe each participant's career and the major events that influenced his or her development as a manager and leader. All of the information described in the case summaries is as reported at the time of the most recent interview in either 2005 or 2006. Within each summary their career is described in three stages. The first is setting-the-stage. It was here that they gained entry into the fire service, and built the technical skills necessary to be successful as a firefighter and supervisor. The executive development stage was when the participant transitioned from a supervisor to a manager developing the skills of organization, decision making and communication. The final stage was executive application. It was here that the participant applied their skills and previous experience to solving difficult organizational problems. As will be shown later it was also in this stage that most changes in leadership and management behaviors occurred.

Case 1 - Stan

Stan is a 54 year old male who has served in the fire service for 35 years with his entire fire service career in one organization. He became fire chief early in his mid-20s. His organization is a fire protection district with a population of 50,000 adjacent to a moderate sized city. Although his department has some career support staff, it is primarily a volunteer organization of approximately 300 people. He was his department's first career employee and served as fire chief through many years of organizational growth and change. He exudes pride in this growth, the services his organization provides

to the community and his role in his department's accomplishments. He has also served in a number of national organizations and has been involved with several national initiatives.

Stan described his setting-the-stage period as roughly from his early experience as a volunteer firefighter to well into his first years as fire chief. His setting-the-stage period transitioned to executive development when he was appointed fire chief. A separation between Stan's executive development and application periods was difficult to distinguish and this combined period seemed to span at least 20 years. Within this period he told of three specific experiences that seemed to hold meaning for him. The first was a tax proposal that was ultimately successful. The second was related to the terrorist attacks in New York City on September 11, 2001. The third was not a single experience but a continuing jurisdictional dispute with a neighboring city and its unionized fire department workforce.

Throughout his narrative Stan often described a mixture of elation, pride and optimism with frustration and pain. He talked frequently about personal leaning and change in relation to increased patience and tolerance but at the same time seemed to struggle with these new behaviors in the real world application. He seemed to have very high standards for himself and for others. He told of an acquired awareness of public safety issues being, "very volatile, very emotional and very public." While he described a learned and evolving appreciation for process he seemed also to be frustrated with the place of change and his own level of control of the process and outcome. Stan's narrative style was reflective and humble although he seemed professionally exhausted.

Case 2 - Randy

Randy is a 44 year old male who has served in the volunteer fire service for 24 years. In his professional life he is the emergency response specialist and fire chief for a refinery of a large petroleum corporation. He has been in management positions in private industry for 15 years and has been a fire service chief officer 17 years. He has been fire chief of his volunteer fire department since 1997. His volunteer fire department serves a community of 7,500. He spoke proudly of the success of his current organization and the development and personal achievement of subordinate officers and members of his organization. He describes being involved in a number of initiatives in both his fire service and professional lives that required new approaches and personal learning.

Randy described his setting-the-stage period when he was young volunteer firefighter then EMT, then fire officer and his early years at the refinery. His executive development stage spanned his years as assistant chief in his fire department and as the new health and safety supervisor at the refinery. He is currently in his executive application stage as fire chief. In his executive development stage he told of a challenging experience in corporate downsizing and reorganization. Randy described this as a major change in the culture of the organization and severely challenged his own perceptions and values. Even though he was resistant at first, he was able to integrate these new directives into the organization. An equally important outgrowth of this experience was his ability to craft a plan to keep options open for the future and to keep that plan visible to superiors and subordinates.

Randy enjoyed fruitful and progressive dual careers in the fire and emergency services. He seems to have developed the capacity to craft long-term plans and internal

and external networks that allow him to continually make progress towards implementing these plans. He seems to have developed finely honed external political skills. In particular he has learned how to keep issues visible to decision makers and to take action when the conditions are right. This is clearly evident in his work with the city as fire chief and with upper management at the refinery. In regard to developmental experiences, Randy's very early management experience in the ambulance service, his assistant chief and later fire chief experiences, and his corporate experiences during times of organizational change are all situations where he seemed to develop new skills.

Case 3 – Jack

Jack is a 53 year old male who has served in the fire service for 37 years. In this time he has worked for seven fire or emergency service agencies. He has been in management positions for 25 years. He served four years in active military service and 23 more in the reserves in progressively responsible officer ranks. He earned a bachelor's degree in fire service management and a master of public administration. He is a graduate of the National Fire Academy Executive Fire Officer program and the Harvard Senior Executive Program for Local Government. He currently serves as fire chief of a suburban city with 45,000 permanent and weekday population of 125,000. He is active in regional fire service organizations and currently serves in a leadership role in a multi-agency response network

Jack described his setting-the-stage period as roughly from his teenage years to his early 30s. He spent a brief stint in college and had one tour in the military. These experiences seemed very important to him and he saw them as critical foundations to his later career success. Near the end of his setting-the-stage period Jack described his

experience as company officer in a rapidly changing and growing fire department. In his executive development period in his early 30s to mid-40s Jack described his experiences as an assistant fire chief in another rapidly changing fire department. In his executive application period Jack served as fire chief in his second fire department and later as an outside county emergency services director brought in to consolidate local fire districts and to reorganize and consolidate county emergency agencies. In his mid-40s Jack returned to the metropolitan area of his teenage years and early fire service experience as the fire chief of his current fire department.

Jack seems to have enjoyed a career that still seems to be growing and evolving. He seems very comfortable with his current situation and seems cognizant of the impact that his earlier career experiences have had on his current success. He has experienced a number of development experiences that are clearly consistent with the developmental experience model. His stories of his year as assistant chief and early years in his first fire chief position are clearly developmental experiences as are his powerful experiences as the director of emergency services under very challenging conditions. He clearly has suffered hardships; his personal experience with cancer, his adversarial situation in his consolidation experience and decision to leave and the line-of-duty death of a department member all seemed to affect him profoundly. These experiences also seemed to shift his leadership philosophy and style to more humane, empathetic and compassionate approaches. What is especially evident in his narrative is his acute sense of observation. He consistently tells of not only learning by doing and experiencing things himself but also learning by watching others. Finally, he also seemed to have acquired a keen sense

of being able to evaluate conditions, people and probable outcomes to determine the gain/loss relationship of policy initiatives.

Case 4 – Frank

Frank is a 56 year old male with 34 years of volunteer fire service experience in three volunteer organizations. He has over 20 years of fire service management experience as a chief officer and now serves as fire chief in a paid capacity in a volunteer organization. For most of his professional life he worked for a large corporation in two locations, first as a mechanic, then as a materials testing technician, and later in a health, safety and environmental role. He has an associate degree in automotive technology, is a graduate of the National Fire Academy Executive Fire Officer program and is a Chief Fire Officer Designate. His volunteer fire department serves a suburb of a major city with a population of 47,000. After an early retirement from his corporate life he served as the fire marshal for a large urban county for two years. He is active in the International Association of Fire Chiefs and national volunteer fire service organizations.

In his setting-the-stage period life Frank told of his initial training as an automotive technician and, soon after, employment as a material testing technician for a major petroleum company. In his early 20's he told of joining his first volunteer fire department. His setting-the-stage period continued in earnest when he was transferred by his employer to another state. His experiences there blended into his executive development period where he began to encounter management and leadership challenges. In his new fire department he progressed through the ranks to chief where he served for another 15 years. In his early years as fire chief Frank told of beginning a relationship with a number of national fire service leaders which later catapulted him into

participation and leadership in national organizations. Frank's transition from his executive development stage to more executive application seemed to have occurred somewhat earlier in his fire service life. After his retirement from the corporate job and the end of his tenure as fire chief, Frank took an opportunity to work as fire marshal in a large urban county.

Frank seemed to be driven by personal accomplishment. He was particularly proud of the people he has nominated for Fire Chief of the Year. However, there seemed to be an inconsistency between his corporate experiences and his fire service experiences. He seems more successful and accomplished where he has personal control and more room to maneuver.

Frank has suffered through several personal hardships but also seemed to have the capacity to reengage after periods of personal reflection. He seemed to have the ability to shift strategies within the bounds of his personal and professional capabilities, sometimes learning the hard way from when his efforts were unsuccessful. His reflections later in life about better matching his real management and leadership style seemed to be aspects of personal learning. In his current position he seems to have settled into a better balance of strategic organizational leadership that still allows him to be involved in the applied management that he seems to love. Overall he seems satisfied with his career and said "I've got to tell you that my life is pretty good right now."

Case 5 – Richard

Richard is a 74 year old male who has been in the volunteer fire service his entire adult life. In this time he has served in only one fire department. He was fire chief for 30 years and has been fire marshal in a paid capacity for the last 11. He has been in

leadership roles in this organization as it grew from about 20 members to 200. He has also served in leadership roles in the creation of the International Association of Fire Chief (IAFC) Volunteer and Combination Officers Section where he is still active. He is a Chief Fire Officer Designate (CFOD). His jurisdiction is a suburban city of 57,000. In his non-fire service professional life he operated a family owned hardware store.

Richard was born in the early 1930's and his setting-the-stage period spanned World War II and the post-war era. In this period Richard told of two sets of experiences. The first was his progression in the family hardware business where he started as a laborer and worked his way up through sales, procurement and management. His early fire service experience paralleled his early professional experience. In his first 10 years on the fire department he progressed thorough the usual ranks of firefighter, company officer, deputy chief and finally fire chief. In his executive development period Richard described several general experiences that shaped his leadership and management skills. Most of these coincided with his early years as fire chief and are related to the impact of the overall growth of the community. Within his executive application period Richard again led his department in a series of progressive and forward thinking actions.

Richard said he has not changed much over the years, except, in his view, maybe projecting a more youthful appearance. However, his involvement in a number of progressive initiatives and his apparent ability to adapt to changes in the community and the volunteer workforce seems to indicate that he has become more flexible over time. He told more recent stories of mentoring younger chiefs, even allowing them to make their own mistakes so they too can learn. Throughout his narrative he spoke of pride in his community, the accomplishments of his fire department and his own personal

contributions often prefaced with references to hard work. He says he is energized by challenge and the prospect of success, the more challenging the better.

Case 6 – Bob

Bob is a 59 year old male with 40 years fire service experience in 4 organizations. He has been in management positions for 31 years. He has an associate degree in fire science, a bachelor's degree in fire administration and a master's degree in public administration specializing in human relations. He is a graduate of the Harvard Senior Executive program, is a Chief Fire Officer Designate (CFOD), a certified emergency manager and is a fellow in the Institute of Fire Engineers. He has been the career fire chief of a large suburban city in a major metropolitan area for 23 years. His jurisdiction has a population of 252,000. He started as a volunteer in his home town and served 6 years in the military in a combination of active duty and reserve roles.

Bob's setting-the-stage period included a number of skill and character building experiences as a volunteer firefighter, civil engineer and in the military. During this period he described developing the maturity, technical awareness and leadership skills that he later successfully applied in his later career. His executive development period included his first position as an assistant fire chief and fire marshal followed by his first fire chief position. In his first fire chief position he encountered frustration, pain and challenge working within a difficult labor environment. This experience almost ended his fire service career, but in reflection, led to personal learning and growth that contributed to later success. His executive application period was one of significant professional accomplishment. Bob spoke of a number of initiatives, some successful and some unsuccessful that illustrate his now mature management and leadership style. In his

current position, which he indicates is nearing an end, he tells of an increasing awareness of life-work balance and the impact of family relationships on in his career and life. Most recently, Bob tells of taking on a new career challenge at a national level that will require all of his learned management, leadership and political skills.

Throughout his narrative Bob described a number of important and positive relationships with others. The early ones he described as mentor relationships, especially the instructors he worked with early in his career. Upon reflection he said his ability to build and productively use relationships is one of his greatest strengths. In fact he believes this ability was central to his recruitment to a high level federal government post. His other relationship stories seemed to fit in a broader category of vicarious learning, as in observing others to learn what is effective and what isn't.

Bob described a number of important personal changes over his career. He frequently mentioned greater patience, an increased ability to work collaboratively with others and an appreciation for the contributions of others. More recently he seemed to be focusing on the future and how the next generation can be better prepared for their turn at leadership. He also seemed to be seeking more balance in his work and personal life, something he admitted was lacking earlier in his career. Bob also seemed to be a consummate life-long learner, not only for the intrinsic rewards of learning but also for its application to real world problems. Overall, Bob established a strong base in his setting-the-stage period, learned very tough lessons through real world experience in his executive development period, and eventually reaped the rewards of that development in his executive application period. His new position will require the application of all these experiences and skills. Finally, Bob did not discount the importance of matching his

skills and management philosophy to a more conducive organizational environment.

These matches at critical points in his career seem to be critical to his success, whether he actively sought them out or took advantage of them when they presented themselves.

Case 7 – Barry

Barry is a 59 year old male who has 37 years of fire service experience with 20 years in management positions. He has served in three fire departments, two as fire chief. He has an associate degree in fire science and a bachelor's degree in business. He is a CFOD. His current jurisdiction is a city of 160,000.

In his setting-the-stage period Barry spoke fondly of his early association with the fire service as a teenager when he spent much time going to fires and interacting with firefighters. As an amateur photographer he was able to get access to fire scenes and through this association was able to watch fire department command officers in action. He told of noticing the traits that seemed to be effective in fire ground command. After getting hired at a young age he spent 12 years as a firefighter and engineer before promotion to captain. During those years he had the opportunity to work in a training position producing visual materials for training and educational programs. A large part of this job was developing public relations materials to promote the department's new paramedic service. He described this as a situation where he had to accomplish much of his work with others with no formal authority to compel cooperation, working independently or superiors and under pressure to produce high quality products. During this period Barry spent much time as an acting captain. He said he learned a lot in acting positions because he was able to move around, work with different people and encounter different aspects of the department culture. Even more important to him during this

period is the relationship he developed very early with the fire chief. This chief at the time was one of the top up and coming national fire service leaders and served as a mentor to Barry throughout his career. Barry's transition from setting-the-stage to executive development was difficult to define due to his long service with his first department. As a captain he has another opportunity to work in a unique position. He talked of being assigned to the safety office and being thrust into new administrative roles. Within his executive application period Barry also told of a number of experiences that seem to be the result of his acquired management and leadership skills. These included a higher level of delegation to subordinates, development of subordinates, and a greater attention to team work at the city level.

Barry sees himself as changing over time with his most important evolution towards becoming more laid back. He seemed to be aware of his greater ability to control his anger. He also seemed to be a life-long learner although he seems more sensitive to maximizing learning potential. Barry's most endearing skill as a learner seems to his powers of observation. Throughout his narrative he told of watching and learning vicariously from others. His stories of carefully listening to and watching fire service leaders, superiors and coworkers has clearly influenced his present management and leadership style.

Case 8 – Megan

Megan is a 60 year old female who has been in the fire service for 31 years. She came to the fire service from an earlier medical career. She has 27 years of supervisory experience and 20 years in management positions. She has been fire chief of her current department for 11 years. Her jurisdiction is a large suburb of a major metro area with a

population of 420,000. Her department is a combination organization with a large and growing staff of career employees as well as volunteers. In addition to her nursing training she has a bachelor's degree in business and a master's degree in organizational leadership. She has a post-graduate certificate in leadership coaching. She is a Chief Fire Officer Designate and has attended the Harvard Local Government program.

Megan's setting-the-stage period spanned roughly from her early 20s to her early 30's. During this period she told of completing her nursing diploma and early experience as the supervisor of one of the first coronary care units in the country when she was in her mid-20s. In this job she worked directly for an executive director and board. She talked of working in an unstructured environment and having little guidance and no prior supervisory experience or training. This early experience and learning clearly became the basis for later application during her executive development period where she endured some challenging, painful and strong learning experiences. Her transition to executive development occurred when she assumed a supervisory position in a rapidly growing fire department supervising emergency medical services programs. In addition to growth in terms of size, this organization was also transitioning from a federation of separate volunteer fire departments to a county fire department with an expanding number of career employees. Within this experience she told stories involving pain and frustration when assigned as the manager of the department's training academy. After leaving the training academy for a promotion to assistant chief she told another story of personal pain and frustration that ultimately precipitates her move to her current position. Megan talks of being passed over for promotion to deputy chief on two occasions and after evaluation of her situation found a classic case of *glass ceiling*.

After this last unsatisfactory experience Megan was appointed as fire chief in another rapidly growing fire department in the same metropolitan area. This department was in transition from a primarily volunteer to a combined career and volunteer organization. As examples of the application of her developing leadership and management skills and growing comfort in her fire chief role, she told of dealing with several issues that were both challenging yet also opportunities for personal and organizational growth. The first was a continuation of her efforts to align organizational values with the current workforce and the external environment. A few years after the first value setting experience she told of noticing a change in the expectations of the workforce due to rapid expansion. She observed that many employees did not have the same values and expectations as those who participated in the first goals and values initiative.

Over the course of her career Megan has endured a number of personal hardships, many similar to others who seek advancement in any profession. Her glass ceiling experience however is unique in a profession dominated by men. She told of being profoundly affected by this experience and personally hurt but she turned this into a positive career opportunity by advancing her career in another fire department. Finally as her narrative progressed she told more stories of her pride in the accomplishment of others. Her story of an officer who overcame serious deficiencies in communication skills to become a battalion chief is an example. In this regard Megan has come full circle from being mentored to being a mentor herself.

Case 9 – Ben

Ben is a 54 year old male who has enjoyed an extensive and progressive career in business and the volunteer fire service. In addition to being a vice-president of an insurance company, he has been the chief of a large suburban volunteer fire department and prior to that fire chief in a smaller industrial community. He has served with a number of national and political organizations that represent the fire service at the state and national levels. He has 36 years of volunteer fire service experience. He has 32 years of management experience in the fire service and 26 years in corporate management positions. He served in two fire departments. He has an associate degree in fire science, a bachelors in business, a masters in education and a doctorate in management. He is a Chief Fire Officer Designate and has certifications as a fire protection specialist, professional safety professional and professional security specialist. The fire department where he was last chief is a suburb in a major metro area with a population of 25,000. He is currently the chairperson of the local fire commission. He is very active in state and national political organizations related to the fire service. He is an accomplished writer and author although he doesn't mention this during his interviews.

In his setting the stage period Ben described his early years, starting as a teenager as a volunteer firefighter in his home town. He told of rising rapidly through the volunteer ranks to chief when he was 26. Within this experience he described opportunities to attend the normal training that was available at the time, but more importantly, was able to observe older firefighters and officers. It is during this time Ben began to develop and utilize an extensive network of fire service contacts and contemporaries, in large part due to his early attendance at regional training classes.

During this same time Ben transitioned from his early experience as a fire protection student to the world of business as a field engineer. Like his fire service experience he moved up quickly and by his late 20s had advanced into management in field operations. Ben transitioned from his setting-the-stage period to full blown executive development quickly when he progressed from his technical management position to general management. He described this as a watershed event with much personal learning. He likened this to moving from the mid-management level in a fire department such as a battalion chief to fire chief. During this period he told a darker story from his business life when confronted by externally imposed change. As a manager he had to deal with downsizing of a business unit and the eventual decision to change jobs. He described this as his burnout experience.

At about the same time that he made the jump into general management in his business life he also relocated to a new volunteer fire department where he again progressed through the ranks to fire chief quickly. After serving as chief he transitioned in to a more political role on the fire commission, the policy body that directs the fire department in his locality. Like his earlier fire chief experience he again was able to leverage the capacity of members towards common goals. Again these goals revolved around the external relationships with other governmental and business officials. The high points of this experience he described were not the internal aspects of managing the fire department, but his involvement in national fire service political action. An important learning that he took away from this experience was the ability to work collaboratively with others on a common goal.

At about this time he told of being involved with the IAFC and his relationships

with the national fire service leaders of the time. Within this time period he also became involved with the Congressional Fire Services Institute and Caucus. This political experience translated into his current political position closer to home where he now serves as the chairman of a state commission charged with adjusting the state fire and emergency medical system to meet the needs of the future. He spoke fondly of the progress this commission has made already and his hopes for the future.

Ben has had a remarkable career made even more significant by his ability to learn and change in both his roles as a business manager and fire service leader. He clearly has been able to transfer personal learning across the boundaries between these roles although his business experience seems to have a stronger influence on his fire service success. Ben has clearly become adept at navigating the political waters in every segment of his life. This is a skill he seems very proud of. The specific skills he referred to throughout his narrative are education, negotiation, and process; all critical aspects of his leadership and management success. Finally, his narrative was full of examples of his own developing leadership and management philosophy based on his early engineering experience, but tempered by an evolving awareness of the impact of process and people.

Case 10 – Sam

Sam is a 58 year old male who has been involved in the fire service his entire life. He has 40 years of experience with 27 years in management positions in a total of six fire service organizations. He has served the last 27 years in only two organizations. He has an associate degree, bachelors in business administration, and a masters in public service administration, as well as doctoral work short of dissertation. His current jurisdiction is an urban city of approximately 500,000. He served as the president of the IAFC. He

retired once from the fire service but returned a few months later. He also served five years in the military as a naval officer.

Early in his setting-the-stage period Sam told of becoming involved with the fire service at a young age and serving as a volunteer firefighter during his college years. This was preceded by experiences in Boy Scouts and Boys State. By far his most meaningful experience during this period was his service as a naval officer during the Viet Nam war. In addition to being a volunteer firefighter during his college years he was also in ROTC. Sam transitioned from his setting-the-stage period to executive development when he was promoted to a shift commander position in the fire department when he was 30. As an assistant chief he told a story of an organizational effort to instill participative management into the fire department. He described this as an important experience where he learned how difficult it was to make well intentioned changes in management practice. Within his executive application period he continued to describe how he applied what he had learned in his earlier life. Sam described two significant hardships in his life. These were a line-of-duty-death of a firefighter and a personal experience with cancer. Although he downplayed his illness as an important event in his professional career he did however acknowledge that he learned from this experience.

Sam's fire service career almost came to an end due to what he describes as a confluence of personally challenging and externally imposed events. These included his service as IAFC president, a change in city manager and a line-of-duty death, a firefighter he had known since he was a child. After retiring and operating a consulting business for a period of time he was approached by the city manager of another city to serve as fire chief. This seems to have lead to a rebirth in his current position.

When he talked about how he's changed over the years he says he's less intense and controlling, more open to consensus in decision making, more patient, and more understanding of the needs of others. Interestingly, when he talked of the impacts of external change he said he does not tolerate them well. He said he saw this as a personal shortcoming; one that he admitted was a factor in his first retirement.

There is no question that Sam has learned new behaviors and developed new insights that contributed to success later in his career. While he seems to have learned and changed from all his experiences his leadership and management style seems most profoundly shaped by his early experiences, especially his military service. He describes himself as a life-long learner and even though he describes some painful experiences he seems supremely optimistic and confident. He specifically tells of relishing the opportunity to help his organization and its members grow and achieve.

Case 11- Tom

Tom is a 53 year old male who has been involved in the volunteer fire service for 30 years. He has been in volunteer fire department management roles for 25 years and chief of his fire department for the past 16 years. In his professional career he was a health care manager and is now a leadership trainer and author. He has a bachelors degree in organizational development and is a Chief Fire Officer Designate. His department is a suburban jurisdiction of 9,000. His fire department is unique in that while it is organized along the lines of a volunteer organization it's members are paid for the time they spend in the fire stations and when called to emergencies.

In his setting-the-stage period Tom began his career in health care in a technical role and at about that same time joined his local volunteer fire department. Within this

period he is described his relatively quick advancement into a supervisory role as a unit supervisor at a hospital. At about the age of 30 Tom experienced two major changes in his life that mark the beginning of an intensive executive development period. The first was his promotion to a management position in his hospital. Parallel with his new management experiences at the hospital Tom assumed new responsibilities at the fire department as the assistant chief and later as fire chief. Within this period Tom experienced the merging of two hospitals and the consolidation and downsizing of his unit. This is a particularly painful period for him filled with conflict and frustration. This was a pivotal experience for Tom, one that he later regards as a negative event with a positive outcome. In his executive application period Tom was involved in a number of fire department organizational development activities, the consolidation of two fire departments and a transition from a volunteer staffing model to a part-time employee model.

Tom seems to have learned and changed significantly over the course of his combined career in health care and the fire service. His hardships involving mergers and downsizing as well as his responsibilities in leading changes within his fire department seem to have been pivotal in his new career direction as an author and trainer.

Case 12 – Jerry

Jerry is a 53 year old male who has been involved in the fire service for 35 years. He has been the fire chief of his volunteer fire department since 1977. He has been active in the IAFC volunteer and combination officers section since the mid-1980s and he served as president of the IAFC. In his professional life he worked in business early in his life, worked for a state agency for 20 years and is now on a state governor's staff

developing emergency preparedness training programs. He is a graduate of the National Fire Academy Executive Fire Officer Program and is a Chief Fire Officer Designate. He has served in only one fire department.

Jerry began his setting-the-stage period parking cars and working as a route sales supervisor for a vending company. His job was to maintain vending machines and to supervise a number of field sales people. Parallel with his early business experience Jerry began his volunteer fire service career. This seemed to have been an all-encompassing endeavor including extensive training, attending classes and traveling around with other young firefighters to see how other fire departments operated. He moved into his executive development period in his mid-20s when he was elected fire chief. He came into this position unexpectedly when the previous chief declined to seek re-election. In his executive application period as fire chief he became involved with the International Association of Fire Chiefs. This grew from attending training seminars taught by some of the leading figures in the fire service at the time. In more recent years he moved in his professional life to the governor's office. Within this period he experienced the loss of a firefighter, and although not in the line of duty, this still had a profound affect on him.

Jerry seemed to have grown and changed throughout his long career in both the volunteer fire service and his professional life. He seemed to have specifically acquired the ability to be flexible in the face of external impacts. His greatest skill seemed to be his ability to thrive within the political environment of his own organization, state government and at the national level in the IAFC. His mixture of being an elected official himself within the IAFC and a staff person responsible to elected officials seemed to be a cornerstone of his personal learning. Even though he seemed optimistic, self-confident

and exuded personal energy, he has known personal hardship. He described himself as a continuous life-long learner.

Case 13 – Clark

Clark is a 58 year old male who is the fire chief of a suburban city in a large metropolitan area. He served his entire fire service career in this one organization, beginning as a firefighter and serving in many positions. He has been in management roles for 28 years, the last 18 years as chief. Prior to joining the fire service he served two years in the military. He has an associate degree in fire science, a bachelors degree in political science and a masters degree in public administration. He is a Chief Fire Officer Designate and a graduate of the Harvard Executive Program for Senior Executives in State and Local Government. His jurisdiction has a population of 165,000 in a suburban city of a large metropolitan area.

Clark had a well defined setting-the-stage period beginning as a teenager when he started hanging around fire stations. He told of establishing relationships with firefighters and, most importantly, with a firefighter who served as a mentor throughout the rest of his life. Before starting his fire service career, Clark served two years in the military. After the military Clark began his fire service career in earnest. After spending only four years as a firefighter he was promoted quickly to company officer at age 28. Clark transitioned quickly to his executive development period when he was promoted to battalion chief and shortly thereafter to assistant chief at age 31. As an assistant chief for 10 years Clark had of a number of experiences that he identified as progressive for the time.

One particularly difficult experience was a major reorganization and consolidation of a communication unit within the department. Another critical experience

involved the line-of-duty death of a firefighter under his command. This experience seemed to solidify his fire prevention philosophy that becomes a constant message in his executive application period as chief. When Clark does become fire chief he began to apply all that he had learned in his setting-the-stage and executive development periods. Even though he seemed to adapt well to his new role he was also able to blend the directives of the city with the unique needs of the fire department and the internal culture.

Clark has enjoyed a long and what seems to be a very satisfying career. He is proud of the performance of his organization and its people. He seemed to be especially adept at integrating needed changes while at the same time working within the organizational culture.

Case 14 – John

John is a 55 year old male who has been involved in the fire service for 31 years with 21 years in management roles. He has served in two fire departments. He has been chief of his current department since 1994. He has a bachelors and a master degree in business and is a certified public manager. He has served on and chaired IAFC committees. His jurisdiction has a population of 100,000 and in a suburban county in a large metropolitan area.

In his setting-the-stage period John told of running his own construction related business at 21. Although he enjoyed several years of success, eventually employing eight people with a million dollars in annual gross sales, it didn't survive a downturn in the construction business. This business failure, in retrospect, had a silver lining. He met a coworker who introduced him to the fire service, something he admitted he saw initially as only a stopgap job. However, he quickly became 'hooked' and launched into his fire

service career. In his early fire service career he served as a firefighter and paramedic but later moved to another department in a management role and to pursue higher education. In this new position as assistant chief he was in charge of developing and implementing an entire fire prevention program and administering the emergency medical services (EMS) program. Within this period John had a growing involvement with personnel matters, especially as his administrative responsibilities beyond EMS and fire prevention grew. John eventually moved into his executive application period as fire chief in this organization where he pursued greater integration of fire and EMS activities. Within this same time period John became involved with the new IAFC Accreditation process and more recently has been involved with the IAFC EMS committee work. John told an interesting story of implementing a program intended to reduce the use of sick leave that was discontinued by higher level political leadership due to cost. He admitted this was one of his professional disappointments.

John spoke passionately about the relationships he has had with others as important influences on his career. When talking about how he has changed over the years John says he is less quick to react, more tolerant of circumstances, more reflective, and has learned to respect others and their positions. He is clearly a continuous learner and his dedication to higher education is evident although he also admits that his energy for formal learning has waned in recent years. John seems to have enjoyed his career thus far, although it has not been without hardship. His early business failure, termination of his sick leave program, and more recent experience in an IAFC leadership position are examples.

Data Analysis

Because the data was collected in the form of narrative stories I chose the holistic-content perspective of Lieblich, et al (1998) for the within case analysis. I considered each participant's narrative as a whole and identified the major themes of critical career experience, learning and change. For each theme from each participant's total narrative I assigned a qualitative value of the strength; weak, moderate or strong. While I did consider the frequency of mention of the themes as one component of strength I did not develop or apply quantitative selection criteria for my decision process. An example of a within case analysis for developmental experience is shown in Appendix H. In cases where published documents were available the analysis of these documents confirmed the analysis of the interviews in all cases.

After identifying the nine emergent themes within each case that fit the general definitions of developmental experience, personal learning, and leadership and management change I compared these nine themes across all 14 cases. This cross case analysis used the general cross case analysis techniques described by Stake (2006). In this phase I identified a number of clusters of common themes and experiences that appeared strong across a number of cases. The common themes that emerged related to the developmental experience model are shown in Table 5, the common themes related to personal learning are shown in Table 7 and common themes related to changes in leadership and management behaviors are shown in Table 9.

Developmental experience

Developmental experience was defined in the literature review as those on-the-job experiences that provide the opportunity to learn skills and behaviors in situations where

results really matter. Since the research on experiential learning and learning agility found that the 75% of new learning for managers and leaders occurs on the job, the use of developmental experience as an executive development strategy should be considered a valuable part of a total career and executive development strategy.

The literature review indicated that for an experience to be developmental it must be new to the person experiencing it. It is not a developmental learning experience if a person can solve a problem applying only current and past skill. This often requires not only learning new skills but also the acceptance of new and different perspectives. To be truly developmental, it requires critical thinking and reflective learning described in the literature review as elements of experiential learning. The experience must require a person to take action. In general it is not enough to observe others or to gain a greater awareness or appreciation for the complexity of a problem. An exception is the vicarious learning that may occur as the result of observing others. To be a developmental experience a person must actually grapple directly with a new task and apply new skills learned in the course of that struggle. They must directly face uncertainties and often must take personal risk to address their new responsibilities. A developmental experience also requires that the experience be self-initiated. The majority of managers who described developmental experiences in the studies reviewed in literature review initiated the experiences themselves and not as part of a structured executive development process. These experiences often involve unsupportive superiors, incompetent and resistant subordinates, high stakes problems, business adversity and major changes in scope of responsibilities.

As shown in Table 5, a total of nine major themes emerged that corresponded to the developmental experience model described in the literature and shown in Appendix A. Of these, eight appear to be strong across all or many of the participants. One emerged in only two cases but was very strong for those two participants in relation to the developmental experience value.

Table 5

Developmental Experience Theme Comparison by Strength

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
First Fire Chief/ CEO position	S	S	S	S	S	S	S	S	S	M	S	S	S	S
Early experience	S	S	S	W	M	S	S	M	S	S	S	M	S	M
Relationships	S	S	S	M	M	S	M	M	M	M	M	S	S	S
Politics	S	S	S	S	S	S	M	W	S			S	S	S
Hardship	S	S	S	M	S	M		S	S	S	S	M	S	M
Observation of leaders	W	S	S	W	M		S	M	M	S	M	S	S	S
First assistant chief/management position	W	S	M	W		S	W	S	S	S	S		S	S
New programs	W	M	S	W	S	M				M	M	M	M	M
Work without authority						S	S							

First fire chief/chief executive officer

All of the participants described experiences that were central to their management and leadership development in the position of fire chief or chief executive officer (CEO) in a non-fire service organization that were profoundly different from their previous experiences. Common were the increase in scope of responsibility in the

position that was unlike any previous experience, operating in a political environment, and working as a member of a management team outside the fire department. The management responsibilities of developing major organizational policy, interacting regularly with people outside the fire department, and being the person of final responsibility and authority within their organization were commonly described. Many reported developing the personal skills of negotiation, communication and networking outside the organization through these experiences. Although a few participants described similar experiences in a first management position it is at the fire chief/CEO level where these experiences seemed most pronounced.

Ben is an interesting case in that he progressed through the supervisory and management ranks of two fire departments and a private national firm. This provided him a unique opportunity to observe the change in scope and intensity of increasing management responsibility in both fire service and business organizations.

When you're managing technical staff, either on a regional basis or even a national basis your focus is first of all to make sure that they can do the job. And then secondly to make sure that the work gets done. When you move into that higher level - and when I say higher level, corporate vice-president - you are now responsible for all of those corporate political issues, the corporate negotiation piece, the major budgetary aspects, the restrictions in staffing, head count if you will, and so on, and then comes the service that those people provide. That is a quantum leap, that's the same as going from a battalion chief to a department chief. And I saw them both as quantum leaps in change of skill sets and use of skill sets. When you move into those administrative positions everything changes. And now it's, you know, how do I convince the board of supervisors to give us an ordinance that's going to allow us to bill for services. How will I convince them that part of the municipal services tax has to come to the fire department? How do I convince them that their perceptions of the way things were 20 years ago no longer exist? (9)

In the position of fire chief or CEO, several participants reported new roles as members of a general management team with responsibilities beyond their own technical

skills. Previous to their position as fire chief or CEO none of the participants reported working in situations that required them to work outside their technical specialties or in specific defense of their internal organizations. Clark described this in the following quote.

I think the whole notion of – as opposed to being a part of a fire chief's management team and kind of being – kind of feeling like a senior person in that role, you go to being a part of the city manager's management team and feeling like an extremely junior person in that role. And you're now dealing with not just a slice of the pie but the whole pie. You're expected to be cooperative and collaborative on city issues with all the other department heads. And while it's understood that you're going to be – you know, you're going to be the 'go to' person for your department, that you're going to look at the big picture and take the other departments into consideration and work with them and once again collaborate with them as you work through city-wide issues as opposed to department-wide issues. (13)

A strong common thread throughout many participants' narratives about their assumption of the fire chief or CEO position was their immersion in the political environment. Having to operate within an environment of conflicting external demands and multiple public policy agendas, as well as working with elected leaders who have divergent positions seemed to weigh heavily on many participants. Most of the participants seemed to take their political responsibilities in stride and viewed them as an integral part of the job. Some seemed to actually relish the new challenge and seemed to thrive within the political environment. These experiences in the first fire chief or CEO roles are so strong that they are described later as major theme by itself.

The most common observation described during their first fire chief or CEO experience was the quantum jump in responsibility and accountability. The participants who discussed this dimension seemed acutely aware that the final responsibility for the performance of their organization and the behaviors of its members rested squarely with

them. When describing an experience with a tax increase project Stan directly connects his own performance with that of his organization. In Sam's extreme case this strong focus on personal responsibility and accountability contributed to health and stress problems.

It was like I led the organization out on a limb and not only was the money in jeopardy but our very reputation and our respect. I felt that if we failed, the voters rejected it, it was not only a rejection of the tax but it was a rejection of the volunteer fire fighters and this system that I was supposed to be leading. (10)

Early experience

All but one of the participants progressed quickly from entry through supervisory and management roles to executive positions. With the exception of one, all were in at least mid to senior management positions by his or her mid-30s. The one participant who did not fit this pattern spent the first two thirds of his career in a large urban fire department where quick advancement through the formal hierarchy was not possible. It is interesting to note that with the exception of this one person, all served their early careers in small and/or growing organizations or non-fire service organizations that did not have the rigid hierarchical promotion systems common to larger fire departments. As will be shown later, even this one participant gained valuable management and leadership experience in a unique way outside of the normal career progression system.

Two thirds of the participants described very early fire service experience, either as volunteer firefighters or close associations with firefighters. All participants discussed quickly mastering their technical duties. Some reported being involved in the fire service as teenagers. For Clark this very early experience and the resulting relationships he developed seemed key to his later success.

I hung out a lot at the fire department and I not only was friends with firefighters but I was a friend of the chief and I got a great deal of insight in terms of running a fire department when I was that young. I don't mean that I could run one, but I

got an immense amount of insight into the politics, the leadership challenges, management challenges, labor-management relationships both good and bad, from the time I was 13 on up. Some people there told me that if I really wanted to pursue that career, that there was a firefighter in a neighboring city that I needed to go and meet. So I went over and met this firefighter and I've been friends with him ever since. In terms of my fire service work experience and my approach to my career as a manager and a leader in the fire service, the most profound impact is this person, without question. (13)

One common early experience was an intense focus on training and early acquisition of technical skills. A number related stories of attending training classes well above their job requirements with a heavy commitment of their own time. For some of the participants this transitioned quickly to becoming trainers themselves. How Randy described his early assignment exemplifies how this experience catapulted other participants into management roles.

And I was dabbling in the training end of the business at that point in time. I was trying to get some more training for our department and the new chief was elected and at the first officer's meeting he came in and he said 'OK, here's the changes, and he laid them out on the table. And one of those things he says, Randy is the new training officer for the department. He will take care of all the training stuff, he will set the agendas, he will tell us what we're going to be doing and not going to be doing. He's got full reign of whatever we do with training.' And they also gave me the public education side of the stuff so I basically went from - I'd been on the department probably three years at that point in time at a level of being a firefighter to being an assistant chief level person in the department overnight. Which, granted, I had no people that I was in charge of but it was a pretty different change for me. (2)

All participants but one described early promotion to supervisory roles, some through normal promotional systems and some who had supervisory duties thrust upon them very early in their careers. Even the one participant who was not an early supervisor reported much experience as an acting-supervisor. A common experience was supervising older subordinates. For some, a major challenge during this rapid rise to

supervisory positions was demonstrating competency to more experienced coworkers and subordinates. Clark's experience as a young company officer exemplified this.

After only four years, I was a company officer. So there was somewhat of an organizational concern of - is he being promoted too early? The relationship with my supervisor was a sense on my part that I needed to establish with him that I was competent, that he could have confidence in me, that he didn't have to worry about me going to the next fire, and that I wanted to make sure that I gave him the support in doing his job that would give him that comfort zone. In my mind it was a positive experience in that the goal of demonstrating competency and establishing mutual respect and trust was met. (13)

Four participants described early military experience as strong contributing factors in their later management and leadership development. The attributes they described from this experience included gaining maturity, personal discipline, responsibility, and confidence. Bob's description of his military experience exemplified this.

I think that (military experience) provided some experiences that led to personal maturity, the development of a strong sense of personal responsibility and leadership just because of the opportunities that are presented to me that I could directly also benefit from and use it in my fire service career. I spent six years doing that and there had been plenty of times then that I wished I had stayed in - the ready reserve even longer because I do think that it had a significant impact on me personally and I found it to be very beneficial. (6)

Sam's experience as a young naval officer was similar and focuses even more specifically on the great jump in personal responsibility at a young age.

So now here I am up being responsible for four hours at a time for this deep draft vessel in wartime with nothing but book training and ROTC, and with a whole on-the-job experience of two months. And I think about the experience level we expect fire service leaders to get before we give them a lot of responsibility and it was unbelievable that quantum leap I made from graduation from college in June till November at sea. And that's what I was doing at 22 years old running a deep draft vessel ship in the navy. (10)

By far the most common and strongest experience during their early careers was observation of leaders within their organizations. The 11 participants who reported strong

experiences in this area described both positive and negative reactions. For most, the negative reactions seemed to outweigh the positive. They seemed to learn the most from observing what not to do, then what to do. These experiences were so strong that they are described as a separate theme.

Relationships

All of the participants described important relationships as critical experiences that contributed to their development as leaders and managers. In general these experiences fell into three groups; positive experiences, negative experiences, and for some, mentoring relationships. Within each of these broad groups they described relationships with other fire chiefs and their immediate families. Each group also included powerful narratives of relationships with superiors, both positive and negative. Within these sub-groups the negative experiences also seemed to provoke the most powerful learning for the future.

Many participants told especially positive stories of their relationships with peers, mostly other fire chiefs that they interacted with in professional organizations or fire chiefs in neighboring jurisdictions. Compassion, patience, understanding, dedication, professionalism, commitment, positive work ethic and vision were commonly cited qualities that they observed in these peer fire chiefs.

Almost all participants described their relationship with their families as important experiences. While some mentioned spouses, mothers, children and grand children, the most common positive family relationship for males was with their father. Instilling a positive work ethic, modeling hard work, helping frame dilemmas, listening,

commitment, courage and dedication were common descriptors of the influence of fathers. Jack's description of his relationship with his father was common.

My dad was my closest friend. And he would never tell me what to do. He'd listen to every dilemma, problem, question I had and then he'd bait me to begin answering it myself. And once something would come together that looked like a plan or an answer, he wouldn't confirm it nor would he deny it but he would say, I want to know how it turns out, let me know. And that notion, the behavior was a facilitator and he never gave me the do it or else. (3)

While there was some mention of negative relationships with peers and subordinates for most participants these relationships seemed more of an inconvenience than causing actual harm. The exception here was where peers were competitors. Jack told of his experience in attempting to champion consolidation of separate fire agencies as an example of negative peer relationships.

I also learned the bad side of people on how some of these chiefs would very quietly say to me, we're with you, this would be a good thing but I can't say it publicly because my board of trustees would fire me. And then at meetings when it came to stating what professionally should be stated, they would unequivocally say anything but what was the truth for fear of their own jobs. (3)

The most powerful negative relationships were related to direct superiors. Nine participants told especially disturbing stories of poor relationships with direct superiors. Clark's description of his relationship with early superiors served as an example of what he didn't want to become.

In those days we were going through extremely difficult times. Much of that exposure and experience was negative. Examples would be overbearing personnel practices, day-to-day management practices that were not only inconsequential in terms of effectiveness but were done in such a way that it just forced more and more alienation within the department of the rank and file from the administrators. White glove fire station inspections, white glove apparatus inspections, I mean literally. People being demoted, written up, suspended on a regular basis for infractions that today, in virtually any facet of the fire service that I'm aware of, wouldn't even be considered for that level of discipline. Just a basic disregard for human resources. If you can't control them at the time or you can't influence change in the direction at the time, you can't help but make a

mental note that when you reach a point that you can control them that you're just going to operate differently. (13)

Jack's early experience was even more illustrative of this negative impact to the extent of serving as the catalyst to move to another fire department.

My boss, we had terrible bosses, I left primarily because of the deputy chief who was there at the time. That individual ruined more people and careers because he was not able to hold a conversation. He was promoted to deputy chief because he was the volunteer deputy chief and he became the number two full-time person under the full-time chief. And at times I think he thought he was doing well but it was received by the folks that would hear him very much in a non-trusting, unacceptable manner. I can remember I was shift commander and we were out in the apparatus floor and I don't even remember the topic or the subject and as I was getting ready to go in and take my uniform off he came in and started the conversation and it was accusatory against the people on the shift without fact or basis. And I said, I disagree, and I explained to him that I don't think he had his facts right. And it turned into an unbelievable shouting and screaming match between the two of us to the point where I even said to myself, this guy takes me for insubordination I'm dead in the water. And that was my decision that I'm not going to stay in that place and I'm leaving. A lot of events occurred after that where they tried to get me to stay and if I had stayed there I'm certain, long story short, it was a part of my history that was probably good for me because it gave me other opportunities that I never would have had if I'd stayed there. (3)

The third group of relationships is as positive as the preceding description of poor superior relations is negative. Four participants described a close relationship with a specific superior as pivotal to their careers and their development as leaders and managers. Serving as a particularly positive role model, listening, coaching and providing personal support were all cited as enduring outcomes of these relationships. Megan described her relationship with an early male superior. He helped her acquire her love of the fire service from him, learned how to extend herself beyond her daily job and introduced her to national level contacts in the fire service. Interestingly, she described this individual as being opposed to women in the fire service and she seems proud that this view changed as their relationship deepened, "and we got to be such close friends

and he was a big supporter of women later on when he became a chief (8).” An interesting observation in regard to mentors was that two of the participants described the same person as the most important professional influence on their careers.

Politics

All but one of the participants described experiences interacting within the political environment as important to their leadership and management development. Even though they reported these experiences were important to some were clearly more negative than positive. The differences between those who viewed their political experiences as negative as compared to positive are described in more detail later.

There were a number of commonalities across most participants regardless of their view of their experiences. Most participants seemed to recognize that they must be able to interact within the political environment to be successful. Key here was the recognition that they must work with multiple stakeholders with a greater emphasis on external stakeholders. The recognition that the political environment and political decision making was influenced by factors outside of their direct control was common. Related to this recognition of process there was also the recognition of different motivations that stakeholders bring to the process. Stan described his view of his new political duties as a fire chief, “I had to understand the political environment, the political pressures, the demographic pressures that come to bear on various bodies, what drives them, and how to manipulate my way through that mine field to an end (1).”

Taking this further some participants described a greater recognition of the role perception and motivation plays in political decision making. Some described learning that the perceptions of political decision makers are based on varying motivations that

may not be based on a particular topic under discussion. Jerry exemplified this recognition by describing two points in his down to earth observation of political decision making based on the need to be re-elected and loyalty.

Nothing happens but everything happens. I mean you're literally running to meetings because we've only got four years and the people decide if you get another four years. But the leadership there is - or the thing that I realize there is, more than anything else it's about relationships and it's about trust. You know, we see governors, mayors, presidents, higher people who are incompetent, in my opinion. And you wonder why they got the job. I can tell you why they got the job, they can hire competency but who they want to work with is someone they know will not stab them in the back. Of all the leadership things that I have read, written about, learned, talked about, emulated, I now figured out in the last eight months it is all about trust. And so, to me that's the secret, it's about trust, it's not about competency. The second part, in any - well, and once they're elected, especially in local government or state or national governmental politics, once they're elected there's only one purpose and that is to get re-elected, and then everything else becomes part of that. (12)

Many participants described the coping mechanisms they had developed to interact as successfully as possible within the political environment. The overall recognition that politics was a process of negotiation and collaboration rather than a win-lose result was common. Developing networks outside the fire department and the fire service was also important to many. Overall there seemed to be recognition that politics was a process of compromise. John summed up a healthy although somewhat skeptical interaction with the political environment and his responsibilities in it.

I remember one of the basic tenets that I still live by today - it's one of those golden nuggets that one of my peers presented me with one day and he said, you know, when you're in the position of a fire chief or director of an organization, be political but remain apolitical. I guess the advice that I was being given was that when you're working within the context of a political government you have to recognize that the decision making processes isn't solely based on what your own internal perception of what that process should be and whether that's the need or economics or other factors but there are other issues of consideration from the elected officials perspective. And so you have to be able to walk that political tightrope. You have to be cognizant of what the priorities are and elected officials

have their own set of priorities for various reasons and appropriately so. That's why they're elected by constituents. (14)

Hardship

Twelve of the participants described experiences of hardship. These narratives can be separated into personal and professional hardships. In most cases these resulted in personal and professional loss and pain but later resulted in a refocusing of life and career goals, reengagement, and ultimately, greater career and personal success.

The most common personnel hardship revolved around personal experiences with cancer. Both Jack and Sam told stories of suffering and recovery from cancer. They both described a refocusing on the importance of life, appreciation of mortality, the importance of family and a greater degree of empathy for others afflicted with similar conditions. Jack's story exemplified this experience, personal learning and change.

It taught me right away what mortality, personal mortality means and dealing with the uncertainty and understanding that you're not in control of everything. And dealing with your own anger and emotion, and your spirituality, and the syndrome of why me, I'm not done yet. And the relationships with co-workers and family members. I've been married 31 years. You tend to forget how valuable your life and family members are until you're thrust into something like that and you realize it's critical, that without them you're alone - and close friends, you're alone. And I think that it taught me in management leadership that your life is a struggle but what you think might be important to you often isn't, that there's something else that's much more important than what you think your priorities are. And I think the experience I had with my own challenge, which God bless, knock on wood, is now seven years ago, and they've called me 'clean' after a lot of struggles, has taught me that humans are humans, not machines. And although you need to hold people accountable and although you often need to hold a hard line, you can do both without losing the personality and the relationship that's needed. And understanding when people are down, by doing nothing it's like kicking them. You've got to do something, even if it's just sticking your head in the office and saying, if you need anything let me know, so that they know that you care, you're concerned and you're there. I think it also shades the value of compassion and loyalty. (3)

Within the overall category of professional hardship there were six similar experiences. The first were four participant's experiences with the line-of-duty-death of a subordinate or close friend. From their stories it was clear that a line-of-duty-death is a profoundly disturbing and emotional event, not only for the individuals involved but the entire organization. Personal responsibility seemed to weigh heavily on those participants who had gone through these events, and for some, brought home the inherent risks of the job. Like the personal experiences with cancer those who experienced a line-of-duty-death reported greater empathy for others, appreciation for personal grief of others and the organization as a whole, and the interconnectedness of the people and the organization. Like his description of his personal experience with cancer Jack also summarized his and other's experience with a line-of-duty-death.

One of my assistant chiefs was killed in the line of duty and I learned a lot more about being in there and a lot more about people in general. It was right after the cancer thing and yet before Sept. 11th and dealing with the assistant chief's wife, and his two sons and I had to discuss some very difficult things with the days following, because he was burned 95% of his body in an electrical explosion and he lived for 10 more days before he passed. And I had to sit down with her and explain to her that life would never be the same and that he wasn't going to live through this and we had to do a DNR (do not resuscitate). And to deal with her and her family not just during those ten days but obviously the months and years afterwards. I appreciate people a lot more. I slow down and understand the process is more important than substance. People need to be understood, if you shut up and listen you'll learn a lot. And there are opportunities, some may call them challenges or difficult times but there are opportunities in life where you get only one chance to do it right, and if you don't do it right you're never going to be able to fix it or return to that moment -- in your life and other's lives. I think also that you have a right and a responsibility to have fun, that there's a lot of pain in life and a lot of things that have to be done that people don't want to do. And when you're not in one of those circumstances you have a responsibility to have fun and enjoy life and enjoy your friends and enjoy your family and enjoy your wife and enjoy your kids. And understand that every moment that you're having fun is as important as it will ever be. (3)

Another category of professional hardship described by several participants was related to extremely challenging job assignments. Attempts at consolidation of independent organizations, dealing with very negative labor relations, terminating subordinates, assignments to manage a dysfunctional organizational unit, and business failures were cited by participants. The participants who described these events reported personal attacks, extreme workload and stress, negative media attention, and personal fear. These events however, precipitated reassessment and later reengagement, often in a personal and professional decision to move to a new organization and ultimately to a higher level of career success. Megan's experience when she was transferred to a new assignment is illustrative of these challenges.

The training academy was the pit in our department because for ten years every problem employee was transferred to the training academy. And all of the sudden they wondered why they were getting so many complaints and things weren't working well. I'm going into a snake pit of employees, with some really big demands. I realized I had to clean house. And it took me eleven months and I cleaned house, fired or transferred, everybody worked on their problems as much as I can and if I couldn't fix their problems, we got rid of them. And the other problems we had, at least, action plans on and then put in places where they could be acted on. And I was able to recruit - I used to call them my stars, just the cream of the crop - to come in there and train. And we were able to work with our HR to get the diverse groups in there. Like I said, the first eleven months were just awful. I was working 14 - 16 hour days, but it was worthwhile in the end and I stayed there about four to five years and never did want to leave then. (8)

A category of professional hardship that was unique to volunteer chiefs was corporate downsizing in their paid jobs. Four volunteer chiefs reported being involved in organizational downsizing and reorganization, either losing jobs through downsizing and having to implement downsizing strategies from above. Only one participant who reported this experience survived in the organization in which it occurred. All reported the intense feeling of loss of control, betrayal, and frustration, for themselves and their

subordinates. All reported that these changes were externally imposed and beyond their personal control. For most after a period of intense hardship, they chose significant career changes that proved ultimately personally and professionally positive. Ben's narrative of this intense experience showed how he reacted to this experience.

And then suddenly, because of something outside of my control, there's a significant demise in the organization. For years you sit there and you build and you build and you build and you invest untold number of hours into trying to build a corporation and a valuable one at that for many, many people, only to have external influences pull the rug out from underneath your feet.

I was getting a little bit burned out because at the time it was more laying people off and downsizing than it was of actually doing the job. So I went from a position where I was downsizing from hundreds of people to going to a department that had a few hundred but that was growing. But I'd say the burnout piece came definitely from laying people off that can get to you faster than anything else. Especially if you're laying off a hundred plus a year. At the end of the day it made me rethink what I wanted to do with my career. (9)

The last hardship category was unique to Megan as the only female participant. She told an especially wrenching story of being passed over for promotion due only to being a woman in a male dominated organization and culture. This classic example of a glass ceiling prompted Megan to seek better fortunes in another organization even though it caused her great pain and frustration.

Finally he said to me, 'you know, I know if I promoted you that when I left, they'd make you fire chief and I couldn't stand to be followed by a woman.' He actually said that to me. So, that told me a whole lot. Especially that I wasn't going to be promoted. So I went down to Human Resources and talked to them and they said if I wanted to take any kind of action that they would support me. And then they got loose at the jaws and told me all of this stuff they had on him, other women and stuff. I finally looked at them and said, you know, I think I know what I'm going to do. I'm not going to file a grievance or anything, I'm not going to do your job. I didn't trust them to support me either after I heard what they obviously had. So, you know, I had a decision to make and the decision was that I wanted to look elsewhere, be a fire chief. And I always tell people, you know, sometimes when you're disappointed, it's only because there's something better. (8)

Observation of leaders

All participants reported observing superiors as important vicarious learning experiences even though many came from observing negative behaviors and traits. This observation was important to many as they sought role models in their early careers. Bob described how early observations of superiors became a personal evaluation style.

And I guess like most of us who tend to be upwardly mobile we do look at role models and identify the good things and the not so good things and try to do the good things and avoid the ones that you see are not very effective, or maybe modify it in some way that you think it might be a little bit more effective. Watch somebody else do it, we go through that to, and... I've always sort of evaluated myself in that way, you know, what did I do good? What didn't I do good? What can I do better next time? And I think that's a good learning experience. I guess one of the - I'm not sure how you would describe it, one of the personal traits that I've always done is to try to look inwardly and evaluate how I'm doing myself in terms of being able to achieve the objective and in that I think some people often times don't do that. (6)

While half of the participants reported observing positive attributes, their narratives of these positive observations were relatively short as compared to the negative descriptions. Those who reported positive observations mentioned superiors with strong work ethics, little patience for mediocrity, the ability to articulate a clear vision, personal strength of conviction, and commitment. Some described being inspired to learn themselves by observing the personal learning orientation of superiors, observing how to weigh alternatives and experiment, and how to develop professional networks.

The participants who described observing negative attributes of superiors was much stronger and seemed to provoke more intense learning. The negative traits participants reported were low trust in subordinates, inability to change with the environment, poor communication skills, inability to learn new behaviors, failure to listen effectively, personal hostility, and fear. Some participants described these traits as

manifesting in not developing subordinates, not sharing power, not delegating real authority, and poor or absent articulation the organizations mission and values.

First assistant chief/management position

Twelve of the 14 participants reported experiences in their first management positions that were important to their leadership and management development. These experiences were in second or third level positions below the level of fire chief or CEO. While their description of a large jump in responsibility and scope as fire chief or CEO were similar these duties were more internal rather than external. Most described their new program management roles as primarily an application of their technical skills with a wider scope. As an example, Ben described his application of fire protection engineering skills to his new role as a middle manager.

I spent my first five years doing fire protection engineering work for an insurance carrier and then went into management. So at the age of 28 or 29 I was a corporate manager for an insurance company, managing fire protection and safety engineers. That, and with a wide age range of individuals underneath me, ranging from just out of college to 55 to 60 year old individuals who were ready for retirement. That brought a challenge and I had to learn immediately and made mistakes. So my background in being a fire protection engineer and then dabbling in the fire department business if you will I think was a plus. I was able to relate fire loss, injuries that occur in the workplace and all of those types of things that are happening. I can relate those right back to how they were caused, what the impact of those were on businesses. (9)

Following this theme further, some participants reported learning new technical skills in their mid-management roles. Learning finance and budgeting were common, as were writing and presenting extensive staff reports. John reported his experience as an assistant chief that is representative of the experience of others.

Budget preparations, preparing reports for the elected official of the county manager. Doing the appropriate analysis that goes along with developing those reports, developing staffing models. In fact, the vast majority of the budget presentations that were done here during that time period were done by myself. (14)

Related to new administrative skills and experiences, some participants reported dealing with significant employee issues, especially terminations as critical learning experiences. Clark illustrated this with his description of being involved with difficult termination procedures.

I had to make a recommendation to let a dispatcher go who I didn't think was meeting standards. That was my first real involvement in separating someone from the organization and that was a difficult decision to decide to pursue in the first place, but secondarily once I'd started in a very short period of time, maybe a day, stuff started moving through the department, and rumors and feedback from the person who was under scrutiny and all that type of thing. And you think, wow, this is a real mess! But you just kept moving forward with it and ultimately it worked out, but there was a while there to think, man this is serious stuff! Which of course it is because you're having an impact on a human being's life. . It's an extremely difficult decision to adversely impact someone's life in that way." (13)

John described his personal learning from his day-to-day personnel management experiences as a foundation for his later role as fire chief.

I think the exposure and the involvement in dealing with personnel matters on a day-to-day basis was a very valuable experience. Not only from the perspective of my view points as to whether or not the course of action that was taken was appropriate or inappropriate, but my ability to influence that decision making process. And I think that that really laid a strong foundation for being able to look at personnel matters from a different perspective, if you will, or at least be able to look at it – and I don't know if global is the proper term, but from a more comprehensive perspective. Rather than just the knee jerk reaction of, you know, we're going to impose disciplinary action and the level of disciplinary action. And then again all of the rules and regulations and laws and everything else that goes along with managing a work force, being cognizant of those things and recognizing that to some extent there are some limitations in how you approach disciplinary issues and you make sure that when you do manage a work force that you're cognizant of those constraints. (14)

Clark's and John's personal stories illustrated another important observation of many participants during their mid-management experiences. This is the impact that organizational culture has on everything. It is in the mid-management roles that several participants describe how important it is to recognize how critical the organizational

culture is to organization as a whole and its individual members. Similarly several participants told stories of their roles in leading internal change as a middle-manager.

New Projects

Twelve participants related experiences designing or promoting major new programs and policy initiatives. These included consolidation of existing organizations into a single new one, initiating entirely new services, making major changes in operating procedures, adopting strategic plans, developing new internal strategies, and enactment of legislative solutions. All of these experiences involved moving well beyond the accepted bounds of the organization's current mission and structure, challenges to the organizational culture, taking a long-term view of potential success vs. short-term risk and in some cases being involved in legislative action. Some participant described enduring considerable risk to their careers and to their organizations. By a margin of three to one these initiatives were successful. The stories of the unsuccessful initiatives, however, seemed to provoke a higher level of emotion and learning. In most cases these experiences occurred within the context of larger experiences in the first assistant chief/management and first fire chief/CEO positions.

A consistent thread among the stories of implanting new programs outside of the fire department was maneuvering within the political environment. Learning to work with multiple stakeholders, conflict, political agendas and learning to make political accommodations to reach consensus was common. Jack's example of building a new fire station is a good case in point of the political learning that others experienced.

One thing I knew we had to do, this building was falling apart, was build a central headquarters fire station. And the long of the story to the short is we had identified a piece of land that was very controversial but also when we went to referendum to get approval to build the fire house and get the money to build it

the city manager chose to attach to it wording that would include a new City Hall. And there I was where without a doubt the community said, we need a new fire house – drive by that, you know, that building, that's falling apart and it will tell you but what's this with the City Hall? And it was an experience where I had to learn; here is my boss using a popular political issue to gain and get approval of something that he has wanted a long time but is it validated in the community, a new City Hall? The long story is the referendum went and it failed. And I had people calling me saying, we didn't – we voted against it because of your city manager on that City Hall issue not your fire station. And that became a balancing act of dealing with my city manager. I obviously couldn't say, no, you can't put that on the referendum but the fallout from it became politically charged and it was one of the nails that caused him to lose his job. And I think it was my first experience with heavy-duty politics in a public setting and the conflict inherent with my boss versus the wishes of the community. (3)

From a more negative perspective the external impact of politics and inertia of entrenched internal forces seemed too much for even the most well intentioned and logical new programs. John described his experience implementing an internal county-wide policy that, even though initially successful, fell victim to the external forces of economics.

I was able to convince our board of commissioners at that time to implement a program that essentially was a buy-back program - over the years is what it boiled down to, and it was very successful. Sick leave utilization went down significantly across the board, in all departments. And last year, because it was costing \$200,000 a year, they eliminated the program. (14)

Jack likewise told of his attempt, unsuccessfully, to consolidate a number of fire jurisdictions into one, even with the early backing of the administrative leadership. He described learning the importance of assessing the cost/benefit relationship of any new initiative as a critical learning experience. This learning he described as helping him develop a new management behavior of paying much more attention to these relationships early in the development of any new program.

I was hired in from the outside and was probably awed more by the challenge than by the reality of what was the potential outcome? What was the probability of being successful and no where along - I realized this maybe three-quarters through the project, maybe two and a half, three years into it, the policy makers at the county board level had never stated a desire to consolidate, they made the

decision to establish this study group simply to placate and hoped some sort of a solution. That was probably my biggest career failure, even though I accepted that job - and that whole project and initiative was programmed for failure from the get-go. I learned a lot about going slower at first to go faster later, thinking what are the right questions to ask to get the right answers, and clarity of what it is. And understanding that some ideas are great but the concept is often programmed for failure from the beginning. Because although some ideas are really good, the reality is that it's probably not worth attempting because you're going to hurt more people in the process and never achieve the ultimate goal. So you leave a lot of the damage at the end of the project that maybe isn't worth the overall advantage of achieving the project. (3)

Within these stories was again a strong recognition of the impact of the internal culture on any new policy initiative. The learning here seemed to be most powerful from unsuccessful efforts. Sam told an especially illustrative story of attempting to implement a major new health and fitness program that was logically sound and morally correct. What he didn't expect was the intensity of opposition due to his direct challenge of the cultural imperative to protect employment and identity.

I can remember as chief - that I had decided that fitness was paramount and it was at a time when the whole fire service was talking about fitness and the importance of health and fitness in the fire service. So we were preparing to introduce our annual fitness assessments where we would utilize the medical community and evaluate our fitness. Then we were going to have a lot of fitness equipment in the stations, have fitness prescriptions and everybody's energized, and a lot of money that the city would provide, and this would be a positive thing. And I said, well, you know, but there's a quid pro quo that after we find out that somebody is unfit, what are we going to do with them. Then I wrote up a draft policy to give to the union that these will be the steps we will take before somebody goes out the door and ends their career. And I was immediately able to change union meeting attendance to triple the attendance in a very short fashion, which I didn't think there would be any -- I didn't even see it coming, I didn't think there would be that much negative repercussion. But what I learned from that experience, whenever you threaten an individual's employment, you threaten their career, you threaten their ability to feed and clothe their family, then everyone takes it that they may be the individual. All they know is now their career is in jeopardy. (10)

When describing the coping that seemed to lead to successful new program Implementation, the participants told of collaborating with others, especially others with

more technical knowledge and experience, networking with colleagues, understanding the perceptions of various stakeholders, and even reconciling their own values with those of new stakeholders. Richard, who was the oldest participant, described his championing of a new method of motivating volunteers even though it sorely challenged his own values as a volunteer himself, something he described as a “real heartbreaker (5).”

Working without authority

This last theme emerged strongly for only two participants but for them it seemed crucial to developing the management skills that figured impressively into their later success. Barry was the only participant who did not have formal supervisory and management experience early in his career. He served the majority of his career in a large urban fire department where his advancement was curtailed by an entrenched hierarchical promotion system. However, during his early years he caught the attention of high level managers, including the fire chief, who made possible Barry’s assignment to staff functions that allowed him to develop administrative, diplomatic and communication skills with no formal organizational authority. Barry described one of these experiences as the external promoter of new medical programs.

And the folks said, OK, Barry, you put all of this together. You go out and make the presentations. And I did probably 50-60 presentations about the new paramedic system. Sometimes with a paramedic, sometimes with our community information officer. And a whole bunch of them alone. Dealing with segments of the public, talking about our programs, and it had to be done right. We were in our infancy and it was just tremendously important that it was done correctly. So I had this opportunity to independently go to different places, make my own judgments, my own decisions about - you know, that sounds like it’s going to be a good fire, I’m getting myself in route, I’m going, checking into the IC (incident commander). And operating that was a very independently but at the same time, operating within that whole system. So there were a lot of judgment calls that had to be made and I would like to say that I made them all right. I had to work with other people, I would work with the guys who were developing the EMS program, I worked with people at the hospital as we were putting the slides

together, following this first group of paramedics and documenting all of their - down in the cadaver lab. (7)

Through this and a number of similar experiences Barry told of learning how to do things right with little formal guidance, and to prepare and present critical information and concepts. He also described learning to use independent judgment, how to make decisions based on ambiguous and incomplete information, and how to interact with organizations and people outside the fire department. Most importantly, these experiences allowed him the opportunity to observe the fire service culture as both an insider and an outsider, something that became a hallmark of his later success as a fire chief.

Bob described an equally powerful early career experience working outside of his technical specialty and without formal organizational authority. In this case he was assigned the responsibility of heading a city-wide bond issue for non-fire department capital construction projects. He told of knowing little about municipal finance or how to process such an important project through the external political process. He credited this experience with his early learning of the political process, collaboration, negotiation, and dealing with a professional challenge outside his technical experience. As he states below, this experience provided the foundation for later success as a fire chief.

I learned an awful lot about municipal finance in a very short period of time because I didn't have a whole lot of people inside the city to even turn to in terms of how to do that. I think that was a tremendous help for me as a fire chief to understand municipal finance. And I think it's been extremely beneficial, particularly in my 23 years now in my current position. (6)

Learning and Change in Leadership and Management Behavior

The same within and cross cases analysis method was used to evaluate the degree to which a developmental experience may have contributed to personal learning and changes in leadership and management behaviors. This analysis was not as simple as the

identification and analysis of developmental experience. Due to the free flowing nature of the data collection process the participants did not apply a consistent definition of learning and change in their narratives. The data analysis methodology was likewise not able to eliminate other variables that may have influenced learning and change other than the developmental experiences. It was also not precise enough to segment specific learning and change within each broader developmental experience theme. Finally, it was not able to determine the individual learning style of each participant or determine how individual learning style may be related to experiential learning for this group of participants.

Personal learning

For the purposes of this analysis the definitions of instrumental, confirmatory and technical experimental learning were used as described in the literature review. It is illustrative of Kolb's first goal of experiential learning; learning the specific knowledge needed to be successful in any endeavor and learning about oneself (Kolb, 1976). Bassett & Jackson (1994) describe this learning as the acquisition of information and problem solving. Mezirow (1994) similarly defines this type of learning as involving defined needs and objectives, well defined behaviors and technical competency. This learning also includes the development of heightened awareness that could be a precursor of behavior change.

Within the nine developmental experience themes the participants described examples of specific personal learning in seven. These 29 learning examples are shown below in Table 6.

Table 6

Learning Examples

Positive observation of behavior: foresight, dedication, commitment, wisdom	Negative observations of behavior: low trust, poor communication skills, meanness	Appreciation for impact on people
Technical skills	Responsibility	Independence
Communications skills	Accountability	Value of hard work
Vision	Contributions of others	Focus on big picture
Independence	Importance of culture	Persistence
Self-interest of others	Expectations management	Confidence
Collaboration skills	Personal focus	Visibility
Negotiation skills	Conflict resolution skills	Uncertainty
Political skills	Process orientation	Administrative skills
Coping with disappointment	Appreciation of family	Presentation skills
	Working without superior support	Loyalty

These 29 examples seem to be represented the strongest in three developmental experience themes; observation of other leaders, early experience and the first assistant chief/management position. Learning from hardship and in the first fire chief or CEO position was also strong across many cases. Specific experiences in politics and working in situations without formal authority were evident for only two participants but seemed very strong for them. Table 7 below shows the cross case analysis.

Table 7

Learning Experiences by Strength Across Themes

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Observation of leaders	S		M	S	L	L	L	S	L	S	L	S	M	S
Early experience	L	M	S	L	L	S	M	M	M	S	S	M	M	S
First assistant chief/management position		S	L			S	S	S	S	M	S		S	S
Hardship	S		S	S				S	S	M	S	L	M	M
First Fire Chief/CEO position			S		M	M		S	S		M	S	M	
Politics			S									S		
Work without authority					M		S							

Observation of leaders

Thirteen of the 14 participants described personal learning from observing the actions and behaviors of other leaders. These included superiors in their own organization, other fire service and business organizations and professional associations. The most common positive observations included foresight, dedication, commitment, wisdom, courage, perseverance and professionalism. Specific learning that the participants described from these role models were doing the right things, projecting vision, being persistent and focusing on the big picture. Many participants also described negative behaviors that they observed in other leaders. These included low trust in others, (particularly subordinates), meanness and poor communication skills. Participants commonly made comments that indicated that this vicarious learning allowed them to evaluate the positive and negative behaviors of other leaders so that they could emulate the good behaviors and avoid the bad ones. Bob's discussion about observing superiors

illustrated this well.

And I guess like most of us who tend to be upwardly mobile we do look at role models and identify the good things and the not so good things and try to do the good things and avoid the ones that you see are not very effective, or maybe modify it in some way that you think it might be a little bit more effective. And I think that's a good learning experience. (6)

Early experience

Personal learning during their early career experiences was described by 11 of the 14 participants. The most common were the acquisition of technical skills and, in early supervisory experiences, often involving supervising older subordinates. Common learning was a heightened sense of responsibility, relying more on the contributions of others and a focus on the quality of outcomes.

A specific subset of early experience learning involved military service. For three participants these were very strong learning experiences. These three all reported learning personal focus, personal responsibility, confidence, and the value of work.

First assistant chief/management position

Learning from the first assistant chief or other comparable general mid-management experience was important for half of the participants. The three most frequently mentioned personal learning themes from these experiences were the learning of administrative skills required in mid-management positions (finance, budgeting, scheduling, delegation, negotiation, communication, presentation, planning, etc), the impact of internal culture on management actions, and an appreciation for the impact of organizational policy on people. Some reported learning conflict resolution skills in their mid-management experiences as well as an appreciation for the importance of process in policy development and implementation. Some gained a greater awareness of the need to

focus on the people involved and impacted rather than technology and procedure. Some reported learning how to deal with increased visibility within and outside their organizations and to sometimes work without the support of superiors. Some reported that duties in these positions required them to learn political skills.

Hardship

Hardship experiences that precipitated personal learning were mentioned by ten participants with six describing particularly strong experiences. Common learning themes from hardship were a greater appreciation for the value of family and friends and an awareness of personal mortality. Learning to cope with uncertainty and disappointment were also described by those participants with the strongest hardship experiences.

First fire chief/CEO position

Half of the participants reported personal learning from their experiences in their first fire chief or CEO position. For some this included either learning new administrative skills or refining those they already had. Most described learning new or enhanced skills in collaboration, negotiation, and communication. Some also mentioned acquiring a much greater appreciation for the personal responsibility of the position and their personal accountability for organizational performance. Some described learning how to develop and transmit expectations. The most common learning theme was a much greater appreciation for the importance of process, people and culture over technology, structure and procedure in all aspects of organizational life.

Politics

Experience within the political system was reported by two participants as critical to their personal learning. Even though one participant described primarily an internal political experience and the other an external one, both described common learning themes of better understanding the motivations of others, understanding the impacts of self-interest and the importance of political loyalty in political behavior.

Working without authority

Like experiences in the political system, working without formal authority was described by only two participants. However, for these two participants the learning acquired through these experiences figured strongly in their later success. These participants reported three learning themes. The first was the acquisition of very specific technical and administrative skills. The second was the ability to work independently and exercise personal judgment. The most important seemed to be a greater awareness of how to operate outside the formal organizational hierarchy.

Change in leadership and management behavior

Like personal learning, the definitions described in the literature review were used to define change in leadership and management behavior. This corresponds to Kolb's second goal of experiential learning, to produce personal change (Kolb, 1976). This change can be evidenced by actual modification of behavior or other actions that indicate that participants actually do something differently as a result of their experience. Included in this personal change analysis are also indications of critical thinking as described by Brookfield (1987). This may include questioning past assumptions and challenging organizational and personal values. Reflection is an important function of this level of

experiential learning and as described by Daudelin (1998), promotes the use of experience to progress beyond the filters of personal biases and past experiences.

Within in the nine developmental experience themes the participants described examples of specific changes in leadership and management behaviors in only four. The 23 personal change examples are shown below in Table 8.

Table 8

Change in Leadership and Management Behavior Examples

More patient	More flexible	Better listening
Evaluate gain/loss	Less angry	Bigger view
Build consensus	Focus on process	Redefine issues
Educate others	More documentation	Negotiation
More persistent	Greater collaboration	Greater reflection
Deal with disappointment	Respect needs of others	Adapt to environment
More responsibility for self in relationships	Incorporate cultural awareness	Involve external stakeholders
	Build relationships	Tolerance for uncertainty

The cross case analysis indicated that changes in leadership and management behavior was most evident in four developmental experience themes in two sets. The first set was the first fire chief/CEO experience and hardship. The second set was the first assistant chief/management position and early career experience. The leadership and management behavioral changed seemed the strongest in the first set. Table 9 below shows the cross case analysis.

Table 9

Leadership and Management Changes Comparison by Developmental Experience Theme

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
First Fire Chief/ CEO position		W	S		M	S	S	S	S	M	S	M	S	S
Hardship	S		S	S				S	S	S	S	M	S	S
First assistant chief/management position		W					M						S	S
Early experience								S	M					

First fire chief/CEO position

Eight of the 14 participants described change in management and leadership behaviors in their first roles as fire chiefs or CEOs of other organizations. These changes fell generally into two categories. The first are aspects of themselves that had changed that seemed to have required personal reflection and evolution of personal values and attitudes. Participants reported that they had become more patient, more flexible, better listeners, and less assertive. For some, this included new ability to control anger and taking greater responsibility for his or her side of unproductive relationships. Several reported developing the ability to view their organizations and themselves from a much larger perspective. The second category is specific actions or behaviors that they use now based on their experience. These include focusing more on process rather than product and defining issues differently than they had in the past, particularly in regard to win/loss relationships. Also included were evaluating the gain/loss relationship of contemplated actions, building better documentation systems, placing more emphasis on the needs of

external stakeholders, building consensus, working through collaboration, and educating others. A specific subset of these new behaviors is an increased emphasis on the needs of others and treating all people with respect.

Hardship

Hardship experiences seemed very powerful in producing personal change in leadership and management behavior. Like the first fire chief/CEO experience, these changes can be viewed as two categories. The first are things about themselves that had changed that seemed to have required personal reflection and evolution of personal values and attitudes. These include much greater personal reflection on actions and impacts, an increased sense of patience and tolerance of uncertainty, and an appreciation for what he or she already has. Participants who reported hardships commonly described a new ability to persevere and persist in difficult circumstances. These changes seemed to have also inspired changes in actions. These include the ability to build relationships, incorporate the contributions of others in wider array of activities, better ability to adapt to changes in the external environment, and filtering out distractions. Some described a much improved ability to deal with personal and professional disappointment.

The second category of change in management and leadership behavior that seemed to arise from hardship was greater personal efforts to take into consideration the potential impacts of change on others. Several participants reported developing more empathy for others, much better listening capacity, appreciation for the difficulties others endure, and generally increased caring about people. These changes seemed to be especially strong for those participants who had been personally challenged by cancer, endured downsizing and reorganizations, and, to some extent, line-of-duty deaths in their organizations.

First assistant chief/management position

While not as strong across as many participants, several reported that personal change occurred as a result of their experiences as an assistant chief or in their first management position. In some respects these changes were the same as in the first fire chief/CEO position although at an earlier time in his or her career. These included an increased focus on process rather than product, inclusion of cultural awareness in program development, collaboration and negotiation skills, involving people at more points in the process and a greater reliance on others over self. In these experiences participants commonly reported much improvement in their ability to use new administrative skills.

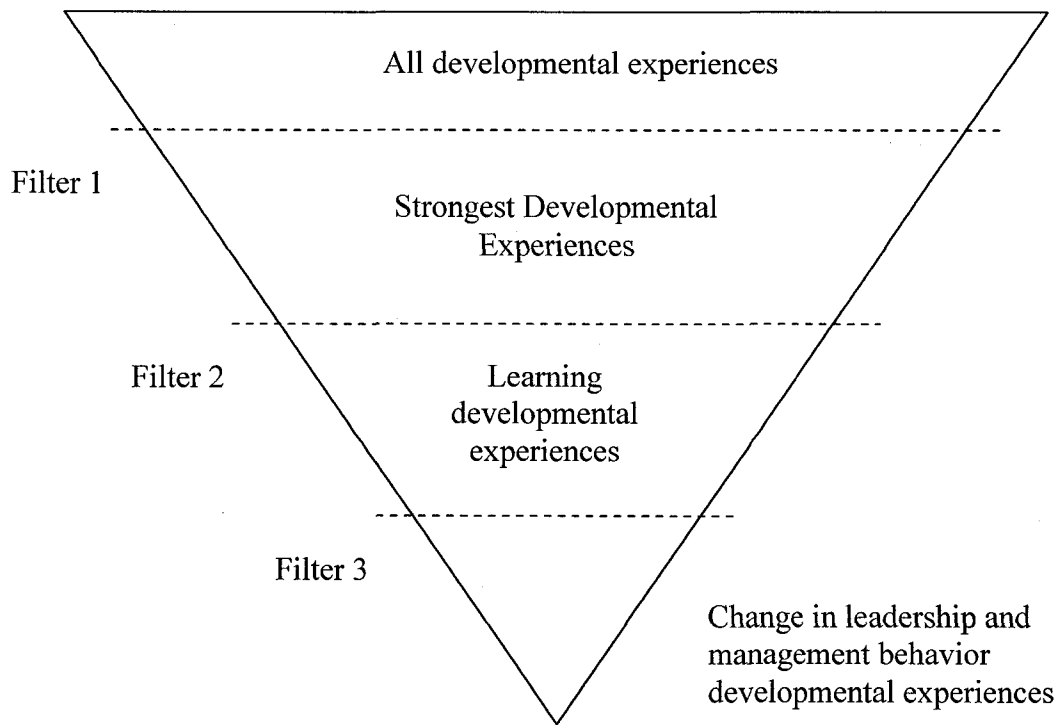
Early experience

The last experience theme where participants reported personal change was in their very early career experiences. Again, like the first fire chief/CEO and first assistant chief/management roles these experiences seemed to have occurred earlier than for other participants. The most common personal changes were related to early supervisory experiences. Using better listening skills and building relationships with others were cited by these participants.

Summary of findings

In summary, the findings illustrated a filtering of developmental experience themes based first on the definition of developmental experience from the CCL model (filter 1), personal learning from those experiences corresponding to the definitions of instrumental, confirmatory and technical experimental learning (filter 2), and finally to changes in leadership and management behaviors (filter 3). Figure 5 illustrates this filtering effect.

Figure 5. Analysis filtering



CHAPTER 5: DISCUSSION

This chapter discusses the findings of this study and implications for future research and application. It first describes the findings in relation to the three research questions. Recommendations for future research and for application in the executive development of future fire chiefs will be made. It will conclude with a summary of the entire study, its relevance to the developmental experience and leadership development models described in the literature review and personal observations.

Research Questions

Below I discuss the findings described in Chapter 4 to address the research questions. In keeping with the qualitative and constructivist approach I make no claim that these questions can be definitively answered.

Research Question 1

What do successful fire chiefs describe as career experiences that are strongest developmental experiences?

Table 10 below compares the 12 scales and descriptors of the *Developmental Challenge Profile* with the nine major experience themes that emerged in the analysis. Where the theme describes one or more of the descriptors of the model it is noted. The themes that displayed the greater number of descriptors I considered the strongest developmental experiences.

Table 10

Developmental Challenge Profile/Theme Comparison

	First Chief	Early Experience	Relationships	Politics	Hardship	Observation	First Assistant Chief	New Programs	Working without authority
Unfamiliar responsibilities	X	X		X			X		X
Proving yourself		X							
Developing new directions	X				X		X	X	
Inherited problems								X	
Reduction decisions					X				
Problems with employees		X	X		X		X	X	
High responsibility	X	X		X	X		X	X	
Managing business diversity	X			X			X		
Job overload	X								
External pressure	X			X	X	X		X	X
Influencing without authority	X			X		X		X	X
Adverse business conditions	X				X			X	
Lack of management support			X		X				
Lack of personal support			X						
Difficult boss			X		X	X			

Three of the developmental experience themes stand out as particularly strong. These are the first fire chief/CEO position, hardships and developing new programs. In their first experience as a fire chief/CEO participants described unfamiliar responsibilities with a high degree of responsibility and accountability that differed from the scope, responsibility and accountability of previous positions. This is an underlying definition of developmental experience in both the CCL and Lominger models. They reported being impacted by and having to react to strong external pressures, business diversity and adverse business conditions as fire chief/CEO. In this regard the participants who were senior managers in private sector organizations reported a higher degree of external and environmental pressures.

Experiences involving professional and personal hardship also fit the definition of developmental experience well. Adverse business conditions, external pressure, problems with employees, and difficult superiors figured prominently in participant stories of hardship. An important subset of the hardship stories that more strongly illustrates developmental experience were the experiences some participants had with downsizing and reorganization. For them, these were particularly painful and ultimately involved much personal learning and change. Another subset was stories of personal hardship involving cancer. These seemed to serve as catalysts for personal learning and change that affected both personal professional lives.

The third strongest developmental experience involved developing and implementing new programs. Like the first fire chief/CEO position and hardship, these stories often included developing new organizational directions with high

responsibility under adverse business conditions and external pressure. Some participants related stories of unsuccessful new programs that exposed them to significant personal and professional risk, in some cases prompting a career crisis and later recovery. Those who told stories involving unsuccessful new initiatives seemed to learn the most. In most cases, experiences with new programs were imbedded within the first fire chief/CEO or first assistant chief/management experiences, although some occurred in pre-management phases.

The forth strongest developmental experience themes were related to politics and in the participant's first role as an assistant chief or other mid-management position. Both had aspects of unfamiliar responsibilities, high responsibilities, and managing business diversity. It is in these roles that most participants described their first major responsibilities in developing and implementing new policy initiatives. Political experiences sometimes included external pressure, and in the first assistant chief position, significant problems with employees.

The least strong developmental experience themes across the participants involved early experience, relationships, observation of other leaders, and working without authority. While individual participants related powerful individual stories of personal development, these themes did not rise to the level of others across a greater number of participants. However, some of these experiences were very important to individual participants. Barry's early experience with special assignments where he worked without formal authority and Sam's naval experience very early in his career were examples.

Research Question 2

What learning and change in leadership and management behaviors do they describe as a result of these developmental experiences?

The participants reported 29 examples of personal learning in six developmental experience themes and 23 examples of changes in leadership and management behaviors in four developmental experience themes. As discussed in the findings, personal learning was defined as the first part of experiential learning. This is instrumental, confirmatory, and technical learning. The second part of the definition required changes in behaviors and actions. The work sheets used to compare the examples of personal learning and changes in leadership and management behaviors with the developmental experience themes where they were the most represented are shown in Appendix J. Like the comparisons in Research Question 1 the themes that displayed the most examples of learning and leadership and management behavior changes I considered the strongest for each category.

As described in the literature review and applied in the analysis, the first requirement of experiential learning is skill acquisition, confirmation and practice. This type of learning appears often in the first fire chief/CEO, first assistant chief/management position, working without authority, and early career experience. These included learning administrative and political skills and specific competencies in communication and presentation. Learning a greater appreciation for the impact of organizational actions on others was strong in the first fire chief/CEO, first assistant chief/management roles, and hardship situations. The first experience as fire

chief/CEO seemed particularly rich in learning. Unique to the first fire chief/CEO and first assistant chief/management positions were a greater appreciation for process over product and how organizational policy impacts people. Learning during early career experiences also was strong. In many cases participants described acquiring and refining technical, and in some cases, administrative skills. The very specific experience of working without authority provided early acquisition of administrative and, more importantly, presentation and political skills. This is consistent with the concept of “platform skills” described by McCauley, Lombardo & Usher (1989) in the literature review. There also seemed to be an important learning by participants who had been involved in hardship situations that was primarily centered on the appreciation of relationships. For some this included a specific appreciation for the suffering of others in similar situations.

The second requirement of experiential learning is the actual change in leadership and management behavior that comes from critical thinking and reflection. The four developmental experience themes where leadership and management change were most displayed were the first fire chief/CEO position, hardship, first assistant chief/management position, and to a smaller degree of change in the early experience theme. In these experiences the behaviors of listening, patience and reflection seemed to have increased. When asked what leadership and management behaviors they had changed over time, participants described slowing down and increased patience with both people and process. Specific leadership and management actions that improved include a greater focus on process, building consensus, increased collaboration and

negotiation, building relationships, and networking. Two changes that appeared strongly in the first fire chief/CEO, first assistant chief/management roles and hardship were displaying greater respect for the needs of others and the ability to incorporate an in-depth understand of fire service organizational culture in policy making.

Research Question 3

What developmental experiences provide the most powerful experiential learning?

Research Question 1 sought to identify those experiences described by the 14 participants that were their strongest developmental experiences. Research Question 2 sought to identify which of these developmental experiences that produced the strongest personal learning and change in leadership and management behaviors. Six developmental experience themes that produced strong personal learning and four produced change in leadership and management behaviors were identified. In accordance with the definitions of experiential learning the strongest experiential learning must have included instrumental, confirmatory and technical learning as well as produced changes in behaviors and actions.

The strongest experiential learning appeared in two developmental experience themes, the first experience as a fire chief/CEO position and hardship. In their first fire chief/CEO positions all but one of the participants told strong and consistent stories of a vastly increased scope of responsibility, accountability and personal risk. As shown in Research Questions 1 and 2 the first fire chief/CEO experience was heavily represented in both the personal learning and change in leadership and

management behavior examples. In this role the participants reported personal learning in 14 of the 29 examples. More importantly, experiences in this position were evident in 19 of the 23 examples of personal change. Hardship experiences did not evidence a high degree of personal learning but did seem to precipitate strong personal changes in leadership and management behaviors. This indicates that there may be something unique about hardship experience that triggers personal change quickly.

For those participants who described significant first fire chief/CEO experiences and endured painful hardship situations the learning and change seemed particularly strong. Six of the participants who related passionate stories of learning and change in their first fire chief/CEO position and in their hardship stories seemed to bear this out. Jack told painful stories of professional failure with serious political implications along with a personal battle with cancer. Megan experienced significant professional challenges complicated by the glass ceiling effect of being a woman in a male dominated career. Ben experienced multiple developmental experiences as a fire chief/CEO and endured a severe downsizing in his business. Tom, likewise, related powerful stories of learning and change in his first fire chief position while experiencing a corporate downsizing. Clark learned and changed much in his first fire chief role and also experienced a line-of-duty death of a direct subordinate. John described a number of personal learning experiences and changes in his first fire chief role and had endured an early business failure.

Recommendations for future research

This study examined a broad and complex topic using a small sample and two relatively short interviews. There is ample opportunity for further research that will allow greater field relevance and application in fire service career development in general and, more specifically, to the executive development of future fire chiefs. It is possible that this exploratory research can serve as a starting point for more focused research. Described below are several areas of potential future research.

Broaden research focus

The focus of this study was narrowly defined to identify developmental experiences and, to a smaller extent, personal learning and changes in leadership and management behaviors. While the participants provided sufficient data to address the research questions they also provided rich details of their career experiences that went well beyond this narrow focus. The stories told by all the participants described a significant personal evolution of management and leadership philosophy. This was especially evident in their stories of observing the leadership and management behaviors others. While some participants related stories that were behaviors to emulate, many told stories of behaviors to avoid. The stories of personal and professional hardship were likewise rich in emotion, learning, and change that seemed to extend beyond developmental experience itself. Future research, again using qualitative methodology could provide better insight into other aspects of career development that would be valuable to aspiring fire chiefs.

Better examination of learning and behavior change

During the interview process the participants talked frequently about learning and change, although it was difficult to differentiate between the two. It was likewise difficult to tell when learning simply improved current skills and when it prompted actual changes in behavior and action. Future research using a mixed research design that adds quantitative measurements of learning and change may better differentiate between learning and change, and, more importantly, predict what learning must occur (and the experiences that best produce that learning) before change in leadership and management behaviors can be expected.

Comparison of developmental experience and learning agility

My initial interest in developmental experience as a career development strategy for fire chiefs was sparked by my interest in learning agility. There are a number of instruments available that measure learning agility and it was my hope that I could use one of these to identify which unique fire service related developmental experience seemed most successful in improving learning agility. At the time I could find no list of developmental experiences in the fire service. This study identified a number of such experiences that can now be evaluated using these instruments. In this way a quantitative methodology could be used to evaluate a much larger sample with a better capacity for generalizing to a larger population.

Recommendations for application

One purpose of this study was to develop insights into how developmental experience based strategies can be integrated into the career development of future

fire chiefs. The experiences described by the 14 participants provide insight into several ways this can be done. The following four recommendations can serve as elements of a new model for fire service executive development.

Provide earlier developmental experience opportunities

By far the most powerful and frequent developmental experiences did not appear until individuals had already reached the position of fire chief. This seems to put fire chiefs, especially new chiefs, into a very steep learning curve, essentially having to learn while doing when the results really count. As described in the literature review this rapid learning in first time situations is an important component of learning agility. The shock of ultimate responsibility, personal accountability and interacting in the external political environment was relayed by many participants when they assumed their first fire chief position. Many told of not having adequate preparation for this role. It would make sense that this shock could be reduced by better preparation in not only technical, organizational and relationship skills but in flexibility and adaptability. In my own experience as a new chief I have experienced this personally even though I had previously worked in a number of senior management positions. I found that it is in fact a difficult transition and wished I had had opportunities to take more risks and to independently stretch in my middle-management positions.

The two developmental experience themes that show promise to provide better management preparation were experiences at the assistant chief level and working without authority. Clark and John both related stories in their assistant chief

positions that prepared them somewhat for their later ascent to fire chief. Both told of being granted significant discretionary authority with a high degree of personal risk in developing and implementing major organizational policies. Both also described a hands-off approach by their superiors which seemed to instill greater independence and self-reliance. While both appreciated the preparation these experiences provided, they also stated that this was not enough for the actual demands when they became fire chief. Most of the participants did not related stories of significant risk and independent responsibility in their assistant chief roles. This is not surprising because within most fire departments mid-level managers (such as assistant chiefs) are often responsible for implementing clearly defined policies, procedures, and directives with little discretionary authority.

The other experience that has potential for better management and leadership preparation is working without authority. Of the 14 participants only Barry and, to a lesser extent, Bob told of such experiences. In his early career Barry worked in a number of special assignments that required him to influence others without formal position authority and to build political and communication skills far in excess of what he needed within the normal career development progression. Included here was also direct access to high level managers and leaders who served as mentors. This is an executive development strategy that appears prominently in the learning agility literature. The emphasis on progressive position experience common in the fire service is quite conducive to instrumental, confirmatory and technical learning but not to stretch assignments that build flexibility and adaptability. The fire service culture

seems adverse to any career development actions that are outside these normal hierarchal rank progression systems. This is an area where I also have personal experience. As a young firefighter I was given an opportunity to work directly for the fire chief as the manager of a strategic planning project. Even though this experience occurred a long time ago to this day I use the communication and political skills I learned then to help me weather the rigors of my first fire chief position. Equally as important, this experience established a mentoring relationship that still exists today and allowed me to establish a professional network well beyond what I could have built only within the confines of my normal rank progression.

Increase focus on early management and leadership opportunities

The learning agility and developmental experience literature indicate that many successful executives are promoted into senior leadership and management roles early in their total careers, generally by their early 30s. They have likewise already had one or more developmental experiences. This pattern seems to hold true for all the participants in this study but is not common in many fire service organizations where conformity and longevity are culturally rewarded. Barry's experience in his early years in a large urban fire department bears this out. In order to gain developmental experience he had to venture outside the formal career development system. Even for the participants who were not in formal leadership positions (at least assistant chief or mid-level managers in other organizations) all were involved in jobs that required independent action and significant organizational influence. This seems to indicate there may be value to providing development

experiences to individuals who display promise early in their careers. Within the stories related by the participants, none indicated that they had been specifically groomed by senior management. In fact, most seemed to be in the right place at the right time and took advantage of opportunities when they were presented.

One tenant expressed in the executive development literature was that the development of future leaders should not be left to chance, that organizations should be more aggressive in identifying and preparing future leaders. Providing and supporting developmental experiences early in a promising person's career is one such strategy. The experiences of these 14 people seem to reinforce this. In fact, most seemed to transcend their technical training quickly and rapidly moved on to acquiring administrative and political skills. One way to jump start executive development in the fire service may be to focus more on the early career and to provide developmental experiences earlier than they occur in the normal fire service promotional progression. Like providing more developmental experiences in general, the fire service culture is not conducive to providing early leadership and management opportunities. One dynamic I observed is that many fire chiefs served in leadership position in the firefighters' union early in their careers. This may indicate that they took the opportunity provided by their peers through election to exercise promising leadership ability outside of the formal organizational hierarchy. This in fact, was the case in my own career and among my colleagues who are also now fire chiefs.

Increase learning from hardship

Only a small number of the participants told stories of serious hardship. However, for them these were powerful and pivotal experiences rich with learning and most important changes in leadership and management behaviors. In my professional associations and relationships with colleagues I hear many stories of hardship but most are discussed only shallowly with little sharing of personal learning and change. As indicated in the learning agility and developmental experience literature, if this is such a powerful experience it would make sense to find better ways of discovering and sharing the lessons of hardship. While there may already exist informal avenues of transferring learning from hardship it does not appear to be strong in fire service executive development programs. In fact, of the leadership and management development programs I've participated in or am aware of, it is not included. Adding some component of learning from hardship could not only allow others to learn from the experiences of others but may also reduce the stigma that may limit the value of hardship experience. Again, there is a direct linkage here to learning agility. Those individuals who are agile learners may also be able to weather hardships more successfully and turn what they learn into productive action.

While only a small number of participants related stories of severe hardship, I was left with the impression that others had endured hardships to some degree. I suspect that if I had conducted a third round of interviews these stories would have emerged. In my own career I have suffered hardships but not to the scale of a job loss or cancer battle like Jack, Megan's glass ceiling, or Sam's loss of a firefighter to a

line-of-duty-death. From my own hardships I can say that I have become more aware of how organizational policy and my own management actions impact people and have gained a greater appreciation for the importance of relationships. I cannot say that I have been profoundly changed by these hardships. Through my experience as a co-participant in this study, however, I do feel that I have developed an increased sense of readiness to learn and change if serious hardship does come my way.

Increase political awareness

A constant theme that emerged across many participants was learning to exist and function productively within the political environment. Like most other developmental experiences this was not something one learns until it really matters, usually in the position of fire chief. Many participants related strong stories of working with political officials and within the political system that were unsatisfactory. While some seemed to have become very adept, and now even relish it, others seemed to recoil from it. However, all acknowledged it as a set of skills required to be a successful fire chief. Even though I had extensive experience as a fire marshal in complex multi-jurisdiction environment (next to the fire chief probably the most external and political position in a fire department) and hold a graduate degree in political science, this has been an eye opening experience for me in my first year as fire chief.

Given the importance of developmental experience within the political environment, it seems to make sense to provide opportunities to learn and practice these skills before they are needed and to be able to learn them quickly as the

situation requires. Early career developmental experience in special assignments with strong external components can provide this preparation. Unfortunately below the fire chief most positions are almost entirely internally focused and these skills are not learned.

Conclusion

The research process started by establishing relationships with the research participants. As a fire service professional myself, this seemed to help establish a common frame of reference and reduced the need to interpret organizational and cultural information. It also helped that I was able to conduct the first round of interviews in person and at a location that was focused on the fire service profession. Each of the participants told engaging stories of their careers with some displaying a great amount of reflection. The data analysis process began with reorganizing the interview data into the chronological order in the three career periods of setting-the-stage, executive development and executive application. After this reorganization of the data and conducting the within and cross case analysis it became clear that the most powerful developmental experiences occurred in the executive development and application periods. Learning was strong in the setting-the-stage and executive development periods. This was consistent with the fire service career development model where much of a person's career is devoted to acquiring and refining technical, organizational and relationship skills within a tightly defined and regulated culture. While changes in leadership and management behaviors were displayed during all three periods the most powerful changes in leadership and management behaviors

were in the executive application period. Of all the participants, only Ben had high level experience as a manager in both fire service and business organizations. His observations of this difference illustrated this difference well.

When you're managing technical staff, either on a regional basis or even a national basis your focus is first of all to make sure that they can do the job. And then secondly to make sure that the work gets done. When you move into that higher level - and when I say higher level, corporate vice-president - you are now responsible for all of those corporate political issues, the corporate negotiation piece, the major budgetary aspects, the restrictions in staffing, head count if you will, and so on, and then comes the service that those people provide. That is a quantum leap, that's the same as going from a battalion chief to a department chief because what I saw in moving from fire company chief to chairman of our fire commission which oversees three fire companies and an ambulance squad, what I saw as a difference there is that I spent all my time now in budget issues, in political negotiations, in trying to set the long-term strategy for the integration of the services. And I saw them both as quantum leaps in change of skill sets and use of skill sets. When you move into those administrative positions everything changes. And now it's, you know, how do I convince the board of supervisors to give us an ordinance that's going to allow us to bill for services. How will I convince them that part of the municipal services tax has to come to the fire department? How do I convince them that their perceptions of the way things were 20 years ago no longer exist?

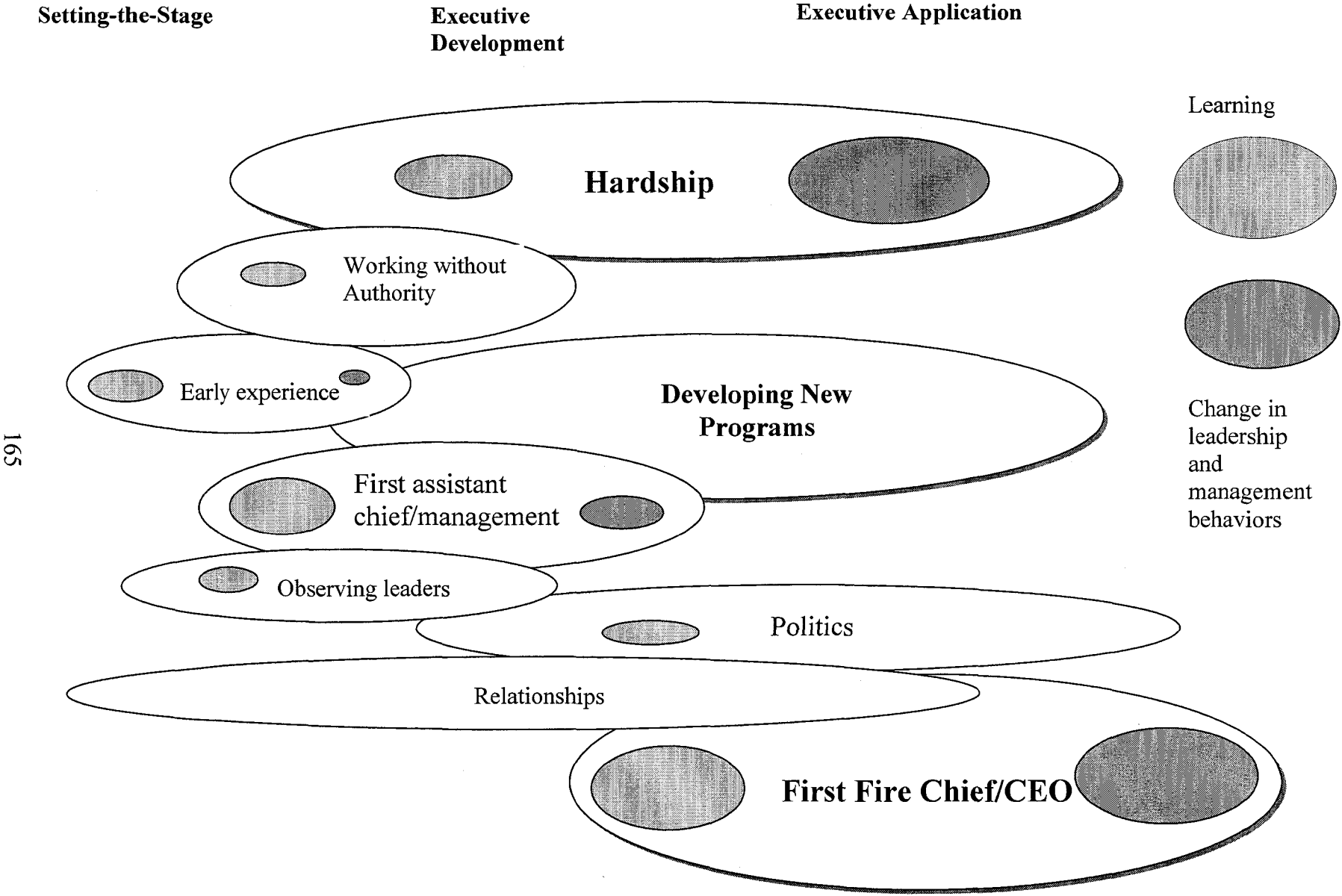
Another part of my corporate experience was the opportunity to go to training classes. There is no way I could have had the type of management training by trying to go through the fire department ranks that I got in the corporate world. There's absolutely no comparison. I personally believe that the fire department or the fire service is ten years behind corporate management in management skills and practices. We're learning things here today at this conference that I learned ten years ago as a corporate manager. (9)

Overall, the findings of this study indicated that developmental experience played an important role in preparing these 14 fire chiefs for the rigors of their current fire chief positions. Even though most of these experiences came parallel with doing the actual job they appear to have improved the ability of at least these participants to be successful. The experiences of these 14 people indicate that the five parameters

associated with developmental experience described by McCall, et al, (1988) are important to the development of these fire service executives. These are (1) that it took 10 to 20 years for them to fully develop and to have sufficient opportunities to engage in developmental experiences; (2) that they had at least one developmental experience early in their management careers, usually before the age of 30; (3) that they learned that executive behavior is more about relating to and with people than the application of technical skills; (4) that dealing with change, ambiguity and risk are inherent in any leadership situation and; (5) that developmental experiences built the confidence needed to survive even the most daunting challenges. Central the developmental experience model is the concept of challenge. Many of the experiences described by the 14 participants clearly were significant challenges that required new leadership and management behaviors and for some, were critical stretch experiences.

An important purpose of this study was to develop a model of developmental experience in the fire service that could be of value to those who aspire to fire chief. Figure 6 illustrates such a model. It shows that the fire chiefs who participated in this study experienced a career progression through three distinct periods; setting-the-stage, executive development and executive application. The findings of this study indicated that while much learning occurs in the setting-the-stage and executive development periods the most active period of change in leadership and management behaviors did not occur until the executive application period.

Figure 6: Developmental Experience Model



Finally, I want to return to a leadership development model described in the literature review. This model was developed at the Center for Creative Leadership (Van Velsor & McCauley, 2004) and includes three components; assessment, challenge and support. Assessment helps people understand their strengths and weaknesses, current performance, effectiveness and their personal development needs. Challenge moves people away from their personal comfort zones and forces them to develop new skills and perspectives. Support is directly related to the positive and sometimes negative influence of other people; such as superiors, coworkers, family, and colleagues as well as the norms and behaviors of the organization.

The findings of this study demonstrate the importance of all three components of this model, but particularly that of challenge. Through their experiences the participants clearly learned much about themselves and how and what they had to change to be successful. While this is not the same as formal behavioral assessments that are administered as part of formal executive development programs, they nevertheless provided real world awareness of what their capabilities were in situations where it really counted. The component of support was also evidenced by the participants in their recognition of the importance of learning from others through observation, the importance of building and fostering relationships, and the importance of knowing how organizational culture affects all organizational actions.

Many of the stories told by the participants described great challenge, which for some induced significant personal learning and changes in leadership and management behavior. This is the essence of developmental experience. This

occurred most often in the first years as fire chief when interacting in the political environment. From a pragmatic perspective this reinforces the need to build these skill sets before they are actually needed. From a learning agility perspective it helps people learn and change quickly when faced with situations where past skills and experiences are irrelevant. I hope that the insights learned from the experiences of these 14 people help others understand and appreciate the importance of enduring and learning from challenges in their quest to become better fire service leaders and managers.

Personal observations

I began this study from a mostly academic perspective as a novice researcher hoping that the results would in some way help me design better leadership and managerial training programs, a prime focus of my last years in the fire service. I did not anticipate that it would instead lead me back into the fire service as a fire chief myself. Through this process I learned as much about myself as I did of the participants. Their stories were personally inspiring and, to a large extent, influenced me to return to the fire service. I found I have also experienced many of their developmental experiences, as well as the personal learning and change in leadership and management behaviors. However, it was not until I was able to step away from the day-to-day focus of doing the job and view these experiences as a researcher that I understood how powerful they were.

Even though my analysis did not establish the definitive relationships between experience, learning and change in leadership and management behaviors that I had

hoped, nor did it establish direct linkages between learning agility and leadership success, I believe it did provide important direction for future research and application. I am very grateful for the time the participants took to tell their stories. In some cases I observed that in telling their stories they were able to reflect themselves on their experiences and what they meant to them. Overall it was a personally and professional enriching experience, a developmental experience in itself for me.

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APPENDIA A

DEVELOPMENTAL CHALLENGE PROFILE: SCALE NAMES, DESCRIPTORS AND SAMPLE ITEMS

Scale	Descriptors	Sample Items
Job Transitions		
Unfamiliar Responsibilities	The manager must handle responsibilities that are new, very different, or much broader than previous ones	You have to manage something (a function, product technology, or market) with which you are unfamiliar
Proving Yourself	The manager has added pressure to show others that he or she can handle the job	Most of the people reporting to you are more experienced than you
Task-Related Characteristics		
Developing new directions	The manager is responsible for starting something new, making strategic changes, carrying out reorganizations, or responding to rapid changes in the business environment	You have to make major strategic changes in the business-its direction, structure, or operations
Inherited problems	The manager has to fix problems created by the former incumbent or take over problem employees	You inherited at least one key report with serious performance problems
Reduction decisions	Decisions about shutting down operations or staff reductions to be made	You have to lay off a significant number of your people
Problems with employees	Employees lack adequate experience, are incompetent, or are resistant	Your direct reports resist your initiatives
High level of responsibility/high stakes	Clear deadlines, pressure from senior management, high visibility, and responsibility for key decisions make success or failure in this job clearly evident	You are being tested by top management
Managing business	The scope of the job is large, with	You are responsible for numerous

diversity	responsibility for multiple functions, groups, products, customer or markets	different products or technologies or services
Job overload	The sheer size of the job requires a large investment of time and energy	The job requires you to put in long hours (60 or more hours a week)
Handling external pressure	External factors that impact the business (e.g., negotiating with unions or government agencies, working in a foreign culture, or coping with serious community problems) must be dealt with	This job requires dealing with foreign governments that can have a substantial impact on the business
Non-authority relationships/influencing without authority	Getting the job done requires influencing peers, higher management, external parties, or other key people over whom the manager has no direct authority	To achieve your most important goals, you must influence peers at similar levels in other units, functions and divisions
Obstacles		
Adverse business conditions	The business unit or product line faces financial problems or difficult economic conditions	The business or a major product line faces intensely competitive markets
Lack of top management support	Senior management is reluctant to provide direction, support or resources for current work or new project	Resources are tight-your have to scrounge and “beg, borrow and steal” to get the job done
Lack of personal support	The manager is excluded from key networks and gets little support and encouragement from others	It’s difficult to find a supportive person to talk to in this job
Difficult boss	The manager’s opinions or management style differs from those of the boss, or the boss has major shortcomings	Your boss is opposed to something you think is important to do

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APPENDIX B

FIRE CHIEF OF THE YEAR AWARDS

Award Criteria

FIRE CHIEF Magazine's annual Fire Chief of the Year Awards recognize two fire chiefs for excellence: a volunteer fire chief and a career fire chief.

A volunteer fire chief is defined as one who earns his or her principle livelihood by some means other than serving as a fire chief, even if the position of chief carries some compensation. In each category, the status of the fire department as a whole – paid, volunteer or combination – is not considered. Individuals who are eligible for nomination and selection as Fire Chiefs of the Year are limited to active chiefs of departments.

Selection criteria will emphasize leadership, innovation, professional development, integrity, service to the public and contributions to the fire service as a whole. All of a nominee's fire service activities and accomplishments will be considered, but special emphasis will be placed on the period from mid-2000 through early 2004. A nominee's command role at an emergency incident, while relevant, will not be enough to place the individual in contention for the award.

Nomination Process

Each nominating organization is open to suggestions for candidates from its members, but the nomination can only be made by a recognized organization or association. The nominating organization is also responsible for notifying its candidate and ensures that he/she is willing to participate in our final selection process. Previous Fire Chief of the year winners are not eligible.

Nomination Format

- Official nomination form.
- Cover letter on the organization's letterhead, signed by the organization's chairperson, president, executive director, describing why this candidate is being nominated.
- Photo of the nominee.
- Current résumé or CV detailing the candidate's involvement in the fire service.
- Up to six other documents supporting the candidate's nomination, such as award citations, newspaper articles, or letters of recommendation from appropriate elected or appointed officials.

No politicking is permitted. The nomination form and supporting documents comprise the entire documentation for the candidate's nomination. Neither the nominee nor anyone representing him or her is to contact the editorial staff or any member(s) of the editorial Advisory Board once the nomination is made and before the final selection has been made. Any violations of this will subject the nominee to disqualification.

Nominations for the final selection process will be announced in the August issue of FIRE CHIEF Magazine.

The selection process

FIRE CHIEF's editor and editorial advisory board will jointly review nominees and select the winners. FIRE CHIEF reserves the right to omit an award. Winners will be notified on or about July __, 2005. All nominees will be notified by e-mail of the results.

Presentation of awards

The Fire Chief of the Year Award dinner will be held on Friday, August __, 2005 at _____ in Denver. The awards will be presented during a general session at the International Association of Fire Chiefs Fire – Rescue International 2005 in Denver.

APPENDIX C

FIRE CHIEF DEVELOPMENTAL EXPERIENCE INTERVIEW GUIDE

I. Overall Questions

When you think about your career as a manager and leader, certain events or episodes probably stand out in your mind that led to a lasting change in your approach to management and leadership. Please describe three or more "key experiences" in your career that made a difference in the how you manage and lead today.

1. Describe what happened?
2. What did you learn from it (for better or worse)?
3. What leadership or management behaviors or actions do you use now based on this experience?

II. Detailed follow-up questions

1. Describe your first managerial job? What was special about it? About your first boss?
2. Describe your first "quantum leap" (movement or advancement) to a job with significantly more responsibility, challenge and pressure than prior jobs?
3. Describe your first important exposure to high-level executives in the fire service? Have there been other exposures or people that stand out for you?
4. Describe your "organizational first date"-like your first real date, a time when you were all alone or by yourself, and had to take complete responsibility for something you'd never done before?
5. Describe the biggest challenge you ever faced in your career?
6. Describe the most frightening first-something you did for the first time that really had you worried at the time?
7. Describe the event (or events) made you realize you were going to be successful as a manager?
8. Were you ever burned out or fed up, but managed to restart?
9. Describe the person who taught you the most during your career. What did that person do that made him or her so special?
10. Most of us have worked for a person we simply couldn't tolerate for one reason or another. What did you learn from such an experience?
11. Overall, how have you changed, plus and minus, over your career? If you ran into someone who knew you well years ago, what differences would he or she identify now?
12. Describe times when you've been more open to learning than others? More closed?

13. Describe events in your personal life influenced your growth as a manager and leader?
14. What about being a manager has been fun for you? What are some examples of situations or events you particularly enjoyed? What was the most fun?

III. Personal Career Journey Questions

1. Total years of fire service experience (all employers and ranks, volunteer and career)
2. Total years of management experience (Battalion Chief, Assistant Chief, Deputy Chief, Fire Chief, Division Director, Shift Commander, manager in a non-fire service organization)
3. Total number of fire service employers (includes all employers and ranks as a career employee or volunteer)
4. Military experience
5. Higher Education (please check all that apply to describe your education and major course of study where appropriate).

Higher education is defined as courses, classes and educational experiences for which you have received academic credit that are reported on an official transcript of an accredited institution such as a college, university, community college or junior college. It may include certifications, seminars, military experience and similar training only if academic credit was granted by an academic institution and is reported on an official transcript. It does not include Continuing Education Credits (CEUs).

___ 1-2 years of higher education (post-high school) not culminating in a degree (university, college, community college, junior college, technical/vocational school) Part and/or full time.

___ Associate Degree: Major _____

___ 3-4 years of higher education (post-high school) not culminating in a degree (university, college, community college, junior college, technical/vocational school) Part and/or full time.

___ Baccalaureate Degree: Major _____

___ 5 or more years of higher education (post-high school) not culminating in a degree (university, college, community college, junior college, technical/vocational school) Part and/or full time.

___ Graduate study beyond baccalaureate degree (graduate degree not completed: Major _____

___ Masters Degree: Major _____

- ____ Graduate study beyond Masters Degree:
Major _____
____ Doctorate Degree: Major _____
6. Specialized management training or certification programs you have completed (check all that apply)
- ____ National Fire Academy Executive Fire Officer Program
____ Harvard Executive Program
____ Chief Fire Officer Designate
____ Other: _____
____ Other: _____
7. Age _____
8. Size of population of your current jurisdiction. _____

APPENDIX D
PARTICIPANT INTRODUCTION LETTER



Knowledge to Go Places

Addressee

Dear Chief ,

Thank you for agreeing to participate in my doctoral research. The title of my dissertation is *The Role of Developmental Experience in the Career Development of Fire Chiefs in the United States*. You have been chosen as a participant in this study because you have received the Fire Chief of the Year Award and as such have demonstrated a career of progressive leadership in the fire service.

The overall purpose of this study is to examine how developmental experience influences the ability of fire chiefs to develop learning agility and to lead and manage more effectively within a changing environment. The terminal purpose is to construct a model of developmental experience within the fire service culture that can assist incumbent and future fire chiefs use developmental experience more effectively as a career development strategy.

Before scheduling an interview at the 2005 IAFC annual conference in Denver I have to tell you about the requirements I must meet in conducting any research involving human subjects. Federal law and each educational institution regulate all research involving human subjects. There are strict requirements for confidentiality, informed consent and participant knowledge of the research purpose as well as risks and benefits to you as a participant. I have satisfied all CSU requirements in this regard. Professor Leonard Albright, Ph.D., of the CSU School of Education is the Principle Investigator on this study and I am working directly under his supervision.

All of our communication will be strictly confidential. I will not produce any documents, reports or articles that identify you, your current or past employers. However, because of the small number of participants in this study and your prominence in the fire service it is possible that elements of your experience may be recognizable in the study. I will provide you with a copy of the completed study at the completion of the project. I have included an informed consent form that I will need you to review and sign before you participate in any interviews. I will contact you within the next week via telephone or e-mail to schedule an interview time in Denver.

Thank you,

Warren D. Jones
Co-Principle Investigator
wjones@cahs.colostate.edu
970-491-2965

APPENDIX E

PROCEDURES SUMMARY

The research design of this study will be qualitative. Within this design grounded theory will be used as the specific research methodology. Personal interviews and document review will be the two primary means of data collection.

The sample will be fire chiefs who have been selected for the Fire Chief of the Year Award by *Fire Chief Magazine* since the inception of this award in 1996. This award is given each year to one professional and one volunteer fire chief who has demonstrated outstanding leadership and commitment to the fire service. The selected sample will be a minimum of 10 fire chiefs who have received the Fire Chief of the Year award.

The focus of this study will be on fire chiefs who have demonstrated success in the totality of their careers. The literature review did not discover a definition of success in the position of fire chief and this study will not attempt to construct a model of success. For this reason it accepts the Fire Chief Year of Award as a valid indication of fire chief success within the context of available literature and research resources. In addition to nomination for this award three other selection criteria specific to this study will be applied to the recruitment of participants. These criteria are:

1. The participant must have at least 20 years of total fire service experience and at least 10 years of management experience as a chief officer.

2. The participant must be able to participate in a personal interview during the International Association of Fire Chiefs Annual Conference in Denver Colorado, in August 2005 or in another location acceptable to the participant and the researcher within the same time frame as the IAFC Annual Conference. The participant must also be available for telephone follow-up interviews as well as be able to review interview transcripts and provide related feedback.
3. The participant must be willing to participate given the risk/benefit and confidentiality precautions of the study as approved by the CSU Human Subjects approval process.

All of the award recipients who meet the selection criteria of time of service and management experience will be contacted via telephone or e-mail with a request to participate in this study beginning with the award recipients in 2004. If he or she is planning to attend the IAFC Annual Conference or is available for a personal interview and is interested in participating he or she will be sent more detailed information on the study including the consent and confidentiality procedure. Each potential participant will be contacted by telephone or e-mail to confirm their desire to participate and if affirmative an interview time will be scheduled. All participants who agree to an interview will be mailed an information packet including an introductory letter explaining the purpose of the study, a summary of the study procedures, consent form and overall and personal career journey questions interview questions.

Each participant who agrees to participate will be asked to take part in a three cycle data collection and analysis procedure. Each participant will be interviewed in-person once and by telephone twice. The interviews will be audio recorded for later transcription. Each participant will be offered the opportunity to review his or her transcripts. In addition to the interviews documents, such as biographical and career information published as part of the Fire Chief of the Year award process, articles written by the participants and related published documents will be reviewed.

Data analysis will use the constant comparative analysis of open, axial and selective coding. This analysis will be first within and later cross case. This analysis will identify emergent themes from the experiences as related by the participants. Similar analysis will be done with documents and themes that emerge from the document analysis will be compared with the interview analysis to identify similarities and differences.

This study will be conducted under the approval of the CSU Human Subjects protection system. The actual participants will be known only to the researchers although due to the very small number of Fire Chief of the Year recipients and their attendance at the IAFC conference it is not unreasonable to expect that participants may know one another and may discuss their participation among themselves or others. Special attention will be paid in the HRC and the informed consent process to make participants aware that due to their small numbers and their notoriety in the field that their identity may be able observed in the data and final report.

APPENDIX F

PARTICIPANT CONSENT FORM

COLORADO STATE UNIVERSITY INFORMED CONSENT TO PARTICIPATE IN A RESEARCH PROJECT

TITLE OF PROJECT: The Role of Developmental Experience in the Career Development of Fire Chief in the United States

NAME OF PRINCIPLE INVESTIGATOR: Professor Leonard Albright, PhD

NAME OF CO-INVESTIGATOR: Warren D. Jones

CONTACT NAME AND PHONE NUMBER FOR QUESTIONS/PROBLEMS:
Professor Leonard Albright, telephone: 970-491-1172, E-mail:
albright@cahs.colostate.edu

SPONSER OF PROJECT: None

PURPOSE OF RESEARCH: To develop a description of how developmental experiences influences the career development of fire chiefs.

PROCEDURES/METHODS TO BE USED: Your participation in this study is completely voluntary. If you agree to participate your participation will be one personal and two telephone interviews with the Co-Investigator. The personal interview will take approximately one hour and will be at a location and time convenient to you at the 2005 IAFC Conference in Denver, Colorado in August 2005. The second and third interviews will be telephone interviews. All interviews will be tape-recorded and than transcribed. At the conclusion of the study the tapes will than be destroyed. You will be provided an opportunity to review the transcripts of each of your interviews. Your response to interview questions and other information provided in the course of the study will held in the strictest confidence. No information that could identify you individually will be provided to any other organization or current or past employer. You may terminate the interview at any time for any reason. You may also request that your data not be included in the final report.

RISKS INHERENT IN THE PROCEDURES: There are no known risks associated with your participation. Due to the small number of participants in the study and your prominence in the fire service it is possible that elements of your experience may be recognizable in the completed study and published document. You should read and understand the following statement before agreeing to participate in this study.

Page 1 of 2, Subject Initials _____ Date _____

“It is not possible to identify all potential risks in research procedures, but the researcher(s) have taken reasonable safeguards to minimize any known, but unknown, risks.”

BENEFITS: There are no known direct benefits to you for your participation in this study. However, your experiences may help develop a model of how developmental experience influences the career development of fire chiefs in the United States. This research will contribute to the knowledge base on developmental experience, the career development of fire chiefs and executive development programs used in the fire service.

CONFIDENTIALITY: All data collected in this study will be combined to identify emerging themes. Your name or specific identifying information will not be associated with the data analysis process or with any reporting of results. The only people who will know your identity will be the Principle and Co-Investigators. As described above due to the small number of participants and your prominence in the fire service it is possible that elements of your experience may be recognizable in the completed study and published document.

LIABILITY: The Colorado Governmental Immunity Act determines and may limit Colorado State University’s responsibility if an injury happens because of this study. Claims against Colorado State University must be filed within 180 days of injury. Questions about subjects’ rights may be directed to Celia Walker at (970) 491-1563.

PARTICIPATION: Your participation in the study is voluntary. If you decide to participate in the study, you may withdraw your consent and stop participating at anytime without penalty or loss of benefits to which you are otherwise entitled. Your signature acknowledges that you have read the information stated and willingly sign this consent form. Your signature also acknowledges that you have received, and on the date signed, a copy of this statement containing two pages.

Participant name (printed)

Participant signature

Date

Witness to signature

Date

Page 2 of 2, Subject Initials _____ Date _____

APPENDIX G

COVER LETTER FOR FOLLOW-UP INTERVIEW



Date

Dear Chief,

Thank you for participating in my research. I enjoyed our first interview in August and I'm preparing to continue our conversation with a follow-up telephone interview. I'll be contacting you soon to schedule a time and location that will be convenient for you. I apologize for not getting back to you sooner; I let a number of projects hijack my time during the fall semester.

Since we last talked I've made two minor changes in my research protocol. The first is that instead of two follow-up telephone interviews we'll do only one. I've found that the amount of data that I've collected from the first round of interviews combined with one follow-up will be sufficient for my study. The second is the addition of a narrative summary. A narrative summary is essentially the retelling of your experiences as I heard them. Please read this and be prepared to elaborate on or add to it during our next conversation. It is important that I represent and interpret your experiences correctly. I'll update this summary with any new information or insights you describe during our next interview.

This narrative summary also served to help me identify your developmental experiences. These experiences are those that seem to have strongly influenced your present management and leadership style. Hallmarks of developmental experiences are that they must be different from what you've experienced in the past, required you to learn new skills quickly, were especially challenging and may have entailed significant risk and pain. In addition to the developmental experiences you also provided a wealth of other information which I will use in other portions of the study. During our next conversation we'll focus on the developmental experiences I've identified. In addition to any elaboration, additions or changes you want to make I will ask three overall questions. These are, as a result of these specific experiences:

1. How have you changed?
2. How did you change?
3. What leadership and management behaviors do you exhibit now that you didn't before?

I've attached the list of developmental experiences that I would like to explore further during our next conversation. Since we last talked you may have thought of other experiences that fit the developmental experience definition that you didn't mention. Our second interview will be an opportunity to include these also.

You'll notice that I've identified you with a fictitious name in the narrative summary. This is an important part of the confidentiality process. If you see anything in the summary that you are not comfortable with or for any reason would not like to have represented please let me know and I'll alter it so it is less likely to be linked directly to you or eliminate it entirely. You'll have another opportunity to review this narrative summary after I update it from our next interview. This is important because the narrative summaries will be included as appendices in the final study.

Thank you again and I'll be in contact with you soon.

Warren Jones

wjones@cahs.colostate.edu

970-491-1890

APPENDIX H

COVER LETTER FOR SECOND INTERVIEW REVIEW



Knowledge to Go Places

Date

Dear Chief ,

Thank you for participating in my research and our follow-up conversation. Enclosed is a copy of my final case report. You'll see that it's similar to the narrative summary from our first interview although updated with new information from our second interview. Please review this and make any comments, additions or deletions that you feel are necessary. I've included a self-addressed and stamped envelope for your use if you want to make changes. If you don't have any changes you do not have to reply.

I plan to complete this study by the end of the spring semester so I should have a completed report on the entire study by early summer. I'll send you a copy when it's finished and approved.

Thank you again and I hope to see you at IAFC in Dallas.

Warren Jones
wjones@cahs.colostate.edu
970-491-1890

APPENDIX I
WITHIN CASE ANALYSIS EXAMPLE

Jack theme analysis log (3-6-06, 3-7-06, 3-20-06)

Theme	(p) Page notation (+) Depth of discussion	Strength
Early work experience Poor academics Military Supervision Fire department training Fire department management Teen years fire involvement Focus	p. 2 p. 2, p. 3, p. 6 (+) p. 3 p. 2 p. 4 p. 2 p. 2, p. 3	Strong
Observation of leaders Negative Low trust in subordinates Low communications Non-qualified Personal agendas Survival mode Retried in place Unstable	p. 4 p. 4 p. 11, p. 12 p. 12 (+) p. 13 p. 14 p. 6	Strong
First assistant chief/management position Older subordinates Change culture from past Technical skill application Increase in responsibility and scope Start from scratch	p. 5 p. 5 p. 5 p. 5 p. 5	Medium
First fire chief/CEO position Greater responsibility External focus Council interaction Accountability	p. 5 p. 5 (+) p. 5 (+) p. 5	Strong
Mentored By father By other chiefs	p. 18 p. 19	Weak
National/regional involvement		
Relationship with city manager Direct report to CM Loyalty conflict with CM/Council Negative communications	p. 6 p. 6 p. 8 (+)	Medium

Politics Work with city council Internal council conflict Loyalty conflict between CM/Council Capital program conflict Understand vested interests Negative media attention Recognize impact of politics Negative political communications Bureaucratic inertia Appreciate how others see organization	p. 5 p. 6 p. 6 p. 6 (+) p. 10, p. 11. p. 12 p. 12 p. 10 p. 11 (+) p. 11 p. 13	Strong
Accomplishment Organization Others	p. 1, p. 16 p. 1, p. 14, p. 17, p. 13 (+)	Strong
Relationships Positive Father Friend Subordinates City manager Fire service leaders Negative Superiors Fire service leaders City manager Coworkers	p. 8 p. 19 p. 19 p. 19, p. 13 p. 4, p. 19 p. 19 p. 19 p. 12 (+), p. 19	Strong
Change and learning Evaluate cost/benefit of change Empathy for circumstances of others Personal focus Application Tolerance for change Safety orientation Recognition of external influences	p. 10 (+) p. 16 (+), p. 20 p. 2 p. 13 p. 20 p. 20 p. 21	Strong
Hardship Consolidation failure Job change Personal attacks Cancer LODD	p. 10 (+) p. 10 p. 11 p. 15 (+) p. 17 (+)	Strong
Personal initiative		
Organized labor Conflict Inherited problems	p. 9 p. 9	Moderate

Change orientation of relationship	p. 9 (+)	
New programs		Strong
Successful		
New Ops SOPs	p. 5	
ISO reduction	p. 13	
New fire station	p. 6	
Unsuccessful		
External consolidation	p. 10 (+)	
Internal consolidation	p. 11 (+)	
Optimism		Weak
Union relationship	p. 9	
Consolidation	p. 12	
Can do based on past experience	p. 13	

APPENDIX J

PERSONAL LEARNING AND CHANGES IN LEADERSHIP AND
MANAGEMENT BEHAVIORS WORK SHEETS

Personal learning by developmental experience theme

	First Chief	Early Experience	Politics	Hardship	Observation	First Assistant Chief	Working without authority
Positive observations of behavior: foresight, dedication, commitment, wisdom, courage, perseverance, professionalism					X		
Negative observations of behavior: low trust, poor communications skills, meanness					X		
Acquisition of technical skills		X					X
Acquisition of administrative skills	X					X	X
Communication skills	X					X	
Presentation skills	X					X	X
Responsibility	X	X					
Accountability	X						
Contributions of others		X					
Importance and impact of culture	X					X	
Expectation management	X						
Personal focus		X					
Conflict resolution						X	
Process orientation	X					X	
Appreciation of family				X			
Collaboration	X						
Negotiation	X						
Political skills	X		X			X	X
Independence							X
Value of hard work		X					
Focus on big picture	X						
Persistence				X			
Confidence		X					X
Impact on people	X			X		X	
Visibility	X					X	
Uncertainty				X			
Working without superior support	X						

Coping with disappointment				X			
Loyalty			X				

Leadership and management behavior changes by theme

	First Chief	Hardship	First assistant chief/ manager	Early experience
More patient	X	X		
More flexible	X			
Better listening	X	X		X
More responsibility for self in relationships	X			
Less anger	X			
Bigger view	X			
Focus on process	X		X	
Redefining issues	X			
Evaluating gain/loss	X			
Documentation	X			
External stakeholders	X			
Building consensus	X		X	
Collaboration	X		X	
Negotiation	X		X	
Education	X			
Respect and needs of others	X	X	X	
Reflection	X	X		
Persistence/perseverance		X		
Build relationships	X	X		X
Adapt to environment		X		
Deal with disappointment		X		
Incorporate cultural awareness	X	X	X	

Tolerance for uncertainty		X		
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