

An Historical Case Study of Organizational Resiliency within the
Arellano-Felix Drug Trafficking Organization

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Ed.D. 2008 The George Washington University

A Dissertation Submitted to

The Faculty of
The Graduate School of Education and Human Development
of The George Washington University
in partial fulfillment of the requirements
for the degree of doctor of education

May 18, 2008

Dissertation directed by

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Dedication

The author wishes to dedicate this study to the hardworking professionals of the domestic and international law enforcement community who, each and every day, battle to protect our communities against those who seek to harm them.

Acknowledgments

Thank you to my family, friends and faith for your continued support. Without your love and attention, all of this would not have been possible. The long nights and time away from home were needed to accomplish this project, and I'm forever thankful for your encouragement to stay the course to completion; and to my dissertation committee, Dr. Schwandt, Dr. Marquardt, Dr. Capune, Dr. Hagy, and Dr. Orton. Your patient guidance was exactly what I needed to cross this finish line; to my dear classmate, Susan, who provided guidance and tutorship throughout the entire process. You took countless hours away from your family to be a mentor and tutor, and for that I am forever grateful; to Christy McCampbell who gave me the idea to write a dissertation that could make a positive impact in helping law enforcement better attack criminal organizations. To the George Washington University Executive Leadership Program staff for your constant professionalism and attention, with extra special thanks to Sue Simmons, Nancy McGuire, and Nancy Gilmore. To Beth Hatch who fully edited this dissertation for publication within days of my departure for military service in Iraq. To the 10 highly respected professionals who graciously gave their time and talents in the interview phase of this study. Your contributions were the foundation for this study and without your knowledge, this study would not have been complete. Also, I very much appreciate the assistance provided to me by Captain Richard Jones, U.S. Navy, who worked with me in finding a suitable date to temporarily depart military mobilization for 72 hours so that I could travel to Washington D.C. to defend this dissertation. Without his assistance, the dissertation defense would not have been possible as my departure for overseas was

quickly approaching. To those whom I served with for six years in the White House who provided support and energy for this project. And lastly, to all my brothers and sisters in the law enforcement profession who each and every day fight against a criminal element in our world that has become more ruthless more violent, and dangerous. You stand that thin blue line that separates society from anarchy. Continue to carry the torch when a comrade falls and know that your work on earth is yet the beginning of your calling in the fight against evil. Never ever give up! Our freedom and way of life depend on your lasting courage to fight the good fight. Therefore, it is an honor to dedicate my dissertation to those brave men and women who have sacrificed their lives and walked their last beat on earth, watching over us to keep up the fight; God Bless and Godspeed.

Abstract of Dissertation

An Historical Case Study of Organizational Resiliency within the Arellano-Felix Drug Trafficking Organization

This study of organizational resiliency within the Arellano-Felix Drug Trafficking Organization (AF-DTO) was conducted through the use of a case study design. The study explores resiliency within the AF-DTO. Very little prior research on organizational resiliency has been written, and no such research on organizational resiliency within a high-level, international, criminal drug trafficking organization had ever been conducted. The lack of such studies represents a void in a critical area of understanding needed to assist authorities in ongoing efforts to dismantle these types of high-level criminal organizations. Furthermore, this study expands the scope of research designs applicable to organizational resiliency by identifying not just the process of resiliency, but also the core resiliency characteristics created by the organization through both evolutionary and revolutionary change. The data analysis strategy and techniques were used to analyze data from both archival documents and interviews, to understand the process and characteristics of resiliency.

Significant contributions to theory and research have made through this study. The researcher used the primary theory base of organizational resiliency/learning mindfulness (Weick et al., 1999; Weick & Sutcliffe, 2001). The study's findings demonstrate that organizational resiliency is applicable to the studied organization, which created and possessed 14 resiliency characteristics and 2 environmental factors assisting

the AF-DTO resiliency. These factors are: reputation, corruption, business acumen, situational awareness, recruitment, adaptability, monopoly goal orientation, trust, compartmentalization, optimism, international reach, technology, loyalty, self-reliance, diminished societal rule of law (environmental factor), and a vast consumer base (environmental factor).

The process of organizational resiliency within the AF-DTO is cycled through a number of constructs leading to mindfulness, sensemaking and adaptability. In the adaptability construct, the AF-DTO creates resiliency characteristics or uses existing resiliency characteristics in order to achieve its goal of sustainability, which is the essence of AF-DTO organizational resiliency. The AF-DTO operates within a supportive environment and cycles itself through the proposed resiliency framework during times of significant stress to maintain its operability and elasticity to the internal and external dismantling pressures.

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CHAPTER 1: INTRODUCTION

Resilience is an old and much honored quality recognized throughout human history. Organizations are still essentially human enterprises and as such, the concept of resilience seems to be an appropriate standpoint from which to view the complexities of organizational change. (Horne and Orr, 1998, p. 39)

Overview

One of the most violent and powerful drug trafficking organizations continues to operate in the United States through its Mexican-based leadership. This organization, the Arellano-Felix Drug Trafficking Organization (AF-DTO), controls the majority of the marijuana and portions of the cocaine, heroin, and methamphetamine. It distributes these products into the United States from Mexico. Despite the efforts of both the Mexican and U.S. governments, the AF-DTO continues to operate successfully. No research or study has ever been conducted to help explain this phenomenon. Without knowing the key factors that facilitate the AF-DTO's resilience, authorities with limited knowledge on these facts are precluded from dismantling them.

The U.S. and Mexican governments have long had a unique relationship. These two countries, which share a border, also share a common problem: that of illegal narcotics. While one supplies large quantities, the other consumes what the other provides. The United States consumes more illegal narcotics than any other country. The largest supplier of illegal drugs into the United States comes across the Mexican border (U.S. Department of State, 2004c). The supply and demand of narcotics between these countries have created an underground criminal world of drug lords who torture and kill anyone who gets in the way of their trafficking (United Nations, 2003). It is up to law enforcement to bring these criminals to justice and dismantle their organizations.

However, little is truly known about Mexican drug trafficking organizations, creating a challenging problem to address (Heyman & Campbell, 2004).

The essence of this research is to identify organizational resiliency¹ characteristics through a detailed study of one organization's success at being resilient to extreme internal and external factors attempting to dismantle its core structure. Understanding the essence of organizational resiliency is the first step in looking at this phenomenon. Organizational resiliency is the ability of a system to reduce the chances of shock, to absorb a shock, if it occurs, and to recover quickly after a shock (Bruneau, Change, Eguchi, Lee, O'Rourke, Reinhorn, Shinozuka, Tierney, Wallace, & Von Winterfelt, 2002). It's the ability of a system to resist the stresses of environmental loading based on the combination of the system pieces; their structural interlinkages; and the way in which environments change, are transmitted, and spread throughout the whole organization (Horne, 1997).

Drug trafficking organizations (DTOs) are often described as snakes that grow another head soon after its dismemberment. What is it that allows these organizations to sustain in a world where not only law enforcement is attempting to capture or kill its leaders, but these organizations battle against each other and competing DTOs from outside their regions? How are these DTOs so resilient? The purpose of the study is to examine this phenomenon in the context of the AF-DTO; to determine what resilient factors allow an organization to continue its existence while withstanding pressures to collapse. These findings may also assist government efforts in dismantling other criminal organizations such as terrorist groups, street and prison gangs, which appear equally

¹ In this study, the terms *resilience* and *resiliency* will be used interchangeably.

resilient (Kleiman et al., 2002). Private industries, nonprofit organizations, and volunteer groups will also benefit from this newly acquired knowledge by replicating the discovered resilient factors used in the survival of this study's DTO.

The AF-DTO continues to operate despite instant and massive loss of personnel, equipment, and intelligence personnel. It is able to reorganize, rebuild, and continue forward with its usual responsibilities and operations. What makes the AF-DTO different from organizations that attempt to survive, but flounder and dismantle? Organizational science research shows a growing number of organizations facing a higher number of unforgiving events that could doom them (D'Aveni, 1994). "Even organizations that have enjoyed stable environments in the past are now facing uncertain technological, economic, political, and cultural changes" (Hinrichs, 2002, p. 3). Therefore, developing a tool to glean out elements of DTO robustness will facilitate the development of knowledge on resilient organizations. Demonstrated by Bigley and Roberts (2001), reliability is becoming a highly sought-after organizational quality.

Sutcliffe and Vogus (2007) believe that researchers should pay more attention to resilience because current theory fails to fully take into account the totality of what a resilient organization means. "A resilience perspective would also promote a new way of seeing by arguing that organizations are more efficacious than some deterministic perspectives in organization theory allow" (Sutcliffe & Vogus, 2007, p. 3418). The resilience perspective is significant in order to accurately theorize organizational adaptation in environments that are consistently hostile. Resilience is a vital component

of survival because it provides the ability “to cope with unanticipated dangers after they become manifest” (Wildavsky, 1988, p. 147).

The business behind the illegal drug trade is ruthless. The illegal drug traders have built empires similar to those of the earlier 20th Century U.S.-based mafia families. DTOs have the ability to transform themselves overnight into revolutionaries to survive. When catastrophe strikes, DTOs demonstrate punctuated equilibrium and understand immediately that they must change when subjected to pressure of exposure, or they will die.

Statement of the Problem

How does resiliency take shape and translate into action? According to Diana Coutu (2002), resilient people possess three characteristics: “a deep belief, often buttressed by strongly held values that life is meaningful, and an uncanny ability to improvise” (p. 48). Bouncing back from hardship is possible with just one or two of these categories, according to Coutu, but to be *truly* resilient, all three are needed. Furthermore, she adds, “These characteristics hold true for resilient organizations” (p. 48). If this is true for organizations, as the author states, then a study about what factors lead to the three characteristics could specifically separate and examine each one of the characteristics to further this hypothesis. A major challenge rests with how one defines “organizational resiliency” because it has been defined with a variety of terms from researchers around the globe. The expressed meaning often depends upon how the writer defines his or her view of resiliency. For example, some researchers define resiliency as “organizational hardiness” (Comfort, 2001), while others refer to it as “organizational

sustainability” (McCann, 2004) or “high organizational reliability” (Weick, 1999). Prior to beginning the research, an acceptance of these differences in definition is necessary: while the phenomenon is the same, the descriptions are slightly different.

Critical research is necessary to define the elements that would help authorities in dismantling the DTO and decrease drug-related crimes perpetrated throughout Mexico, United States and beyond. Illegal narcotics entering this county have claimed the lives of innocent victims and supported drug-related terror by the AF-DTO, including kidnapping, torture and killings. The AF-DTO will continue its rampage unless efforts are placed on identifying the core resiliency factors and aiming our efforts at those indicators to bring about the DTO’s failure in catastrophic proportions, like deadly blows, one after another on a consistent basis, never allowing it to rise again. However, according to Weick and Sutcliffe (2001), organizations prepare themselves for failure, much like nuclear aircraft carriers, and this preparation alone is the main ingredient to the organization’s resilience—they are always preparing for the worst, and therefore, attempts at dismantling such an organization have remained a monumental task.

In 2004, the federal government spent nearly \$19 billion on the drug war (ONDCP, 2004). A large portion of this money funded various enforcement initiatives. Collectively, federal government agencies worked together to establish a priority list of targets, known as the Consolidated Priority Organization Target (CPOT) list. The AF-DTO remains near the top of this list (White House, 2004). Surprisingly, despite the serious effort that the U.S. government has made to dismantle the AF-DTO, the

organization continues trafficking illegal narcotics into and throughout this country. It is an organization that for decades simply refuses to die.

Purpose of the Study and Research Questions

The purpose of this study is to explore the nature of organizational resilience. Through this study, I will identify the essence of this phenomenon to better understand what it takes for a DTO to remain resilient. This will be accomplished through a retrospective case study of the AFT-DTO dismantling efforts from 1990 through 2007. The research questions focus on discovering the essence and meaning of resilience within an organization that has experienced, or is currently undergoing, various forms of pressures that could implode or dismantle the organization.

This journey explores first a general question about organizational resilience and then a specific question about resilience within the studied DTO.

General Question:

- What role does organizational resilience play in the prevention of organizational failure within highly volatile organizations?

DTO Question:

- What is the experience of resilience from the perspective of law enforcement and justice personnel who were assigned to dismantle the DTO?

In short, this study searched for the dynamic elements of organizational resiliency that allow the AF-DTO to survive setbacks and continue operations.

Significance of the Study

Very little research delves into organizational research of resiliency. Quarantellie (1997) states, “Almost nothing has been written about the social historical emergence and development of social and behavioral research on disasters” (p. 285). However, hardiness is often referred to in other writings on organizational resilient ability. Comfort (2001) states that no attention has been given to the measurement of an inter-organizational system’s capacity to function under severe threat. There is no measure of the “...organizational fragility curves for organizations performing under stress” (p. 116).

Weick and Sutcliffe (2001) believe that certain organizations survive in turbulent environments because they are always on guard, always aware of their vulnerable surroundings, and these organizations institute protective measures to ensure their existence. In 1993, Weick asked the question, “Why do organizations unravel? And how can organizations be made more resilient?” (p. 628) Being resilient appears to be no simpler than preparing for potential setbacks. If this is true, then what exactly do these organizations focus on, particularly a DTO, which is up against incredible odds for failure based on the significant international law enforcement effort against them?

Throughout time, some organizations have thrived while others have failed. Rummler and Branch (1990) conducted a study showing that, within 18 months of a published report detailing a list of exceptional companies, one third of them dropped off the list. Grove (1997) states, “In order to survive, grow, and prosper in the global marketplace, key corporate leaders must develop aptitude for change and must develop and foster organizational resilience” (p. 1). However, this study is not examining a typical neighborhood business. A DTO is a very different type of business. The question arises

as to how to study the DTO. One approach is to compare other types of legal organizations that operate in highly volatile or dangerous environments, like an aircraft carrier or a nuclear power plant rather than an accounting firm. However a DTO is neither a military component nor a fixed plant, and without any other previous studies looking at resilience within a highly sophisticated criminal organization, such a comparative study is not possible. Several studies attempted to measure organizational resilience (O'Neil, 1999). However, none of these studies have taken into consideration a high-level DTO targeted by two governments and this explains why a qualitative study examining the core essence of organizational resilience (within the context of a DTO) is both necessary and vital for the security of communities worldwide.

Recently, DTOs have been compared to terrorist organizations (Hutchinson, 2002). If similarities between DTOs and recognized terrorist organizations are found, the study's data would serve to more realistically prepare authorities to identify those resilient factors within a DTO that were successfully destroyed by authorities and replicate this success by using similar tactics against a terrorist organization.

Hoffman (2004) wrote an article citing the resiliency strengths that businesses can learn from al-Qaeda in order to replicate similar resiliency strengths. Asa Hutchinson (U.S. Department of State, 2004) formerly the DEA Administrator, testified before Congress, stating, "I appear before you today to testify on the nexus between international drug trafficking and terrorism ... the degree to which terrorist organizations utilize drug profits to finance their horrific activities is of paramount concern." In his

final comments, he added, “the new breed of narco-terrorist will challenge the resilience of all law enforcement agencies” (p. 1).

Resiliency is an abstract term and can be described in the context of individuals, organizations, or the environment (Wolin et al., 1999). In the vein of organizations, the 9/11 terrorist acts against the United States demonstrated first hand our country’s vulnerability to attack and our resolve to rebuild and be resilient. Terrorist threats continue leaving us wondering what is over the horizon for America. This reality leaves us contemplating about the safety, security, resilience, robustness, and reliability of our institutions and democracy. We, as citizens, depend on public safety organizations to respond to such catastrophes, giving little thought to the unthinkable—what if safety organizations are unable to fully protect the U.S. homeland? In contrast, a more silent war has been going on for generations. Law enforcement officers have been fighting to dismantle high-level DTOs responsible for large-scale drug production, trafficking, and the violence associated with these activities that have claimed countless lives.

Resiliency appears to be a strong indicator of success with individuals (Dougall et al., 2000; Zapf et al., 1996). Why should organizations be any different? When life-changing experiences are borne out of disastrous events, then beliefs, feelings, and actions may be triggered to make an organization resilient. Leaders in law enforcement have articulated what appear to be resilient factors of DTOs. This study will describe the feelings, thoughts, experiences, and observations of the efforts that took place in an attempt to dismantle a DTO. Hence, one significant focus of this study is to test the

proposed research methodology and refine qualitative research skills. Based on the preliminary findings, additional research will be explored.

The importance of this study will be profound. Organizational resilience is one of the most understudied areas in organizational research. Freeman (2002) agrees, “Little, if any research has been conducted related to organizational resilience” (p. 2). His resilience research falls largely in the category of youths and their ability to overcome adversity (i.e., youth overcoming substance abuse or victimization issues). Sutcliffe and Vogus (2003) stated that a “sparse state of existing work, particularly at the organizational level,” exists on organizational resilience (p. 18). Quarantellie (1997) found, “Almost nothing has been written about the social historical emergence and development of social and behavioral research on disasters” (p. 285). Since so little research has been conducted on this exact subject matter, it is understandable that even less research addresses resilience from the DTO perspective. The significance of such a study is clear. Of the existing research on resilience, only a fraction examines organizational resilience and DTOs.

Throughout history, we have witnessed the courage and perseverance of people who overcome adversity, such as Martin Luther King Jr., Abraham Lincoln, and the American founding fathers. Even in more recent years, people continue to look at resilient citizens for inspiration. During a press conference a few days after 9/11, then New York mayor Rudy Giuliani revealed that he went home shortly after the attacks and read various articles on Churchill and the Battle of Britain.

Resiliency was observed when the New York firefighters worked day in and day out to the point of exhaustion. In addition to demonstrating resiliency during the attacks (Kendra & Wachtendorf, 2002), the New York Fire Department continued to endure after the attacks, largely by rebuilding its leadership and equipment: Within a few days, 161 firefighters had been promoted. Before the 1-year anniversary, all of the equipment and trucks had been replaced, over 1,200 new firefighters had been hired, and an additional 600 promotions had been given (Bearden, 2002).

“In order for an organization to survive, it must have the capability to adapt. When the environment is turbulent and complex, adaptation becomes more difficult but more important” (Tenkasi, 2002, p. 3). Researchers at the Arizona State University, Center for Environmental Studies, examined organizational resiliency concepts and accept as true that resiliency theory “seeks to understand the source and role of change in adaptive systems—particularly the kinds of change that are transforming” (ASU Joins, 2002, p. 1).

Motivation for this subject evolved from my personal experience as a police officer and spending 6 years with the White House Drug Czar’s Office (Office of National Drug Control Policy) targeting the highest levels of our world’s DTOs. Like the 9/11 terrorists, the AF-DTO attempted to break the American spirit through corruption, humiliation, torture, and killings. Our nation, operating much like an organization under the leader of our President, pushed forward and defeated the Taliban and sought out justice against those who attacked us—we did not give up, but rather faced our enemy. Assuming that our nation’s security agencies operate together as an organization, we can

defend the notion that we are resilient. Our resilience was profoundly witnessed during the continuing operation of the Pentagon 1 day after the 9/11 attacks. This same resilience can be seen within the darkest segment of the criminal world of high-level DTOs. Sutcliffe and Vogus contend that it is critical to determine what exact attributes and resources give rise to resilience (Sutcliffe & Vogus, 2003). This study dares to identify these attributes and characteristics.

Today's illegal drug markets are controlled by highly developed organizations with a documented history of having the ability to thrive in a world of uncertainty. The U.S. government also has a well-documented trail of targeting international drug traffickers and bringing them to justice. However, despite a full-fledged war against various DTOs, the United States has not been able to fully dismantle some of the key international drug rings.

According to the U.S. Department of Justice's Drug Enforcement Administration, the AF-DTO is one of the most violent and powerful DTOs in Mexico. At its prime, this cartel was responsible for the distribution and movement of massive multi-ton shipments of marijuana, cocaine, heroin, and methamphetamine into the United States (DEA, 2003). Despite numerous successful joint U.S. and Mexican law enforcement actions taken against the AF-DTO, the organization remains intact and fully in control of its operations. How is it that an organization, often on the run from law enforcement, can not only exist, but also thrive in its world of drug trafficking? How can one entity remain in power despite the coordinated efforts of two governments (one being the world's only superpower) and the full resources they bear on the problem? These are key questions

that need answers in order to make a dent and further turn the tide in the war against DTOs. We must understand how this organization can remain so resilient so that we can focus our efforts to remove the resiliency characteristics. Additionally, legitimate organizations (both public and private) seeking resiliency may benefit from this study's findings by focusing their efforts on a number of the resiliency characteristics for development, organizational learning and sustainability.

Conceptual Framework

The conceptual frame for this study is partially based on Weick et al.'s (1999) study on mindfulness. The three authors proposed a mindful infrastructure for high reliability (Figure 1).

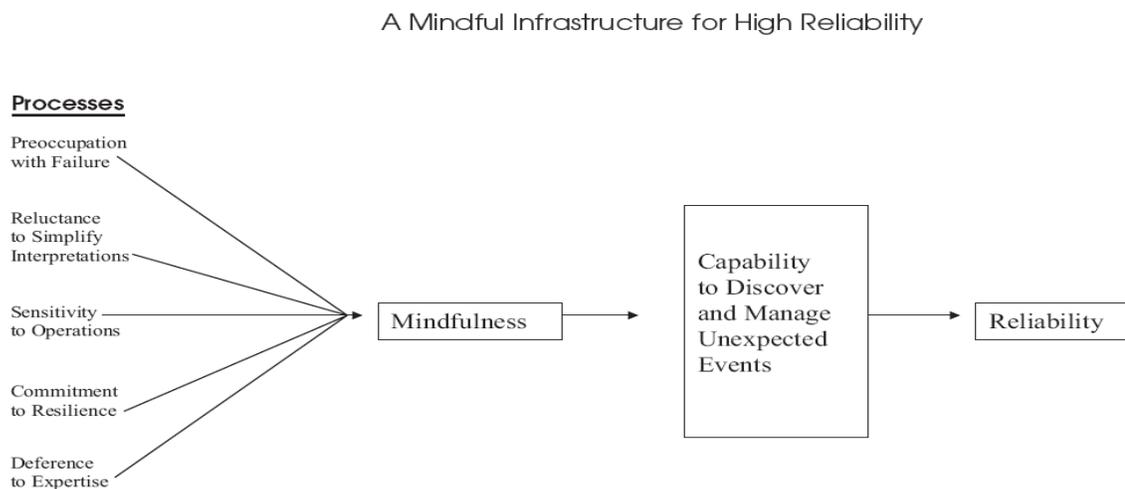


Figure 1. Mindful Infrastructure for High Reliability

Note. From *Organizing for high reliability: Processes of collective mindfulness. Research in Organizational Behavior* (p. 89) by Weick, K. E., Sutcliffe, K.M., & Obstfeld, D. (1999).

Weick et al. demonstrate that the listed processes produce reliability. One observation is that the words “resilience” (as listed in his Processes Category as “Input”) and “reliability” (used as “Output”) listed to the right of his diagram, are interchangeable. The contention is that commitment to reliability is a process, while resiliency is the result of maintaining this process. An equally important notion is that “reliability” is an actionable, workable, attainable goal achieved in many processes of an organization’s routines, while resiliency is the end state (i.e., output) of what one would hope to have built after meeting the expectations of the above-listed processes.

Weick’s (1993) study of the Mann Gulch disaster (in which 13 firefighters died) applies the idea of mindfulness—or, in this case, lack thereof—to a specific organization. Although the term “organization,” in the context of organizational resilience, is sometimes thought to include only companies, any group of people working together can constitute an organization. In Weick’s study, the organization being studied was the crew of the smokejumpers at Mann Gulch. Weick’s discussion of the Mann Gulch tragedy focused on the collapse of sensemaking, as well as what it takes to become a “resilient organization.” According to Weick, there are four sources of resiliency: (1) improvisation and bricolage (demonstrated in the Mann Gulch tragedy when the smokejumpers created an escape fire [setting a fire to burn up ground brush/fuel so that the firefighters can then proceed through this newly burned area prior to the approaching fire reaching them] to use); (2) virtual role systems (i.e., a social construction of reality, demonstrated in the Mann Gulch tragedy when the smokejumpers broke down rank barriers and made smart

decisions); (3) having an mind-set of wisdom (i.e., learning from all experiences; and (4) respectful interaction (i.e., being able to influence each other). Although the Mann Gulch smokejumpers had two of the four sources of resiliency, the smokejumpers as a group ultimately failed to be resilient. The Mann Gulch disaster was “a case in which people were unable to negotiate strangeness. Frameworks and meanings destroyed rather than constructed one another” (p. 645). Weick saw a lost opportunity for resilience, which turned into a “deviation-amplifying feedback loop”—that is, a downward spiral of failures based on repeated failures. “The colossal fire blowup in the Mann Gulch was shaped by mishaps that fitted together tighter and tighter until all became one and the same—a fateful blowup” (p. 648). Lessons are learned from this kind of tragedy and have helped form a plan for creating resilience within organizations. Weick (1979) postulates that organizations attempt to transform various forms of data into information that is understood for self-maintenance.

Weick’s work on sensemaking (1988) strongly reflects sensitivity toward the knowledge-building process. Weick’s sensemaking translates into how individuals actively attempt to understand the world around us. Sensemaking develops a set of practices that aid in the understanding of acquired information. It references methods for building the context in which to place information so that the information is useable. In essence, Weick’s theory explains how to understand the process of organizing people from within an organization and how those individuals manage the data rather than rely on the structure of the organization itself.

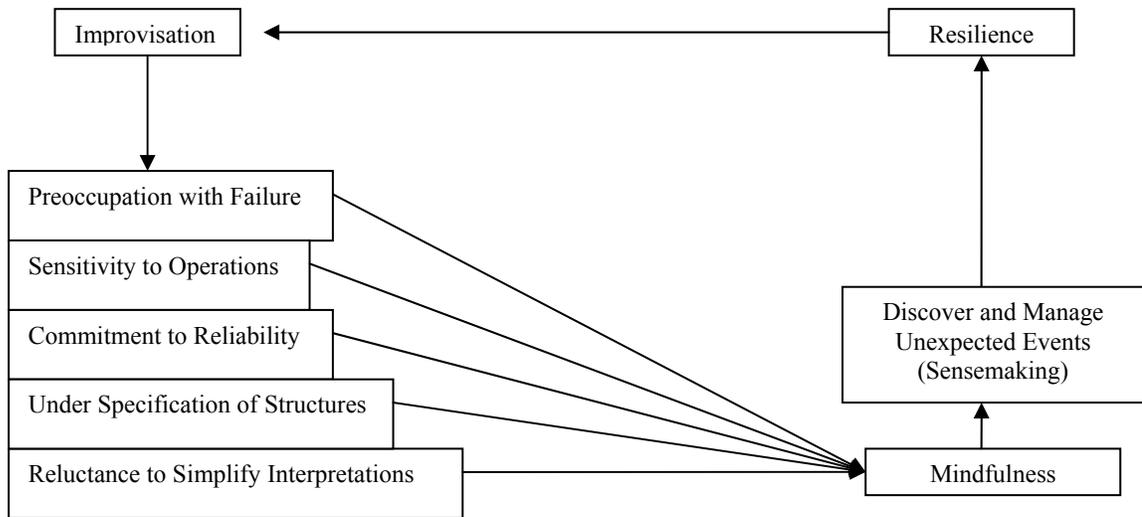


Figure 2. Conceptual Frame for This Study

Resiliency is defined by Webster (2003) as the ability to recover quickly from illness, change, or misfortune. Resiliency is the critical buoyancy factor. Also, resiliency is the property that enables materials to resume their original shape or position after being bent, stretched, or compressed. It is elasticity. Resiliency, within the context of this conceptual framework, occurs when an organization has this elasticity, enabling the organization to resume its original operations after being challenged to a point that significantly and immediately alters or attempts to alter the organization's effectiveness.

The above conceptual frame (antecedent versus outcome), Figure 2, begins with improvisation, the phase at which the organization recognizes its need to deal with immediate action or face certain destruction. Improvisation, as described by Rerup (2001), leads to resilience. According to his framework, improvisation awakens the organization to focus on five key variables: (1) preoccupation with failure; (2) sensitivity to operations; (3) commitment to reliability; (4) under specifications of structures; and (5)

reluctance to simplify interpretations. According to Rerup's five key variables, an organizational mindfulness is created and leads to discovering and managing unexpected events. (Rerup also discusses sensemaking, which is defined by Weick, 1993, as making order and retrospective sense of what occurs. Rerup directly connects sensemaking to resilience within the context of an organization.) In turn, through the aforementioned process, organizational mindfulness evolves into resiliency. Weick (USDA, 2004) states, "Mindfulness is the passkey into high reliability organizing" (p. 14). Weick interchanges the word resilience with reliability (2004); hence, this study's framework uses Weick's "mindfulness" as it relates to reliability/resilience through the medium of sensemaking.

In Figure 2, the arrows are the processes that occur to reach the outcome of organizational resiliency. The arrows are the roadmap to the resiliency objective. One fascinating component of this process is found with the context of improvisation. According to Rerup, improvisation is difficult to maintain because it constantly requires attention.

According to Weick (2004), the resilient organization will maintain a commitment to resilience—it will seek out what may go wrong and prepare plans and contingencies to work out catastrophic events. This is the reason for the last arrow, which leads from "resiliency" back to "improvisation." It reflects the idea, as detailed by Weick, that resiliency is not an end-state, but rather a continuing process, an evolution constantly repeating itself for those organizations that find themselves on that thin edge of chaos and harmony.

Following are the definitions of key terms:

- 1) *Agenci Federal de Invesigaciones* (AFI): A Mexican federal law enforcement agency.
- 2) Benchmarking: Creating a comparative goal in relation to past performance (ONDCP, 2004d).
- 3) Consolidated Priority Organization Target (CPOT) list: A U.S. Department of Justice list of the command and control elements of major international DTOs and/or money laundering enterprises that significantly impact the U.S. drug supply (ONDCP, 2004d).
- 4) Counter-drug Intelligence: The collection, analysis, and dissemination of information for officials who design and implement drug enforcement policies and programs (Drug Enforcement Administration, 2003).
- 5) Crisis: An incident that upsets normal conditions, creating a disturbance that cannot be brought back to normal using existing or specialized emergency functions (Lagadec, 1993).
- 6) Dismantled: When law enforcement actions destroy a targeted organization's leadership, financial base, and supply network to the extent that the organization is incapable of operating and/or reconstituting itself to manufacture, cultivate, import, transport, distribute, or divert controlled substances or precursor chemicals, or engage in money laundering operations.

- 7) Disrupted: When law enforcement actions impede the normal and effective operation of a targeted organization as indicated by changes in organizational leadership and/or regular methods of operation related to financing, transportation, communication, organizational structure, drug production, or security procedures (ONDCP, 2004d).
- 8) Drug intelligence: The collection, analysis, and dissemination of information that narcotic traffickers use to conduct their illicit activities and elude law enforcers (Kenney, 2003).
- 9) Drug trafficking organization (DTO): An organization consisting of five or more persons that (1) has a clearly defined hierarchy or chain-of-command and (2) has as its principle activity to generate income or acquire assets through a continuing series of illegal drug production, manufacturing, importation, or distribution activities (ONDCP, 2004d).
- 10) Effective: Producing an intended or expected outcome or output according to some quantitative or qualitative standard (ONDCP, 2004d).
- 11) Efficient: Exhibiting a high output-to-input ratio, a reduction in response time, or a reduction in the costs associated with a process (ONDCP, 2004d).
- 12) Gang: A group or association of five or more persons with a common identifying sign, symbol, or name, the members of which, individually or collectively, engage in criminal activity that creates an atmosphere of fear and intimidation. A gang may also be a DTO providing that it meets the requirements set forth in the DTO definition. A gang differs from a DTO in that while the principle criminal

activities of a DTO are directly related to drug trafficking, the criminal activities of a gang are more diverse (ONDCP, 2004d).

13) Heroism: Extreme self-sacrificing courage especially in fulfilling a high purpose or attaining a noble end (Webster's, 2003).

14) High-intensity drug trafficking area (HIDTA): A region of the country, designated by the White House, to receive federal funds in order to coordinate local, state, and law enforcement resources to dismantle DTOs operating within their designated region.

15) HIDTA targeted: Those DTOs and conditions identified in a HIDTA's strategy that the HIDTA executive board views as critical to the HIDTA's mission (ONDCP, 2004d).

16) Initiative needs: A capability or activity that contributes to disrupting or dismantling a DTO by improving the effectiveness and efficiency of the HIDTA (ONDCP, 2004d).

17) Improvisation: An adaptive activity that involves reworking pre-composed material and designs in relation to unanticipated ideas conceived, shaped, and transformed under the special conditions of performance, thereby adding unique features of every creation (Berliner, 1994).

18) Intelligence: The collection, analysis, and dissemination of information (Kenney, 2003).

19) Intelligence assessment: A written report that provides comprehensive factual or tactical knowledge of a topic (ONDCP, 2004d).

- 20) Intelligence-driven task force: A HIDTA law enforcement initiative that develops and selects its enforcement targets based upon information derived from an agency's and/or the HIDTA's intelligence component (ONDCP, 2004d).
- 21) International DTO: An organization that regularly conducts illegal drug trafficking or money laundering activities in more than one country or that is based in one country and conducts or coordinates illegal activities in another (ONDCP, 2004d).
- 22) Local DTO: An organization whose illegal drug trafficking or money laundering activities are generally, but not always, limited to the same metropolitan area or, for nonmetropolitan areas, are limited to an easily defined region or small number of geographically proximate counties. If a DTO's activities regularly take place within a single metropolitan area, it is to be considered a local DTO even if that metropolitan area includes parts of or more than one state (ONDCP, 2004d).
- 23) Money laundering organization: A hierarchy of individuals engaged in processing illegal drug profits through a continuing series of illegal activities so as to make those illegal profits appear to be legitimate income (ONDCP, 2004d).
- 24) Multi-state DTO: An organization that regularly carries out illegal drug trafficking or money laundering activities in more than one state (ONDCP, 2004d).
- 25) Non-HIDTA targeted threats: Threats identified by a HIDTA that are not being addressed by the HIDTA because (1) they are not viewed as critical to the HIDTA's mission, (2) the HIDTA does not have sufficient resources to address

the threat, or (3) they are being addressed by a non-HIDTA-funded task force or agency (ONDCP, 2004d).

26) Operational intelligence: Information about traffickers and enterprises that supports ongoing criminal investigations and prosecutions (Kenney, 2003).

27) Organizational learning: A system made up of actors, actions, symbols, and processes that permit an organization to transform data into prized information, thereby increasing the organization's long-run adaptive capacity (Schwandt & Marquardt, 2000).

28) Organizational resilience: The ability of a system to withstand the stresses of environmental loading based on the combination of the system pieces, their structural inter-linkages, and the way in which environments change is transmitted and spread throughout the whole system (Horne, 1997).

29) Outcomes: Changes in the population or problem targeted by the program. Outcomes are the actual accomplishments and are predicted on outputs (ONDCP, 2004d).

30) Outputs: Specific activities that an initiative conducts or produces. Cases opened, arrests made, amount of drugs seized, and number of DTOs dismantled are examples of output (ONDCP, 2004d).

31) Performance measure: An outcome or efficiency measure used to report performance. Performance must be reported quantifiably, either directly or through assessment-based measures. For example, the percentage of DTOs dismantled or disrupted is a performance measure that reflects an outcome. The

cost to permanently remove illegal drugs from the marketplace is a performance measure that reflects efficiency (ONDCP, 2004d).

- 32) Regional priority organizations target (RPOT): A DTO known to be linked to or affiliated with a major regional/national DTO and/or money laundering enterprise that is designated by the Drug Enforcement Administration or by the Organized Crime and Drug Enforcement Task Force Program (ONDCP, 2004d).
- 33) Reliability: The capacity to produce collective outcomes of a certain minimum quality repeatedly (Hannan & Freeman, 1984).
- 34) Resilience: (1) The ability to recover quickly from illness, change, or misfortune; buoyancy. (2) The property of a material that enables it to resume its original shape or position after being bent, stretched, or compressed; elasticity (Webster's, 2003).
- 35) Resiliency: The ability of a system to reduce the chances of shock, to absorb a shock if it occurs, and to recover quickly after a shock (Bruneau et al., 2002).
- 36) Resilient organization: An organization able to sustain a competitive advantage over time through its capability to do two things at the same time: (1) deliver excellent performance against current goals and (2) effectively innovate and adapt to turbulent, rapid changes (Robb, 2000).
- 37) Sensemaking: To create order and make retrospective sense of what occurs (Weick, 1993, p. 635).
- 38) Sources: Documents that provide the information from which threats, harmful consequences, and regional needs are determined (ONDCP, 2004d).

- 39) Strategic intelligence: Information on broad trends in the international narcotics trade, including global and country drug production estimates, country- and drug-specific threat assessments, and drug availability and consumption patterns (Kenney, 2003).
- 40) Tactical intelligence: Information of immediate use in interdiction and enforcement operations (Kenney, 2003).
- 41) Threat: The capability of an individual or group, or an existing or impending condition, to do or cause harm, coupled with the intent to do so (ONDCP, 2004d).

CHAPTER 2: LITERATURE REVIEW

And thus, like the wounded oyster, he mends his shell with a pearl.

—Ralph Waldo Emerson

Introduction of Literature Review

The literature on organizational resilience is fragmented (Sutcliffe & Vogus, 2003). Resiliency, which has been associated with learning (Cole, 2001), has also been defined within various literature pieces and has recently become an important topic in psychology (Wiles, 2002). Webster (1983) defines resilience as “the capability of a strained body to recover its size and shape after deformation caused by compressive stress ... an ability to recover from or adjust easily to misfortune or change” (p. 1,003). It’s about recovering from error (O’Connor & Fiol, 2002).

Adaptability is another term for resilience, as cited by Wildavsky (1991); Levinthal and March (1981, 1993); Sitkin (1992); Weick, Sutcliffe, and Obstfeld (1999); Eisenhardt and Martin (2000); and Teece, Pisano, and Shuen (1997). Mallak (1997) believes that resilience is the ability to thrive and survive under difficult conditions, while Wildavsky (1988) sees resilience as the capacity to deal with incidents—whether expected or unexpected—once they have occurred. He later (1991) posited that in order to be resilient, an organization must be prepared for adversity; it must be able to learn, act, and investigate without truly knowing what will be needed most in the future to avoid a disaster. “Organizational resilience is an essential corollary for positive organizational

scholarship because it begins to articulate how organizations behave efficaciously and thrive amidst adverse conditions” (Sutcliffe & Vogus, 2002, p. 7).

Social researchers continue to refine their ideas about organizational resilience. Collins and Porras (1994) said that a firm must possess core values to become more resilient; without these values, the firm will “expire.” In 1998, Horne and Orr identified characteristics that build resilient organizations. Other authors connect and interchange the terms “hardiness” and “resilience” (Rusk, Schoel, & Barnard, 1996; Maddi, 1987), while still others connect the concepts “radical change” and “adaptability” (Aitken, 1999; Guidimann, 2002). Other researchers offer insight into the process of an organization becoming resilient: “Organizational resilience results from enhancing particular competencies, such as: the processes that encourage mindfulness and processes that enhance capabilities to recombine and deploy resources in a new way” (Sutcliffe & Vogus, 2003).

The research data suggest that the following abilities are largely responsible for organizational resiliency: (1) the ability to promote competence; (2) the ability to restore efficacy; and (3) the ability to encourage growth. Weick and Sutcliffe (2005) simplify the concept of resiliency to one question: “Do I have the skills to make do?” The Resilience Alliance defines resilience as “(a) the amount of disturbance a system can absorb and still remain within the same state ... (b) the degree to which the system is capable of self-organization ... (c) the degree to which the system can build and increase the capacity for learning and adaptation” (Carl et al., 2002). Sutcliffe and Vogus (2002) conceptualize

resiliency as the ability to restore and maintain efficacy. In order for an organization to survive, it must be able to adapt (Hinrichs, 2002).

The etiology of the word “resilient” helps to convey the word’s meanings. The Latin root “resile” refers to something that, once damaged or stretched, will recoil or spring back to life or maintain its shape, weight, or size. Researchers have developed many contemporary definitions of the word “resilient,” and a consensus has not yet been reached on which definition is the best. This fact is an ongoing problem (Kaufman et al., 1994). Kotliarance and Duenas (1993) found that some languages don’t have a similar or equivalent word for resilient. Grotherberg (1995) created the following definition based on her work on an international resiliency project:

Resilience is a universal capacity which allows a person, group or community to prevent, minimize or overcome the damaging effects of adversity ... resilience may be promoted not necessarily because of adversity, but indeed may be developed in anticipation of inevitable adversities. (P. 2)

Braverman (2001) defines resilience as “a concept that incorporates two components: (a) exposure to significant stressors or risks, and (b) demonstration of competence and successful adaptation” (p. 2). Resiliency has also been applied to another type of organization, an eco-system. In the eco-system context, resiliency is defined as “...a measure of stability that refers to the rate at which a system recovers to a steady state following a disturbance” (Steinman, Mulholland, & Palumbo, 1991, p. 1). Greene (2002) defines resilience as “a universal capacity which allows a person, group, or community to prevent, minimize, or overcome damaging effects of adversities” (p. 1).

Now that we understand some of the definitions and uses of the term “resilience,” we should also understand what resilience can accomplish. According to Sutcliffe and

Vogus (2003), “resilience provides insight into how organizations continue to achieve desirable outcomes amidst adversity, strain, and significant barriers to adaptation or development” (p. 1). Resiliency is at the core of survival. It is what makes people pick themselves up and take the first step of a long climb back up a mountain. It is about being determined and focused to overcome adversity, to overcome significant challenges (Sutcliffe & Vogus, 2003). Resiliency, while not a learned trait, can also run deeply within successful organizations as well. Organizations maintain a keen instinct for survival in a world that allows only the strong to survive. Johnson and Kloman (1999) state, “We attempt to build resiliency into our existing systems so we can sustain” (p. 3). They continue, “In preparing for disaster, we are essentially trying to manage our exposure to the unanticipated consequences that disasters pose. We attempt to build resiliency into our existing systems ... so we can sustain the potential consequences” (Johnson & Kloman, 1999, p.3).

High-reliability theory (HRT), as asserted by Scott (1994), belongs in the organizational theory realm because of its focus on organizations that work within dangerous environments (chemical processing plants, aircraft carriers, nuclear power plants, etc.). Hinrichs (2002) describes a type of system that is designed for high performance, called the high-performance work system (HPWS), which is a type of system that brings together people, technology, work, and information in a format that best fits these characteristics so that a high-performance outcome can be sustained (Nadler, Gerstein, & Shaw, 1992).

Hamel et al. (2003) describe changes in organizational survival. In previous years, a company simply had to maintain status quo to stay in business. Now, staying in business requires a much different process than maintaining status quo: “continued success no longer hinges on momentum. Rather, it rides on resilience—on the ability to dynamically reinvent business models and strategies as circumstances change” (p. 53). It is the “renewal” that should be the natural consequence of a company’s resilience; that is, the company should robustly work toward its future rather than rest on its past successes.

Smith (2002) describes organizational resilience in the context of being concerned with crisis prevention. There are two main areas of work in crisis prevention. The first is concerned with the development of a crisis preparation culture. The bulk of this work is within the development of cultural types and pathologies within organizations. The second area is concerned with the ethical aspects of corporate behavior and the creation of resilience as a consequence of suspect ethical behavior (pp. 4–5). If Smith is correct in his assumption that organizational resilience is largely concerned with crisis prevention, then we must also take into account Mallak et al.’s (1997) study of tools to help plan for a crisis. They assert four tools to be used to help better prepare for a crisis: (1) risk analysis, (2) contingency plans, (3) logic charts, and (4) tabletop exercises. Risk analysis is simply identifying what can possibly go wrong. Contingency plans require backup plans in case things go wrong. Logic charts require the act of following prescribed new procedures; they “provide an overview of principal emergency response events and recovery operations” (p. 17). Lastly, coordinating the tabletop exercise involves assembling the employees and creating scenarios in advance—a form of role playing

(i.e., certain people have various specific roles during a crisis, much like a fire drill in a school house).

According to Sutcliffe and Vogus (2003), collective efficacy is a prominent component of resiliency (a possible construct for a resiliency framework). According to Bandura (1989) and Wood and Bandura (1989), a group's shared belief in its capabilities can have a great impact on the group. Bandura (1989) and Caproni (2001) detail important factors relative to efficacy, which include (1) how the group is led and structured; (2) strategies, knowledge, and competencies; and (3) whether the members interact with one another in a mutually facilitative manner. Weick (1993) details this same process in his study of the Mann Gulch disaster. "The mechanisms by which collective efficacy contributes to a group's resilience resemble the mechanisms for efficacy at the individual level" (Sutcliffe & Vogus, 2003, p. 13).

Resilience at the organizational level, according to the research literature, examines organizational learning, adaptation, dynamic capabilities, and high-reliability organizing (Sutcliffe & Vogus, 2003). Putman (1995) found that training is a key ingredient to organizational survivability; therefore, organizational learning may foster understanding organizational resilience. Most importantly, organizational resilience appears to be anchored in the organizational process, while the emphasis is on learning.

Sutcliffe and Vogus (2002) believe that resilience "results from processes that promote competence, restore efficacy, and encourage growth as well as the structures and practices that enable these processes" (p. 2). The aforementioned definition of resiliency is linked to organizational theory, finding that resiliency is a characteristic or capacity of

an organization's ability to absorb strain and continue to maintain itself and may include the ability to bounce back from serious events. "An entity not only survives/thrives by positively adjusting to current adversity, but in the process of responding, it strengthens its capabilities to make future adjustments" (p. 5). Hence, the organization learns and becomes stronger even though the transition to becoming resilient is an ongoing process (Monday & Myers, 1999).

Robb's (2000) definition of a resilient organization (found with the definition section of this proposal) exhibits certain broad characteristics. According to Robb, a resilient organization "is able to create structure; dissolve it; provide safety in the midst of change; manage the emotional consequences of continuous transformation and change (anxiety and grief); and learn, develop, and grow" (p. 27).

The September 11 attacks and their aftermath are a living laboratory for those wishing to better understand how individuals, groups, and organizations respond under extreme disaster conditions. Along with other major disaster events, 9/11 revealed much about institutional responses and collective behavior in crises, underscoring what is already known about the social processes that characterize such events, while at the same time highlighting aspects of disasters that the literature has yet to explore fully. (Tierney, 2001, p. 1)

Interesting data have emerged from reports written after 9/11. One such report looked at resiliency factors that could be implemented in private industry and the banking business based on what was learned from the attacks at the World Trade Center. This study concluded that four key practices were necessary for U.S. financial system security. First, the organization must identify all of its critical activities. Second, the organization must determine the appropriate resumption and recovery objective (how long do they expect to be out of commission before up and running again). Third, the organization

must have sufficient out-of-region resources that can help with the recovery and resumption objectives. Fourth, the organization must test the “recover and resumption” arrangements. Combined, these activities should ensure the businesses resilience during turmoil or attack (One Year, 2002). Carl et al. (2002) provided research showing that massive transformation is unstoppable and that resilient organizations contain the necessary components for reorganization and renewal. However, training, according to high-level personnel in the Fire Department of New York, was the most important factor in their resilience (Fanning, 2002).

Researchers from Washington University studied the effects on an emergency response unit and found four factors relating to their resilience: (1) firefighters chose that line of work; (2) the personnel had training; (3) workers were rotated and given considerable amounts of debriefing; and (4) the department received high amounts of public support (O’Brien, 2002). McCann (2004) states, “resiliency helps the organization manage disruptive change” (p. 48) and argues that organizational resiliency and organizational agility are two different things: “Agility helps the organization manage rapid change, while resiliency helps the organization manage disruptive change” (p. 48). If this is the case, and agility can be related to hardiness and sustainability, then McCann would see hardiness and sustainability as unrelated to resiliency. But not all researchers agree. Some combine the characteristics of hardiness, sustainability, and agility to resiliency, like ingredients in baking a cake. McCann identifies four dimensions of resiliency: absorbing shocks and surprises; creating and exploring alternatives (planning for crisis and making hard choices for renewal); broadly accessing resources (using one’s

talents and resources both outside and inside the organization); and executing transformational change (redesigning itself to support a new self-concept) (pp. 49-49).

Hoffman (2004), the vice-president of external affairs and director of the RAND Corporation, stated, “In terms of its organizational resilience and flexibility, its structure and communications, al-Qaeda is not unlike a successful, smart company” (p. 32). He cites strengths attributed to the al-Qaeda resilience, which are (1) a clear message, (2) a firm purpose, (3) a charismatic leader, (4) and no fear of delegating. Al-Qaeda adopted a flatter, more linear organizational structure: Bin Laden was very good at issuing orders and making sure they were followed, while also making clear the goals and aims of the organization. Hoffman believes that a key indicator of al-Qaeda’s success lies in the organization’s ability “to recruit, to mobilize and to animate both actual and would-be fighters, supporters and sympathizers Despite the punishment meted out to al-Qaeda over the past two years and more, it still remains a potent terrorist threat . . .” (p. 34). Hoffman credits the organization’s resilience to its ability to change direction slightly (comparing the movement to that of shark in water) so that it can survive.

Within the frame of the organization, Marks (1977) believes that future planning is the most important factor in an organization’s ability to deal with uncertainty. Losel, Bliesener, and Koflerl (1997) find that many constructs relate to resilience: hardiness, adaptation, mastery, plasticity, and adjustment. Others have noted the importance of moving the construct of resilience from the esoteric to the tangible (Biscoe, 1999).

What Organizational Resiliency Is Not

McCann (2004) makes a clear distinction between an agile organization, which can adapt to change, and a resilient organization, which can manage disruptive change. According to McCann, disruptive change can lead to organizational failure if not dealt with properly. “While organizational agility is certainly essential, so is organizational resiliency. Rapid change requires agility; disruptive change requires resiliency” (p. 49). Meyer’s (1982) study of a hospital strike found that rigid job descriptions and centralization were negatively associated with resilience. Aiken (1999) posits that resilience is the opposite of vulnerability.

Limited Organizational Resilience Research

The literature of organizational resiliency is not heavily studied, and the few researchers who are in the organizational realm appear to disagree with each another. Interestingly, though, research into the organizational side of this topic increases after some form of catastrophic event has taken place. This makes simple sense; it would be rather difficult to study an organization that has not suffered from horrific events. Even the research data, which focus on analyzing these kinds of major events, have been criticized. “Systematic and extensive social science disaster research has been going on for nearly five decades now. Much worthwhile work has been done. A very large number of empirical generalizations have been produced. Yet, I am troubled. In view, the field more and more, is producing less and less, of what might be characterized as major advances in new knowledge and understanding of disaster related phenomena”

(Quarantelli, 1994b, p. 1). The lack of literature and resources in the area of organizational resilience is rather astonishing considering how vital it is for survival.

Resilience in the Context of Humans

Although individual and organizational resilience exist in literature, distinctions and similarities can be found. In Weick's (1995) work on sensemaking, he described its relevance and importance in similarity to that of the battered child syndrome; all too often, things have been occurring around us, without us knowing it despite clear indicators. Sensemaking is often, and simply, the ability to see what is truly going on before our very eyes.

For the purpose of this study, the level of diagnosis is on the organization, not the individual. However, it's important to uncover a limited amount of the individual resilience factors to ensure that this study encompasses a full understanding of organizational resilience. "The bulk of what we know about resilience grew out of research on vulnerable children in psychopathology and developmental psychology" (Sutcliffe & Vogus, 2003, p. 8). Werner and Smith (2001) looked exclusively at resilience within children. Kobasa (1982); Kobasa, Maddi, and Kahn (1982); Maddi (1987); and Wesman (1990) examined hardiness within individuals.

There is significant literature on youth resilience. The issues applying to children who overcome difficulties may be similar to those of organizations and adults. After all, organizations are made up of people, and those who are able to direct organizations during catastrophic events may share similar characteristics. "In recent years there has been tremendous interest in understanding why some children grow up to be healthy and

well functioning adults despite having to overcome various forms of adversity in their lives” (Braverman, 2001 p. 1). Braverman defines resilience as “the phenomenon of successful development under high-risk conditions” (p. 1). He provides lengthy examples of the following six factors: risk factors, competence, resilience, vulnerability factors, protective factors, and developmental assets. In particular, his section on resilience states the following: “[Resilience] is a concept that incorporates two components: (a) exposure to significant stressors or risks, and (b) demonstration of competence and successful adaptation” (p. 2). Staudinger, Marsiske, and Baltes (1993) studied adult resiliency. As mentioned earlier, Weick’s study of the Mann Gulch disaster showed that a group of individuals working together equates to an organization. Hence, a relationship between individuals working together as a “group,” for a common cause or purpose, can equate to the definition of an organization.

The literature pertaining to individual resiliency, however, is more common. According to Hind (1996), “To understand fully the resilience of an individual, it is important to consider the interaction between the individual and the environment. This can be broadened to a consideration of organizational culture and the concept of a resilient organization” (p. 19). Hind describes the resilience audit (p. 23), which was created so that people could detail self-perceptions, their unit, and organization. The results of the audit are formed to show items of weaknesses that affect the overall operational capability of the organization. The audit is an attempt to bridge the connection between the individual and the organization. Egeland et al. (1993) and

Wildavsky (1988) explored this same area, specifically the area relating to competence within an individual, unit, or organization. Other researchers have examined patterns.

Stumpher (2001) defines resilience as a pattern of psychological activity that makes up a belief for the purpose of being strong in the face of harsh circumstances, explaining, “[Resilience is] the goal-directed behavior of coping and rebounding ... of accompanying emotions and cognitions. It is a dynamic phenomenon, influenced by both the internal characteristics of the individual, and various external life contexts, circumstances, and opportunities” (p. 5). He posits that people do not have resilience, but create it in certain circumstances. Ashmos and Huber (1987) posited a connection between organizational and individual resilience through the interaction between subsystems and systems. Organizations are social systems. The capabilities of organizations and their ability to be resilient are determined by their strength of blending together various characteristics that create the resilient organization. However, as Weick (1993) revealed, just because an organization has resilient members (i.e., individuals) does not necessarily mean that the organization is resilient. Ironically, Horne and Orr (1998) theorized that resilient individuals may actually harm an organization’s ability to be resilient because the organization fails to grow through time of trial.

Organizational Resiliency

Hamel et al. (2003) describe four challenges that must be met before an organization becomes resilient. First, the organization must push away from its past and be willing to throw everything away for a new beginning. The company must have the ability to see what needs changing and be willing to consider those needed changes. This

challenge is referred to as the cognitive challenge. Second, the company must create a menu of options to counteract failing strategies. This second challenge is known as the strategic challenge. Third, the organization must be willing to divert resources from what worked in the past to activities in the future by creating a broad menu of new ideas supported with the necessary talent, resources, etc. This third challenge is known as the political challenge. The final challenge is the ideological challenge: The organization must think beyond its existing place in history and embrace a belief of near perfect execution and excellent operational abilities. Hamel claims that few organizations can or have mastered these four challenges. The biggest obstacle that must be overcome first is conquering denial, followed by becoming hopeful, and ending with spreading optimism throughout one's organization.

Becoming resilient, according to Hamel (2003), is accomplished in three phases: revolution, renewal, and resilience. Revolution is the creative destruction phase; it is innovative with respect to the rules of the organization. Renewal is the phase in which the organization must reinvent itself; this phase is also known as strategic renewal. "It requires innovation with respect to one's traditional business model (p. 55). These two phases lead to the third phase, resilience. When an organization has reached the resilience phase, it is capable of continuous reconstruction, requiring innovation while keeping in mind the organization's behaviors and values that favor perpetuation over innovation. According to Hamel, "Any company that can make sense of its environment, generate strategic options, and realign its resources faster than its rivals will enjoy a decisive

advantage. This is the essence of resilience” (p. 63). Some researchers equate resilience with adaptability.

Grove (1997) believes that developing organizational resilience will create an organization’s ability to adapt quickly to events—both planned and unplanned—while ensuring that operational performance maintains its equilibrium. Grove’s dissertation is a qualitative study focused on senior management’s ability to build organizational resilience after a significant downsizing.

Goble, Fields, and Cocchiara (2002) devised a strategy, modeled after IBM’s approach to business, to help institute organizational resilience within information technology businesses. They proposed six layers to evaluate operational resiliency: (1) strategy, (2) organizational, (3) processes, (4) data applications, (5) technology, and (6) facilities/security. They hypothesized that resiliency began with strategies that helped organizations examine vulnerabilities and risks: “a resiliency plan must be viewed as a continuum within an overall business strategy” (p. 5). Without such a plan in place, the rest of the resiliency levels would fail. Innovation appears to be an important factor, as does the ability to change and adapt. Goble et al. (2002) explained, “achieving organizational resiliency should go beyond typical organizational issues and may include the creation of virtual, flexible and distributed workplaces to enable collaboration among employees, suppliers and customers anywhere, anytime” (p. 6). From this layered plan, the main building blocks for resiliency were devised: recovery is the ability to bounce back quickly; hardening is the fortification of infrastructure to make the organization less vulnerable to disaster; and redundancy is the duplication of efforts.

Quarantelli (1987) described disaster research conducted by the U.S. military between 1950 and 1965. In particular, he detailed studies conducted at the National Opinion Research Center, which was commissioned by the Chemical Corps of Medical Laboratories at the Army Chemical Center in Maryland. Researchers at the National Opinion Research Center examined a 1948 incident in Donora, Pennsylvania, in which a local population became ill from toxic fumes and 25 people were killed. This retrospective study examined wartime conduct of a populace by analyzing how the populace responded to natural and industrial tragedies. The same group conducted a study of survivors of plane crashes to determine the psychological reactions and actions of individuals and local populations in a calamity. The purpose of the study was to develop methods for deterring panic and minimizing emotional and/or psychological failures.

Measuring Resilience

O'Neal (1999) defines several measures of resilience or hardiness. (Often hardiness and resilience are used interchangeably throughout literature.) The measures were as follows:

1. Personal Views of Survey III, created by the Hardiness Institute in 1985
2. Cognitive Hardiness Scale, by K. Nowack in 1989
3. Psychological Hardiness Scale, by S. Youkin and N. Betz in 1986
4. Resilience Scale, by G. Wagnild and H. Young in 1993
5. Resiliency Scale, by C. Jew in 1999

6. Personal Resilience Questionnaire and Organizational Resilience Questionnaire, by Conner in 1992

7. Family Hardiness Index, by McCubbin in 1996.

O'Neal states, "Although only a few references can be found prior to the mid 1980s, the volume of studies has grown tremendously in the last few years" (p. 3). Of the seven measures listed, Conner's Organizational Resilience Questionnaire appears best suited for organizational studies than the other scales mentioned above since they focus on individuals and not organizations.

O'Neal's scale measures five key areas:

1. It displays a sense of security and self-assurance that is based on a view that life is complex but filled with opportunity (Positive);
2. It provides a clear vision of what to achieve (Focused);
3. It demonstrates a special pliability when responding to uncertainty (Flexible);
4. It takes a structured approach to managing ambiguity (Organized);
5. It engages change rather than defends against it (Proactive) (O'Neil, 1999, p. 10).

Mallak (1998) measured resilience in health care provider organizations. He states, "The notion of a resilient organization is an emerging concept for understanding and coping with the modern-day pace of change and associated work stress" (p. 148). His definition of resilience is "the ability of an individual or organization to expeditiously design and implement positive adaptive behaviors matched to the immediate situation, while enduring minimal stress" (p. 148). He examined the following behaviors: (1) goal-directed solution seeking; (2) avoidance; (3) critical understanding; (4) role dependence;

(5) source reliance; and (6) resource access (p. 148). He defined these terms in contexts similar to those of other researchers. The commonality of descriptors used to define resilience clarifies how it crosses many academic lines. Mallak states, “Dramatic episodes of resilience behavior occur when faced with a crisis” (p. 149). He describes various natural disasters and individuals putting themselves in great danger to save the life of another. Mallak references Weick’s (1993) Mann Gulch case study disaster and the three scales that Mallak developed to assess Weick’s factors of organizational resilience: (1) bricolage; (2) an attitude of wisdom; and (3) virtual role system (VRS) (Mallak, 1998, p. 149). Out of the three scales, the last scale, VRS, is least known. According to Mallak, the VRS is “an advanced form of work-team relationships modeled after Weick’s work in crisis management. The VRS allows the work environment to continue despite the loss of one or more of its members” (p. 148). VRS is permitted through the team’s visualization of how the entire team functions, not simply in one role. Through these efforts, the members can rebuild the structure, but they must understand all roles and responsibilities.

Bell (2002) states, “Organizational resilience has taken on a new urgency since the tragic events of Sept. 11th. The ability to respond quickly, decisively and effectively to unforeseen and unpredictable forces is now an enterprise imperative” (p. 1). His five core concepts include (1) leadership; (2) culture; (3) people; (4) systems; and (5) settings. Similar to other researchers previously discussed, Bell believes that leadership is “key,” particularly for organizations that have no choice but to continue to operate. Beunza and Stark (2003) hypothesize from their research that organizations have the ability to adjust

to turbulent environments by bringing the environment inside the organization; that is, the organization can get accustomed to the threat and train to be resilient against it.

Community Resiliency

In Rosenman and Handelsman's (1992) research regarding modeling resiliency in a community devastated by human-made catastrophe, the authors found that a devastated community can rally to its immediate needs of food, water, shelter, and so forth and quickly rebuild basic community infrastructure for traveling on roads, obtaining clean water, and other needs. However, the key thing needed for this success is the leadership's ability to lift the morale of the citizenry and workers. A good example of community resilience was observed with the rise, decline, and resurgence of the American auto industry.

Franko (2002) studied the American auto industry's movement from the 1980s through the 1990s. He compared the American auto industry's resilience with that of the Japanese auto industry and found that the American auto industry developed the ability to become "lean and mean" (p. 36). He explained,

refocusing on core businesses after disastrous de-worifications in the 1970's and 1980's was surely part of the continued success of a number of American firms ... important motors of improved U.S. performance (include) innovation, ... and the development of a global outlook (the need to compete with Japanese). (P. 36)

Franko also found that the Japanese were equally resilient during the 1970s to product failure and company collapse, because the Japanese used the same notions of innovation and the need to compete with the Americans. The respective auto companies found a way to survive. Carl et al. (2002) believed that a resilient system has the ability to create opportunity for growth and learning.

Kumagai (2002) conducted a case study titled, *Developing a Resilient City*. In this study, Kumagai examined an earthquake disaster in the city of Kobe, Japan. Nothing can prevent destruction from such a catastrophe, but what he found was that a community can bounce back from a devastating blow. His findings point to four key areas that ensured this city's survival. First, educate your citizenry and empower them to take charge when necessary. Second, build strong structures that are capable of handling such ferocious earthquakes. Third, maintain institutional preparedness—that is, maintain a clear flow of information among city government agencies, business, and citizens. Interestingly, Kumagai hints that this process should be acculturated into everyday life so that the process becomes the norm. Fourth, change policies when needed and don't let bureaucracy bog down the decision-making process, especially when in the middle of a catastrophic event.

Horne's article, "The Coming Age of Organizational Resilience" (1997), predominately focuses on private industry. However, Horne provides six core concepts deserving attention from public safety organizations concerned about resiliency:

1. **Communication** of goals, directions, and patterns that relate to changes in markets, finances, operations, mission, or vision throughout the entire organization.
2. **Coordination** of large and small change efforts throughout the organization to present a "whole goal" picture of the workforce.
3. **Commitment** by all sectors of the organization to work together during periods of organizational uncertainty (with a sense of trying) to maintain trust and goodwill.

4. **Consideration** by organizational leadership that change surrounds, and creeps into, people's lives to such a degree that people may perceive even small shifts in organizational activity as overload.
5. **Connections** for communication and interaction within the organization that is focused, functional, and flexible enough to adapt to rapidly changing needs and conditions.
6. **Community** perspective that is rooted in converging areas of self interest by organizational members with regard to training/learning, compensation, work standards, culture and work environment, and future vision (Horne, 1997, p. 27).

These six concepts convey the key actions and attributes necessary for organizational survival. Leadership and culture are two focus areas of my study—both found within Horne's description and definition. Yukl (2002) states, "When a group is under extreme pressure to perform a difficult task or to survive in a hostile environment, the role expectations for the leader are likely to change in a predictable manner ... they look to the leader to show initiative in defining the problem, identifying a solution, [and] directing the group's response to the crisis" (p. 37).

A level of connectivity is required for resilient organizations. "A shared sense of organizational purpose/mission and interactive planning consistently appear as critical success factors in the continued resilience of organizations" (Horne, 1997, p. 27). In relation to public safety organizations, this connectivity is vital. "The organization will need to rapidly know its challenges, the competencies it has or needs to meet these challenges, and information about how it has adapted to changing conditions" (Horne,

1997, p. 27). Horne states that, in order for this level of connectivity to occur, “organizations will need to be very cohesive entities” (p. 27). The AF-DTO seems to fit this requirement, since its members are exclusively and reciprocally dependent upon each other for survival.

Resiliency appears to emerge after some type of crisis. Crises can be varied and defined by many types of events. Warren Walker, of the RAND Institute, states that crises are rare events. He explains, “Each crisis is different from other crises. Among the variables that define a crisis are its type (e.g., flood, explosion, war, airplane crash), location, affected population, and relevant support organizations” (Walker, 1995, p. 1). Lagadec (1993) describes organizations in crises as having three stages that can cause the organization serious harm. The first two stages can be overcome by implementing various forms of emergency procedures that have been practiced and become a part of the organization’s memory. However, the third stage is so severe that the emergency procedures become obsolete. According to Lagadec, “the specialized emergency function is no longer enough to bring the situation back” (p. 3). Ellis’s (1998) study of one of the world’s most reliable urban transport systems found that reliability was partially due to an organization’s resiliency to various forms of actions that could subdue the system for normal operations. For example, if an organization is left alone to interpret its meaning, it would be able to limit its reach to the tipping point of no return (Rudolph & Repenning, 2002). The ability to interpret meaning is an essential component of this study’s discussion surrounding mindfulness, which is a component of the conceptual frame discussed in the final two chapters.

Doe's article, "Creating a Resilient Organization" (1994), studied organizational resiliency by pinning success on the ability to adapt to change. She states that, at times, too much happens at once and panicking can lead to a stagnant status and that the only viable option is to react to the events occurring simultaneously. She hypothesized, "A resilient organization requires a resilient workforce" (p. 2). She describes a process involving selecting and retaining key types of employees who can manage change well and manage the change within the organization. Working with these individuals to increase their resilience, the organization will improve its ability to adapt to changes and seize opportunities more quickly than its competitors (p. 2). She lists key areas for organizational focus necessary to ensure organizational resiliency: communication, employee involvement, a transition plan (how do you retain or let employees go, which is necessary to weed out while retaining the right employees to deal with uncertainty), support and training (for the remaining employees so they can be successful in the organization), and human resource policies (that individual goals and objectives must be tied to the objectives of the organization).

Within organizations, managers are key in "seeing" through a crisis, since "Organizational environments are uncertain and contain important patterns of strain ... Effective managers are those who have become skilled at mapping such strain patterns and identifying coping strategies that are appropriate for the community within" (Drabek, 1989, p. 151). However, according to Comfort (2001), organizations are systems, designed as socially designed structures and have similar stresses that build until they reach a level where the organization ultimately loses viability and fails, or is no longer

able to function. Comfort further posits that because these organizations are led by human managers, they have the ability to learn and adapt to new situations. The problem, though, according to Comfort, is that “almost no attention has been given to the measurement of an inter-organizational system’s capacity to function under severe threat” (p. 116).

Resiliency is often found in successful criminal organizations, which is essential to success. “Over the past several decades, Colombian narcotics trafficking organizations have transported greater quantities of cocaine and heroin into the United States” (Kenny, 2001, p. 1). This occurs despite increased U.S. measures to counter their trafficking methods. The Colombian cartels adapt to these changes by altering their behavior and storing the changes in their memory, then create and select innovative ways that produce satisfactory results (2001). This example helps to support the notion that resiliency is part of human nature and survival of the fittest, since drug cartels need their businesses to thrive in order to survive.

Comfort (2001) described the concept of shared risk and how vital it is to effective emergency management. Shared risk “means a community’s capacity to mitigate risk and respond to damaging incidents when they occur. [Shared risk] depends upon [the community’s] ability to assess its own vulnerabilities, monitor its own performance, and mobilize resources in response to threat” (p. 118). This concept is essential in our understanding of the AF-DTO and whether they operated in an environment of shared risk.

Kumpfer (1999) proposes six key constructs with a view on organizing the research literature about factors that contribute to resilience:

- **Stressors or challenges** that disrupt equilibrium and the perceived degree of stress;
- **Environmental contexts** such as family, culture, community, school, and peers;
- **Person-environment transaction**, including perception, reframing, changing environments, and active coping;
- **Internal resilience factors**, including cognitive, emotional, spiritual, physical, and behavioral;
- **Resilience processes**, which are stress-coping processes that allow the individual to bounce back; and
- **Positive outcomes.**

Creating a Resilient Organization

Robb (2000) addressed complex adaptive systems (which he also refers to as learning systems) that have the ability to change with environments. These learning systems are made up of two subsystems. First is the performance system; the goal is to perform the existing goals and tasks in the interest of surviving in the immediacy. The second is the adaptive system, which is a long-term process aimed at performing and meeting future goals. “Successful adaptive/learning systems are characterized by robustness in both subsystems and by strong linkages between them” (p. 28). Robb

theorized that these two subsystems are linked together through a foundation of architecture, skills, and culture, as depicted in Figure 3.

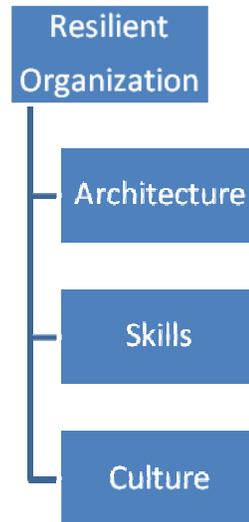


Figure 3. Resilient Organization Components

Note. From “Building Resilient Organizations,” *OD Practitioner*, 32 (p. 28), by D. Robb, 2000.

With the performance and adaptation systems functioning side-by-side, each system concentrates on what it knows best—that is, to ensure short- and long-term survival. The performance system focuses on various levels concurrently, such as customer needs, efficient business processes, and goals and performance measure for teams and individuals. These goals are simply short-term processes that must be updated, improved, changed, deleted, and so forth to remain competitive. Therefore, there is a need for the adaptation system and its sole purpose of bringing new life into the organization through new ideas, solutions, etc. The skills for each system as illustrated in Figure 4.

Performance Skills	Adaptation Skills
<ul style="list-style-type: none"> • Task performance and operational execution • Performance management: focusing behaviors and goals within a narrow range • Problem solving • Rational analytical, linear thought • Convergent thinking: closure and focus • Focus on the concrete and specific • Action 	<ul style="list-style-type: none"> • Visioning • Diversity and individuality in generating a wide range of possible viewpoints, goals, perceptions, and behaviors • Exploration of environmental change and its implications for organizational focus, structure, and potential diversification (external focus) • Creativity, experimentation • Emotional competency • Divergent thinking: opening up options, resisting early closure • Focus on the system, its organizing principles, structures, values, assumption • Self-reflection, humility

Figure 4. Skills Needed for Performance and Adaptation

Note. From “Building Resilient Organizations,” *OD Practitioner*, 32 (p. 30), by D. Robb, 2000.

Resilient organizations not only have rules and procedures to keep them strong, but they also promote a culture in which members see themselves as “living communities with an economic/task responsibility” (Robb, 2000, p. 32). Much like the skills listed in Figure 4, a resilient culture is set within a styled set of characteristics, as shown in Figure 5.

Performance Culture	Adaptation Culture
<ul style="list-style-type: none"> • Production-oriented • Perfection • Error detection and correction • Evaluative • Tends toward unsafe, unemotional, protective concealment • Task oriented • Alignment of people • Tends toward exclusivity • Conformance of standards • Planning and control: plan your work and work your plan • Compliance-oriented • Tendency toward dependency relationships 	<ul style="list-style-type: none"> • Innovation-oriented • Experimentation and learning • Appreciating, wondering, creating, speculating, trying • Accepting; nonjudgmental • Safe: to speak up, to be authentic • Relationships, meaning, and play orientation • Diversity and individuality • Inclusive • Questioning standards • Emergence: letting things unfold and develop • Commitment-oriented • Adult, responsible relationships: mutual autonomy and interdependence

Figure 5. Culture for Performance and Adaptation

Note. From “Building Resilient Organizations,” *OD Practitioner*, 32 (p. 30), by D. Robb, 2000.

The above-listed frameworks proposed by Robb set the stage for his Resilient Organization Framework. After he developed the framework, he designed and administered a survey to various organizations. The study was conducted on a minimal sample and produced limited findings.

Sutcliffe and Vogus (2003) proposed the framework in Figure 6 for understanding the factors that lead to resilience and the factors that lead to failure.

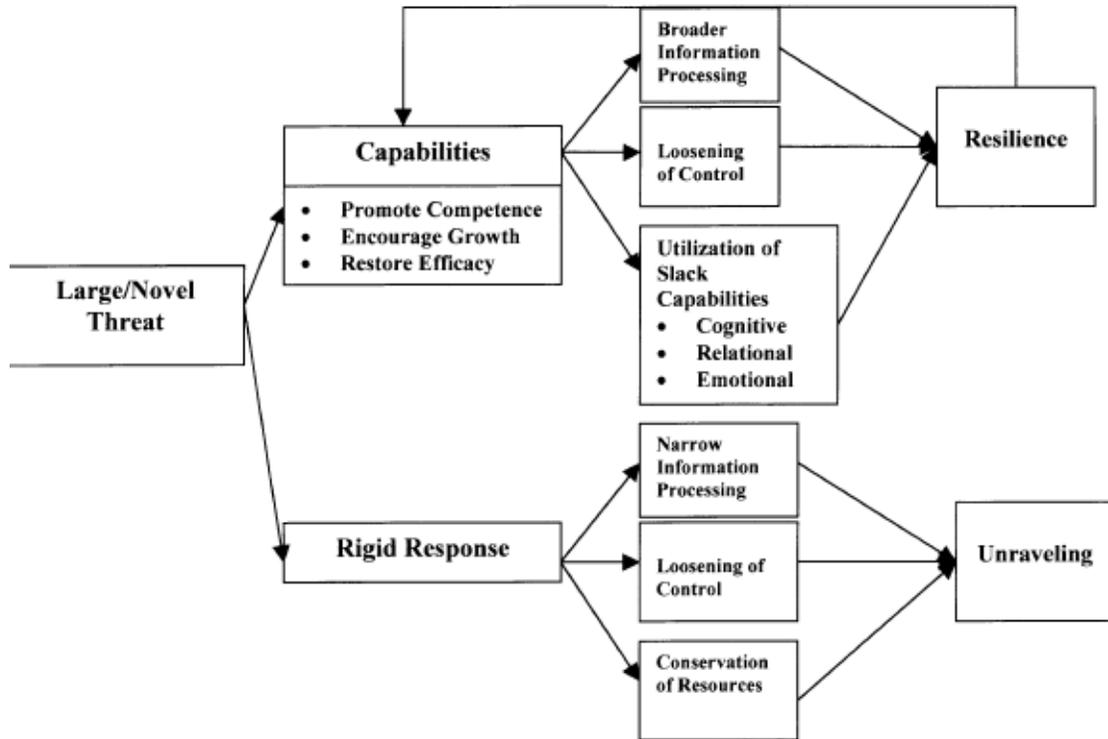


Figure 6. Resilience Framework

Note. From *Organizing for Resilience* (draft) (p. 28), by K. Sutcliffe and T. Vogus, 2003, Ann Arbor, Michigan: University of Michigan, Department of Management and Organizations.

Sutcliffe and Vogus (2003) hypothesized that organizational resilience occurs when individuals, who are the most likely to have the needed immediate information and knowledge, are able to make decisions for the group because they are authorized to do so. Organizational resilience depends upon individual teaching, the development of specialized information, and personal experience. From this theorized process, a sense of accomplishment and capability grows within the individuals, who are better prepared to act on behalf of the organization. Despite these actions, resilience cannot be guaranteed: it simply facilitates the ability to recover (Garmezy, 1991). McCann (2004) asserts six

dimensions of organizational resiliency: being able to absorb shocks and surprises, creatively exploring alternatives, broadly accessing resources, and executing transformational change, or rethinking its purpose and identity, and, when necessary, recreating itself to support its new self-concept. Bruneau et al. (2002) described four dimensions of resilience: (1) robustness, (2) redundancy, (3) resourcefulness, and (4) rigidity. Kendra and Wachtendorf (2002) used these four dimensions to study organizational resilience. They redefined the organizational resiliency phenomenon as “socially constituted adaptability to unpredictable ambient forces” (p. 102). Their findings suggest that, in similar types of major disasters, resilient organizations must have leaders who are problem solvers and facilitate employees to deploy rapidly adaptive strategies. They credited training as being one of the most important foundational items in creating a resilient organization. Creative thinking, flexibility, and the ability to improvise in newly emergent circumstances were equally important factors.

Bigley and Roberts (2001) studied the Incident Command System (ICS) model and found that, if followed, it will create organizational reliability (see Figure 7). They researched a fire department’s use of the ICS model and described three factors specific to and evolving from an environment that enables an organization’s ability to cope with catastrophes.

**ICS Factors Leading to Organizational Reliability in
Complex and Volatile Task Environments**

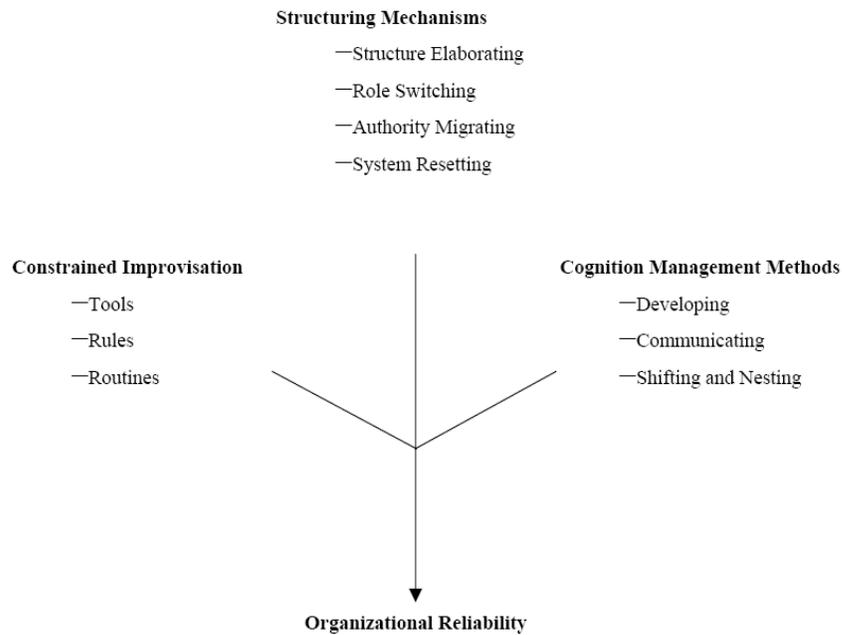


Figure 7. ICS Factors Believed to Lead to Reliability in Complex and Volatile Task Environments

Note. From “The Incident Command System: High-Reliability Organizing for Complex and Volatile Task Environments” (p. 1,297), by G. Bigley and K. Roberts, 2001, *Academy of Management Journal*, 44(6).

According to Bigley and Roberts (2001), an ICS is a highly structured process.

Figure 8 shows their conceptualization of the process. Note that there is a resemblance to how the AF-DTO organization is structured, which is described later in Chapter 4.

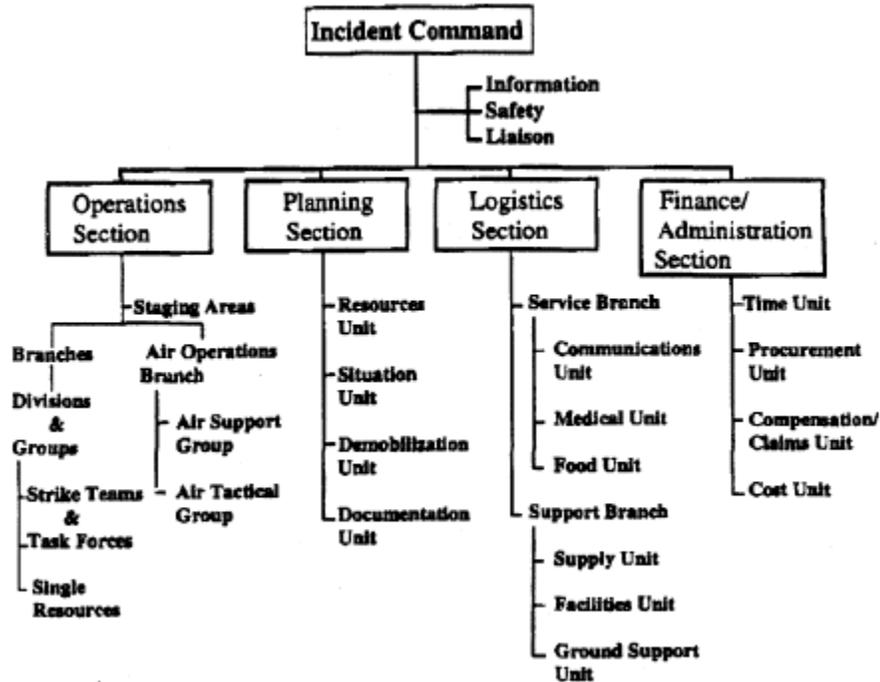


Figure 8. Incident Command Structure

Note. From “The Incident Command System: High-Reliability Organizing for Complex and Volatile Task Environments” (p. 1,298), by G. Bigley and K. Roberts, 2001, *Academy of Management Journal*, 44(6).

Mellow and Talmadge (2003) conducted a study of resiliency dimensions for a community college, which is a form of organization. They identified six dimensions of resiliency: First, the whole system engages all players to make the change occur, particularly beginning at the smallest levels, including student groups. Mellow and Talmadge cite Lewin’s as well as Emery and Trist’s work in the area of open systems to support this first dimension. Second, the system creates new structures to develop new energy and transformation. Third, the system tackles difficult issues. Fourth, the system supports staff and faculty leadership. Fifth, the system publicly frames decisions and

issues by using email, newsletters, newspapers, etc; and sixth, the system sustains transformation of a new structure and provides support for new ideas.

Martin (2004) used variables from business model constructs to form a model for resiliency. Martin applied these variables and theorized that when an organization follows this model, it will become resilient. Martin's assumptions on organizational resiliency stem from his model's resiliency investment variables. He posits that a resilient organization must have leadership, individual strategies, and an ability to be proactive. Martin's model is shown in Figure 9. The sections in bold are areas added to the existing business model variables. The existing business model variables are found on the left of the arrows.



Figure 9. Model for Business Resiliency

Note. From “A Model for Business Resiliency” (p. 30), by Thomas Martin, 2004 November, *Continuity Insights*, 1.

Horne and Orr (1998) examined behaviors that create resilient organizations and found, “Resilience is a fundamental quality of individuals, groups, organizations, and systems as a whole to respond productively to significant change that disrupts the expected pattern of events without engaging in an extended period of regressive behavior” (p. 31). These researchers were one of the very few who argued that a collection of resilient people within an organization does not equal a resilient organization. They hypothesized that too many of these types of people, together, may actually work against the process of resilience because the overbearing nature of their personality will override the shared vision of the others. The Horne and Orr model for organizational resilience contains seven behaviors:

1. **Community:** The organization’s leadership must always remember that their employees must feel a sense of purpose, shared vision, and an understanding of goals.
2. **Competence:** The organization must be able to change to adapt to changes in the environment.
3. **Connections:** Relationships between groups, people, and the system must be flexible under pressure: “The connections allow us to establish, maintain, and sustain linkage and alignment throughout the entire organization” (Horne and Orr, 1998, p. 32).

4. **Commitment:** All parts of the organization must be able to work together during uncertain times, with goodwill and trust, thereby creating “functional trust among members of the organization” (Horne and Orr, 1998, p. 32)
5. **Communication:** The organization must sharing relevant information, make sense of that information, and understand what works and what fails in creating a plan together.
6. **Coordination:** Small and large change efforts occurring within the organization must be timed and linked together to reach the preferred outcome.
7. **Consideration:** The organization must be mindful of its employees. All of the changes may cause overload, and the organization should plan accordingly.

Horne and Orr (1998) created the Organizational Resiliency Inventory, a 74-item assessment tool used to locate the occurrence of behaviors linked with resilience in organizations:

The model offers organizations the opportunity to learn more about their inner workings as a system ... exploring the dynamics of the resilience streams within ... leads to identification of areas of higher and lower resiliency response when dealing with significant change. (P. 37)

Question	Characteristic
When do people in organizations improvise?	People improvise when they can no longer «maintain» and act by following existing routines (Cyert & March, 1963: 121). Improvisation is more common than we expect because every time a routine is performed it unfolds in a slightly different way (March & Olsen, 1989: 39). Improvisation is the mean used to reenact the new routine because «in an unknowable, unpredictable world, ongoing readjustment is a constant» (Weick, Sutcliffe & Obstfeld, 1999: 88).
What is improvisation?	Improvisation is an adaptative activity that involves «reworking precomposed material and designs in relation to unanticipated ideas conceived, shaped, and transformed under the special conditions of performance, thereby adding unique features of every creation» (Berliner, 1994: 241). By experimenting with preplanned material, agents recombine subsequences of routines (precomposed material) whereby they «stand some chance of discovering complicated and interesting combinations of [actions] that none of [them] previously imagined» (March, 1976: 78).
How do people improvise?	Improvisation is similar to Schumpeter's (1950) concept of «creative destruction» and takes two things: experience and creativity. People improvise by «exploiting» recombinations of bits and pieces of experience (subsequences of actions) and by «exploring» creatively new ways in which to use their past experience (March, 1991). Improvisation can be done in total isolation, but it is usually a social or joint act.
Why do people improvise?	Improvisation is a matter of survival: either people improvise or they 'die'. Improvisation is key because in a dynamic environment their expertise is futile unless it is put to use in creative ways that match situational demands.
What is the function of improvisation?	Improvisation is an explorative sequence of action that facilitates innovation, generates safety, and provides for organizational resilience. Improvisation keeps people and activities going and prevents the collapse of action.
What is the outcome of improvisation?	The outcome of improvisation is survival and learning by doing understood as creation or upgrading of knowledge, skills and competency. Improvisation is a skill that fades if it is not exercised on a regular basis.

Figure 10. Understanding Improvisation in Organizations

Note. From *Houston, We Have a Problem: Anticipation and Improvisation as Sources of Organizational Resilience* (p. 3), by C. Rerup, 2001, *Comportamento Organizacional E Gestao*, 7.

Rerup (2001) examined an organization's ability to remain resilient while experiencing an unexpected incident by exploring the concept of anticipation. Rerup defines resiliency is "the ability to predict the future in order to prevent failures" (p. 27) and improvisation as "the ability to recombine chunks of past experience into new

patterns of action” (p. 27). He found that if any organization wants to prevent unexpected events from happening, it must create anticipatory skills. Further, if an organization wants to remain resilient, while handling an unexpected event, it must construct both improvisational and anticipatory skills. Figure 10 provides a framework for understanding how organizations improvise.

Rerup (2001) explored two sources of organizational resilience: (1) the ability to forecast the future in order to prepare for its outcomes and (2) improvisation, which is the ability to chunk together past experiences into new patterns of action. He posits that improvisation is relative to resilience because it’s not possible to know in advance all dangers that could potentially depose one’s organization. If an organization wants to remain resilient, when faced with unexpected events, it must cultivate both improvisational and anticipatory skills. His study examined NASA’s Fifth Mission, the mission to the moon that resulted in no loss of life and created resilience through improvisational and anticipatory skills.

Examples of improvisation and resilience can be found in the detailed findings in the Family Service of Morris County office of Morristown Study dated September 11, 2001. While a high number of New York City Firefighters (FDNY) had been examined for posttraumatic stress disorder, only 14 percent met the criteria to be diagnosed with having this disorder. The study concluded that the low rate was a result of the firefighters’ resilience. McKinsey (2002) conducted an in-depth study on how the 9/11 events affected the FDNY. For this study, McKinsey conducted more than 100 interviews with FDNY personnel who responded to the 9/11 incident and listened to more than 60

hours of communication tapes. He spent more than 1,000 hours working with FDNY personnel to finalize the report for the study. His findings are as follows:

- **Leadership** established good command and control during the first minutes of the incident. However, some units responded directly into the towers and failed to report to the staging areas. Therefore, senior management could not properly track its personnel.
- **Confusion** was initially observed between the World Trade Center One (WTC1) and World Trade Center Two (WTC2). However, the responding units entered in a controlled and orderly way.
- **Communication** problems hindered the leadership's ability to communicate.
- **Personnel** inside of WTC1 did not hear orders to evacuate when WTC2 collapsed.
- **Interagency coordination** was minimal.
- **Resource management** was complex, they had too many resources to manage and lead.

The investigative report made recommendations for improvements. The findings can be construed as “measures to increase resiliency” and are as follows:

- Increase operational preparedness:
 - Expand use of incident command system.
 - Further develop the agency's operation center.
 - Create incident management teams.
 - Deploy a flexible recall schedule.

- Seek formal mutual aid agreements from other agencies.
- Modify and enforce staging protocol.
- Expand hazmat capabilities and reevaluate other special operation capabilities.
- Improve planning and management:
 - Enhance the department planning and operation process.
 - Expand and reorganize the operational planning unit.
 - Improve communications and technology capability.
 - Revamp the communication and technology management process.
 - Immediately address urgent needs.
 - Improve ability to disseminate immediate information.

Whether these new procedures can be tested in a real-life incident as volatile as 9/11 remains unknown at this time. The suggestions listed by McKinsey were one approach at improving an organization's ability to endure and operate in horrific conditions. It is important to understand that FDNY continued to operate during the 9/11 incident and was without sufficient command, control, workforce, and equipment (Golway, 2002).

Kendra and Wachtendorf (2002) also studied the resiliency effects of the FDNY after the attacks of September 11th, 2001. They found that the key resilience attribute was that the emergency management organization had not been destroyed. The FDNY continued its operations, as an organization, doing what its members knew how to do—respond to emergency calls and provide service to the public.

Freeman, Hirschhorn, and Maltz (2002) studied the September 11th, 2001, effects on a company based in one of the World Trade Center towers—Sandler, O’Neill & Partners—a firm that lost 30 percent of its workforce in the collapse and was expected to close its business. However, within one year, the firm was fully operational and doing better than before the attack. The study largely credited the firm’s moral purpose to bounce back. The study also credited the ability to secure help (additional money was donated from around the world to help damaged businesses). Freeman et al. (2002) referred to a “pool of opportunity,” since death and destruction created voids and opened new leadership opportunities that were filled without guilt because of its connection to moral purpose. The firm was able to operate and do better than expected in spite of catastrophic and very painful loss.

Woods (2004) describes a system’s resilience as having the following criteria: (1) a buffering capacity, which enables a organization to absorb or adapt to change within a major breakdown; (2) flexibility, which provides the resolve to restructure due to outside pressures; (3) margin, which is the closeness of the organization’s operational distance to another kind of performance boundary; and (4) tolerance, which helps the structure to withstand pressures. Woods refers to the process of managing resilience as “resilience engineering.” He theorized that managing an organization’s resilience should involve assessing the threats to organizational decision making, monitoring any drift toward failure boundaries, and monitoring the organization’s ability to keep an eye on risks. This type of resilience engineering should seek to develop and manage practices to measure sources of resilience. Resilience engineering, according to Woods, can be used to assist

organizations to develop tools to support sacrifice decisions across production/safety tradeoffs in order to help ensure survival.

Complex Adaptive Systems

California's Northridge earthquake caused severe damage and killed many in Southern California in 1994. The disaster response system that took effect, according to Comfort (1994), illustrates the "vital characteristics of a complex, adaptive system—a capacity for learning from one set of conditions and actions and incorporating that new facts into the decision-making process for the next stage of action" (p. 168). During this process, the system balances chaos and order, anticipation, and resilience (1994).

Some believe that "the environments are largely invented by organizations themselves [because] ...they select their environments from ranges of alternatives, then they subjectively perceive the environments they inhabit" (Starbuck, 1976, p. 1,069). Arizona State University Center for Environmental Studies (ASU Joins, 2002) found that resilience researchers are interested in complex adaptive systems and that these types of units are unique in developing resiliency within organizations.

Comfort (2001) defines self organization as the "capacity to adapt to new information and reallocate resources and action accordingly" (p. 119). In her research, she cites Kaufman's (1993) study describing all types of systems as operating on a continuum between order and chaos. Systems at either end move toward the center, known as the edge of chaos, "where there is sufficient order to hold and exchange information, but sufficient flexibility to adapt to changing environment ... at the edge of chaos, organizations are able to adapt most successfully to changing demands for the

environment” (Kaufman, 1993, p. 120). Kaufman describes this process as self-organization, where change in behavior was initiated by the actor, not by any outside entity.

The purpose of this study is to explore how the aforementioned elements play into the AF-DTO’s ability to operate in situations described as a chaotic state under severe distress. A major goal of this study is to determine if the AF-DTO was able to learn from incoming data in this dynamic environment and, in turn, alter significantly the operating context of organization’s ability to respond to threats.

Sensemaking and Mindfulness in Organizations

Consistently, Weick rises to the top of the research list in review of resiliency literature (Hammonds, 2002). He coined the phrase “sensemaking” and applied it to a variety of organizational settings and situations (Weick & Sutcliffe, 2005). In his 1998 article, “Enacted Sensemaking in Crisis Situations,” he defines crises as “characterized by low probability/high consequence events that threaten the most fundamental goals of an organization” (p. 305) and argues that in order to counteract catastrophes, one must “reduce tight coupling and interactive complexity” (p. 316). Smith (2002) supports Weick’s theory on sensemaking and its relationship to resilience and theorizes the importance of developing routines and role structures. Smith explains the significance of these routines and role structures in halting the eroding of organizational resilience by inhibiting an effective response from those responsible for controlling events.

Similar to the idea of sensemaking is the idea of mindfulness. Fiol and O’Connor (2002) describe mindfulness as “a way of seeing the information gained through

scanning, a way of evaluating that information, and a way of acting on it that contrast[s] with many of the assumptions of traditional approaches” (p. 13).

McCann (2004) connects organizational resiliency to an organization’s agility through four characteristics, one of which is sensemaking. He describes sensemaking, in the organizational resiliency context, as the process of scanning and interpreting large amounts of diverse data and then rapidly creating a hypothesis and mental model about what the organization is experiencing. This ability to connect the variable of organizational agility to the sensemaking construct of organizational resiliency is supported by research.

In contrast, Comfort (2001) argues that sensemaking can fail in organizations. She describes the 9/11 attacks in terms of the flights from Boston and Dulles, which were controlled by hijackers. The passengers and crews were unable to make sense of the immediate situation because they were coerced into following the hijacking procedures and unable to make sense of what was going on to act differently. “In each instance, the crews and passengers on these planes faced unimaginable events. They did not recognize the risk and were unable to act to avert danger” (p. 116). However, Saveland’s study (2005) found that sensemaking is an evolutionary aspect of organizational change and explained it as being the most important factor in situational awareness and the mindfulness of high-reliability organizing. In this case, United Airlines Flight 93, which crashed into the Pennsylvania field, exhibited sensemaking; the passengers became aware of the situation and the hijackers’ intent and acted appropriately. These brave passengers

acted together, exhibiting a form of an organization making sense of its environment and conditions of survival.

Hinrichs and Tenkasi (2002) state, “Organizational systems, structures, and relationships provide a foundation for effective sensemaking” (p. 24). Organizations are susceptible to stress. “Organizational environments are uncertain and contain important patterns of strain” (Drabek, 1989, p. 151). Drabek credits managers for learning to be aware of various organizational complications and developing methods for overcoming those complications. Hence, organizations “morph” into their environments; they have the ability to adapt. Hatch (1997) describes isomorphism (also called requisite variety), which is a belief that organizations match the complexity of the environments they find themselves within—even those environments that are extremely challenging or out of the ordinary. Lagadec explains, “Our ability to deal with chaos depends on structures that have been developed before the chaos arrives. When the chaos arrives, it serves as an abrupt and brutal audit: at a moment’s notice, everything that was left unprepared becomes a complex problem and every weakness comes rushing to the forefront. The breach in the defenses opened by crisis creates a sort of vacuum” (Lagadec, 1993, p. 54).

In high-risk industries, failures, mistakes, and errors will often not be tolerated due to the potentially catastrophic outcome associated with mistakes. To overcome these problems, such organizations prudently develop alternatives to experimentation and trial-and-error learning. They must learn as much as possible from problems, transfer learning across organizations, and develop their processes based on proactive learning (Carroll, 1998a; Weick et al., 1999, p. 1). There are two elements that distinguish complex systems

from other system forms: (1) the capacity to avoid the harshness of entropy by importing energy and information and (2) the capacity for “self-organization.” Self-organization concerns the ability to internally produce the means for renewal and regeneration (Kiel, 1994).

The High-Reliability Organization

The high-reliability organization (HROs), according to Aase, is “characterized by the overall demand for high reliability because of their unique potential for catastrophic consequences” (p. 7). Aase provides the following examples of HROs: nuclear power plants, energy utility plants, transportation systems (aircraft, space shuttles, shipping freights), chemical plants, offshore installations, and large construction projects (p. 7). Similarly, Weick (1999) defends HRO’s placement in organizational writings because it allows the reader to understand these types of organizations and their effectiveness during difficult times. Aase advises that “the relations between high-risk organizations and organizational effectiveness, organizational learning, or organizational knowledge should be explored in further depth” (p. 7). Scott (1994) asserts that high-reliability theory is valuable for organizations to explore because it allows industries working in dangerous environments (nuclear power plants, etc.), to remain alert and successful. These organizations focus more on the things that could destroy them, than how to advertise or market a product. They are always at risk of failure (Vogus & Welbourne, 2003) and find themselves in complex, rapidly changing, and tightly coupled environments that demand their utmost attention because their first error can destroy their entire organization. This is a process often referred to as a tightly coupled system (Perrow, 1999) and is described as

“spun so tightly” that few possible substitutions or buffers exist to release strain. Therefore, it becomes reliability seeking (Vogus & Welbourne) to prevent failure (D’Aveni, 1994).

Weick and Sutcliff’s (2001) book, *Managing the Unexpected*, promotes key concepts that organizations may adopt to manage uncertainty, including cultivating humility, being glad when you’re having a bad day (so you can learn from it), creating an error-friendly learning culture, developing skeptics (who can point out things others may not see), being suspicious of good news, seeking out bad news, treating all unexpected occurrences as information, and spreading this information widely (Iverson, 2002). Weick (2004) presented a workshop on HRO tactics for the U.S. Forest Service (USDA, 2004), stating, “Mindfulness is the passkey into high reliability organizing” (p. 14). It’s imperative that workers in an HRO strive to see more, view more, learn more, do more—and most importantly, don’t become complacent. HROs can accomplish this through five central processes encouraging a self awareness and willingness to learn, which are: failures, simplifications, operations, resilience, and distributed expertise. Weick provides further details on the fourth item, resilience.

According to Weick (2004), the HRO will maintain a commitment to resilience—and seek out what may go wrong, and prepare plans, and contingencies to work out catastrophic events. Weick interchanges the word “resilience” with “reliability” and describes viable actions that a reliable system follows in order to sustain its existence. These actions include conducting a short study, developing a speedy trust, conducting just-in-time learning, fostering psychological stimulation, and working with fragments of

potential relevant preceding incidents. Weick supports the notion that HROs actually need “near misses” to learn how to react and act toward the unexpected. HROs are successful when they trust others with more experience and expertise to make decisions. These and other actions are visually described in a diagram for high reliability.

La Porte and Consolini (1991) theorize that HROs facilitate by

reporting errors without encouraging a lax attitude toward the commission of errors; initiatives to identify flaws in standard operating procedure and nominate and validate changes in those that prove to be inadequate; error avoidance without stifling initiative or operator rigidity; and mutual monitoring without counterproductive loss of operator confidence, autonomy and trust. (P. 29)

According to Clarke (1993), HROs have almost-certain safety—that is, organizations operating in this capacity are error free. He maintains that HROs contain certain characteristics that presume that the organizations are learning from themselves (or intrinsically).

O’Connor and Fiol (2002) support Clarke’s contention that HROs encourage reporting of errors in order to learn to improve their organizations. These types of organizations are decentralized and tend to push decisions down to the lowest level in order to bring about a quick decision. La Porte and Consolini (1991) define redundancy as “the ability to provide for the execution of a task if the primary unit fails or falters” (p. 84). They describe the landing of military craft on the deck of an aircraft carrier and how almost everyone on board bears some responsibility for each landing’s success and that this process is part of a continuous loop of confirmation and communication that occurs at once over many channels. Redundancy enhances organizational reliability/resiliency.

Smart (2003) states, “The theory of HRO design is well placed to inform organizational design where performance reliability and safety are critical and that failure is simply not an option” (p. 735). His work lists catastrophic tragedies—including Chernobyl, Exxon Valdez, Bhopal, and the Challenger—and posits that these types of events have led to efforts to understand them better. Within the high-risk organization, one might presume that leadership from a certain individual was responsible for the organization’s resilience. Schulman’s 1996 study, *Heroes, Organizations and High Reliability*, found that not to be the case. Schulman reviewed extensive interviews conducted at a nuclear power plant and found that no heroic tales existed. In fact, the findings concluded that the culture of the organization was anti-heroic, and the message of the organization was “don’t be a hero.” A hero was thought of as a “cowboy,” a rough individual who could bring more damage to the organization than good. Rather than depending on heroes, organizational resiliency appears to depend on an organizational preparedness among all members of that organization.

Perrow’s (1984) Normal Accident Theory (NAT) postulates that when organizations are involved in dangerous work, failure is to be expected. That is, failure is inevitable in tightly coupled systems. In contrast, Roberts (1993) later cited work conducted at Berkeley’s school on HRO theory, and found, when certain organizational strategies are set in place, one can achieve outstanding results without failure. Sagan (1993) concluded that NAT offered the best explanation of the study of U.S. nuclear weapons. He felt comfortable in his research because the nuclear close calls (i.e., near misses) could have escalated into full-blown nuclear war, but “good luck” prevented near

catastrophes. While NAT is a theory that justifies failure, HRT offers substance for helping to prevent failure (Rijpma, 1997). Other researchers (i.e., Weick) credited redundancy as an important factor in minimizing failure.

Rijma (1997) offers an argument against redundancy, believing that “it may increase complexity ... redundant information gathering may lead to ambiguity and conflicting perceptions” (p. 20). The study and understanding of HROs, abilities and secrets continue to grow with awareness within the research community (Schulman et al., 2004). However, despite an implied connection between HROs and resilience, Sutcliffe and Vogus (2007) contend that reliability may not be an appropriate relative term in the framework of resilience: “resilience and reliability are not identical constructs. Future work should more clearly compare and contrast reliability and resilience and the mechanisms by which they are achieved” (p. 321).

Organizational Failure

Marion (2000) describes and focuses on three types of organizational failure: failure in startup organizations; failure attributable to major technological shock or similar catastrophic changes; and failure of mature organizations, upon which the author focuses her writing. The literature does not consider public organizations, especially those that have no choice but to continue to operate like many public safety agencies and organizations worldwide. Failure for these types would be catastrophic not only to the organization itself, but also to those who are charged with serving and protecting. However, Fortune (2005) describes how most organizations that fail, or make major mistakes, do not keep track or record of those mistakes, and the failings continue over

time because the organizations fail to learn from its mistakes. Porter (1985) sees competition as being the core of organizational success or failure. Wildavsky (1988) theorizes that organizational learning occurs through small-scale trial and error. From this small-scale trial and error comes a form of organizational learning that most theorists recognize (Smart, 2003). Human beings "...cannot behave with perfect rationality, [but] intelligently designed organizations can do so by compensating for human fragility. In doing so, organizations behave more rationally and effectively than individual human beings" (p. 736).

When a DTO makes a mistake, thereby losing some or all of a shipment of narcotics, it learns from that mistake. Schwandt and Marquardt (2000) posit that organizations that are able to adapt quickly and continuously will be able to survive. Those structures that will not or cannot learn by adapting to events will falter. The ability to adapt and reinvent is a key indicator of survival: "by increasing the speed and quality of their learning they can succeed in a rapidly changing global marketplace" (p. vii).

Comfort (2001) conducted a study in her 1999 book, *Shared Risk: Complex Systems in Seismic Response*, in which she describes four conditions that affect the emergence of response systems under threat. (She included terrorist organizations in this theory and suggests that it also applies to DTOs, which are often characterized as terrorist organizations.) These four conditions are as follows:

1. Articulation of commonly understood meanings between a system and its members;

2. Sufficient trust among leaders, organizations, and citizens to enable members to accept direction;
 3. Sufficient resonance between the emerging system and its environment to gain support for action; and
 4. Sufficient resources to sustain collective action under varying conditions
- (Comfort, 2001, p. 121).

Comfort describes how important trust is to the process and the organization to overcome uncertainty. She further describes various types of systems, such as: emergent adaptive systems, operative adaptive systems, and auto-adaptive systems. When describing the terrorist events of 9/11, she posits that the flight from Boston, which flew into the World Trade Center, was not an adaptive system because sensemaking collapsed. In the alternative, the flight from Newark illustrated an emergent adaptive system; the passengers knew their fate and crashed the plane into an open field. She further describes an operative adaptive system as federal agencies responding to the attacks with rapid mobilization. These are valuable descriptors of organizational types that may help further our understanding of resiliency within the AF-DTO by demonstrating characteristics similar to those discussed by Comfort. “Devising and testing measures of fragility and resilience in organizational systems will contribute significantly to our ability to maintain self-organizing, auto adaptive emergency response systems” (Comfort, 2001, p. 124).

High-Reliability Theory

Smart et al. (2003) reviewed research and case studies on HROs. The researchers spanned the globe looking for an existing study on high-reliability theory based on their

assumption that findings must exist on tragedies such as Exxon Valdez, Chernobyl, the Challenger, etc., found that scholars had studied these types of incidents. The general consensus was that HROs, which they also refer to as failure-free, feel “the need effectively to pursue seemingly paradoxical courses of action simultaneously” (p. 736). Simply stated, personnel are trained to perpetuate and accept the fact that if they see a problem, they “own” it and must find a way to fix it, or find somebody else who can. Taking full responsibility is hallmark of a high-reliability culture (HRC). The HRC creates a value system that rewards, rather than punishes, a member for finding failure.

A group of researchers working at the University of California, Berkeley, are credited by Smart et al. (2003) for being largely responsible for HRT. The Berkeley researchers identified key design features that they believe can form a template for catastrophe aversion, which include:

1. The political and organizational leadership prioritizes extreme reliability.
2. The prime cultural norm labels any action jeopardizing reliability as “a disgrace.”
3. Standard operating procedures and clear hierarchies are specified (i.e., a task-based approach is taken to organizational design).
4. Zero tolerance is applied to any feature impacting this task-based view in order to eliminate cascading error.
5. Continuous organizational learning is practiced using trials without major errors.
6. System redundancy is achieved by resourcing to peak rather than average loading.
7. Collegiality and inverted hierarchy occur in periods of high loading.
8. Continuous innovation occurs in times of average loading.

9. Continuous training emphasizes coordination through shared ideology.
10. Interdependence and reciprocal coupling are key structural features.
11. “Alertness,” “attention,” and “care” are emphasized as key operational performance characteristics (Weick 1993) leading to the creation of a “collective mind” (Smart et al., 2003, p. 736).

Smart et al.’s research found that, despite all efforts to avoid catastrophic events, errors do occur and serious accidents are rare but, overtime, inevitable. According to Brown’s (1993) theory, the best one can hope for is a near-error-free environment. Other researchers (Sutcliffe & Vogus, 2003) found that a near-error-free environment can be accomplished by optimistically adjusting to present adversity, which, in turn, strengthens the organization’s capabilities to make future adjustments.

Learning from Colombian DTOs

Colombian DTOs have been in existence longer than the AF-DTO. In fact, the AF-DTO has depended on Colombian DTOs for drugs and replicated much of the operational structure of their counterparts in Colombia. Therefore, an understanding of Colombian DTOs, through the review of archival documents, is an important factor in understanding the historical success of the AF-DTO. A review of this literature is essential in understanding the AF-DTO and will assist in answering the questions posed at the beginning of this study.

According to Kenney (2001), the Colombian DTOs are some of the most resilient in the world. He states, “While a number of government officials and researchers have long recognized the flexibility and resilience of Colombian trafficking enterprises, there have

been no attempts to develop a systemic, learning-based explanation for how these criminal organizations respond to state counter-narcotics efforts” (p. 3). In his research, he uncovered that Colombian DTOs alter their behavior in response to previous experience and new information. Then they store this knowledge in procedures and routines, including the collective memory of participants, and select and retain innovations that create positive results. In short, DTOs learn, and in doing so, they become more effective, while making it more difficult for the government to shut them down. Kenney credits organizational learning, which explains why the drug industry persists in Colombia, despite various successes against them by both the U.S. and Colombian governments. Kenney details the types of learning, in both tactical and strategic routines, that benefit the Colombian DTOs. Tactical routines may involve changing communication rules, processing practices and transportation routes, and developing new procedures for drug distribution. Strategic routines involve more long-term thinking, such as diversifying into new products and markets and restructuring organizational units and decision-making hierarchies. Kenney provides a practical example: “Colombian narcotics organizations learn when participants gather, interpret and apply information to collective behavior through organizational practices and procedures” (p. 6). Colombian DTOs move through additional phases of organizational learning, which involve acquiring information (counter-surveillance), recording and storing information through organizational memories, interpreting knowledge and experience, and applying knowledge and experience. Despite the success noted by Kenney of some Colombian DTOs, Kenney also notes that some DTOs in Colombia fail

to learn and are destroyed. The resilient ones remain because “they continue to possess the knowledge, skills and experience necessary to outwit their many licit and illicit competitors” (p. 30). Kenney also helps us better understand the dynamics of resilience within a successful DTO. A system within a system is at play, and this subsystem is called “information.” Information includes counter-drug intelligence, drug intelligence, strategic intelligence, operational intelligence, and tactical intelligence. This formal structure fits into the proposed structure of the AF-DTO.

Kenney (2003) studied the Colombian trafficking enterprises and the difficulty of authorities penetrating them. His research is relative to the study of the AF-DTO because it attempts to answer the questions about why we have yet to dismantle an organization that exhibits resiliency. Kenney provides the following insights revealing why it is difficult to gather the needed information required to fight DTOs. First, it’s very hard to infiltrate these organizations to gain information. Imagine the difficulty our government has today infiltrating terrorist organizations. DTOs’ practices and activities are designed to minimize their exposure to authorities. Second, various structural features of DTOs make them difficult for undercover agents to infiltrate the upper level of leadership. Usually only close family levels are at the top of DTOs. Third, they have compartmentalized structures that work as discrete cells that rarely interact with other parts of the organization. Fourth, authorizations (which are legitimate) are bound by rules and laws of gathering evidence and taking action, but DTOs are not constrained by formal rules or laws and can bend and break rules to best suit their needs.

When we think about drug trafficking, we often think of cocaine, Colombia, and the resilience of Colombian DTOs that have operated for decades. “In spite of significant government efforts to identify, disrupt, and dismantle these transnational enterprises, today the Colombian narcotics industry produces more cocaine and heroin than ever before” (Kenney, 2001, p. 1). But we don’t have to look that far to find large, resilient DTOs; we simply need to look across our southern border into Mexico.

According to Kenney (2003), authorities have begun to use innovative measures with limited luck. Law enforcement will pay informants for information. These informants are often criminals, but it is a great way to get needed information. However, informants with intimate knowledge of the leadership within DTOs are limited. The DTOs trust only those within their inner circles. Informants have also been found providing false information deliberately to authorities to obtain quick cash. Success, limited in obtaining physical evidence, is enhanced greatly when using electronic surveillance at the tactical and operational levels. Such surveillance includes various eavesdropping technologies: telephone taps, telephone transmitters, simple transmitters, laser interceptors, satellite relays, and radio telemetry. Another successful tool is the pen register, which traps and traces devices to record phone numbers. For law enforcement to be successful in using these tools, they must be quick: “counter-drug intelligence is time-sensitive” (p. 226). On the flip side, DTOs also use intelligence in order to “allocate resources, exploit market opportunities, and improve their drug production, transportation, and distribution technologies” (p. 227). They go as far as collecting information about the latest interdiction and enforcement strategies. To do this, they

employ their own undercover operations, surveillance, and research. According to Kenney, they use various sources, including government documents, court records, media reports, and literature on military and police operations. To the hindrance of U.S. efforts, criminals benefit from the U.S. Freedom of Information Act; it enables them to retrieve detailed information about investigations and operations. This is done to reduce exposure to counter-narcotic efforts by learning how authorities operate (Cash, 1993). What must be considered is that law enforcement must follow the law when conducting business; the criminals don't, which allow them great efficiency at gathering information. DTOs are not worried about violating someone's civil rights or failing to show probable cause for a search or detention; law enforcement is therefore constrained in the same area of intelligence gathering, and other areas of operations.

CHAPTER 3: SUMMARY OF METHODOLOGY

Overview of Methodology

Organizational resiliency within the AF DTO will be studied in the context of a case study. Stake (1995) defines case study research as “the study of the particularity and complexity of a single case, coming to understand its activity within important circumstances” (p.11). Yin (1994) provides a more extensive definition of case study research: “A case study is an empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident” (p. 13). The level of analysis is at the organizational level. This researcher explored the essence and experience of organizational resiliency within the AF-DTO, from the time it was first recognized as a DTO by the U.S. federal government through 2007.

Yin (1994) argues that case study research is a comprehensive research strategy that relies on multiple sources of data. Here the data need to corroborate one another in a triangulation manner. Case studies have included many different types of data, both quantitative, qualitative, current, and historical. One methodological approach is a combination of sources and types of data used to describe, analyze, and evaluate interactions within a particular context. In fact, a case study is an ideal methodology when a holistic, in-depth exploration is desired (Feagin, Orum, & Sjoberg, 1991).

The methodology for this dissertation evolved from different sources, such as: the author’s professional work combating DTOs; an intrinsic framework based upon Stake

(1995); and a descriptive case study model based upon Pyecha (1998). The triangulation method recommended by Denzin (1984) will be applied to control for bias.

Cresswell (1998) describes the importance of having a key focus for case studies. The focus of this case study was to develop an in-depth analysis of a single case, as described above. The discipline is primarily sociological, because the modern study of organizations has been driven mainly by social science variations of natural science models (Audet, Landry, & Dery, 1986; Behling, 1980). Data was collected from multiple sources, including documents, archival records, interviews and observations. The data were descriptive and showed themes and assertions. The narrative form is an in-depth study of a single case. Thoughtfulness was given to construct validity—both internal validity and external validity—and reliability (Yin, 1989). Creswell (1998) states, “a case study is an exploration of a ‘bounded system’ or a case (or multiple cases) over time through detailed, in-depth data collection involving multiple sources of information rich in text” (p. 61).

Yin (2003) believes that case studies are best suited for divulging information from a study involving a phenomenon. As the researcher, there were no controls over the documents reviewed. The timeframe allotted for the proper review period and covers the years from 1980 through 2007. The procedure used is outlined in the following:

Wiersma (2000) describes the four main steps of research: (1) identifying the research problem and creating questions and hypotheses; (2) collecting and evaluating data; (3) synthesizing the information (which may help reformulate the research

questions); and (4) analyzing and interpreting the information and drawing conclusions. This researchers listed below describe different types of case studies.

In one case study, the researcher studies a phenomenon and looks to clarify the cause of the phenomenon (Strasser, 1969). Phenomenology is a research tradition that allows for the understanding of experiences of a phenomenon (Creswell, 1998). The question arises as to how to keep records when using the case study procedure. The answer to this question has been answered by the following researcher:

Yin (1994) listed six sources of facts for record gathering in the case study procedure: documentation, archival records, interviews, direct observation, participant observation, and physical artifacts. All do not need to be used in every case study (Yin, 1994).

A significant problem in data collection of data existed because the AF-DTO is a secretive and illegal organization that protects its information. Obtaining accurate data directly from the AF-DTO organization were, at times, challenging to obtain, but not impossible. Therefore, the study depended on official records from authorities who conducted investigations into the AF-DTO. This methodology sufficed because similar data were used by various judicial systems to prosecute members of the organization or to further exploit information from the organization. This was the most reliable information found. If, on the other hand, data were to be provided directly by the AF-DTO, one may easily question its truthfulness, since its authorship would be from a criminal organization that lacked credibility due to the nature of its operations and possible fear of having such information used in their future prosecution in a court of law. A central

feature of creating case study methodology involves the ability to identify probable sources of evidence (Yin, 2003). Considering that fact, the author of this dissertation examined archival records. The records were obtained from various sources: open sources (such as the press or government documents on the web) and court documents used in actual court cases filed against the AF-DTO. Historically, AF-DTO has been in power for over 20 years. Consequently, these documents were vital to the study's success in understanding the resilience characteristics. Despite the significance of these documents, other problems may exist.

Yin (2003) asserts that problems can exist in obtaining difficult-to-find information, and other data may be incomplete, inaccurate, or misleading. To help minimize these potential problem areas, data were thoroughly scrutinized and researched from a nongovernmental source. Hodder (1994) asserts that such material provide diverse insights from the data provided by questioning the participants.

Yin (1994) recommended that one possess a specific set of skills: the capability to ask high-quality questions and to infer the responses, be an outstanding listener, be flexible so as to react to potential situations, have a good handle on the subject matter, and be unbiased by predetermined thinking. Other researchers suggest that a good research study must function like a lead examiner (Feagin, Orum, & Sjoberg, 1991).

If the researcher is to function like a lead examiner, then, knowledge about where to obtain the data is crucial. To help the lead examiner, Yin (1994) also lists six main topical areas of a case study, but not all must be used. These six areas include

documentation, archival records, interviews, direct observation, participant observation, and physical artifacts.

The researcher for this dissertation used the following areas outlined by Yin (2003): documentation, archival records, and interviews. Direct observation and participant observation are too dangerous for this type of a study, and physical artifacts are not relative. He states that the purpose of using this gathering technique is to arrive at facts.

Data Collection

Kvale (1996) describes the following seven stages for conducting in-depth interviews: thematizing, designing, interviewing, transcribing, analyzing, verifying, and reporting. Thematizing is simply defining what one wants to investigate in order to help clarify what one will look for. Designing is the process of creating an interview guide (which includes a face sheet, questions, and a post-interview comment sheet) to help the study stay focused. Interviewing is the actual phase of collecting information and involves active listening, patience, flexibility, and audio recording. Transcribing is the act of placing the text into an arrangement that can be examined. Analyzing is the next phase, which involves looking for themes, relationships, patterns, and so forth. The verifying stage is simply checking the work and data to ensure credibility and validity using triangulation (in this study, triangulation occurred by having an expert in the field of the AF-DTO read through the transcripts). The final stage, reporting, involved completing the written report section of the dissertation.

Seidman's (2006) three interview processes will serve as the primary method for gathering the data for the interview process. However, for the purpose of this interview, I modified the interview process by removing the third interview and simplifying the first and second interviews by focusing only on resiliency characteristics of the AF-DTO. This process consisted of familiarization, deep data collection, and reflection. According to Yin (1984), open-ended interviews are best because they allow for greater depth of data gathering and increase the quantity of sources. Using the in-depth style, 10 interviewees were interviewed for this dissertation. According to Kvale (1996), it would not have been possible to make penetrating interpretations if a larger number of subjects were interviewed.

Rubin (1995) found that effective interviews generally go through seven stages. These stages may blend into one another or can be dispersed throughout a series of interviews. The stages simply provide guidance on how to deepen the interview relationship and make certain that the process is taking place at the appropriate level. The stages include (1) creating a natural atmosphere for an informal chat; (2) making sure that the interviewee is capable to answer the questions; (3) showing a level of understanding and the aptitude to provide follow-up questions; (4) encouraging the participant to talk at length and then become more precise; (5) moving into asking more difficult questions; (6) not allowing your subject to feel worried or isolated while answering difficult questions; and (7) closing the interview by showing appreciation. You may also move into more casual talking as a way of winding down the interview (Rubin & Rubin, 1985). Prior to conducting the interviews, epoche was performed. Epoche is a practice of suspending

one's beliefs and redirecting, followed by letting go, in order to conduct an impartial interview (Husserl, 1913).

Seidman's interview processes (albeit modified for this study) will proceed in the following manner:

- **Interview 1** established the context of each participants' experience observing resiliency within the AF-DTO. This interview involved inquiry into details that were relevant to identifying core resiliency characteristics.
- **Interview 2** probed the details of their personal experience with observing or theorizing resiliency characteristics with the AF-DTO and what factors led, or did not lead, to successful operations. The focus was on the concrete details of the participants' experience. Participants were asked to talk about their knowledge and interaction and to place their experience in the context of the study.

Participants were asked to reconstruct details, events, and operations and explain specifically what worked and what did not work when combating, investigating, or prosecuting the AF-DTO.

Throughout the interviews, the researcher primarily asked open-ended questions focusing on resiliency within the AF-DTO. A portion of these open-ended questions were anchored within findings from the Canadian Royal Mounted Police study examining core characteristics of criminal organizations. While a portion of these were used for coding the responses (if associated with the interviewees' comments), the researcher also pursued new codes that emerged from the data collection. Richards (1999) discussed

these characteristics and labeled them as relevant to Mexican drug trafficking organizations. The fourteen core criminal characteristics are as follows (Richards, 1999, p. 4):

1. Corruption: The use of illicit exploitation of weaknesses and the blackmail of public and prominent figures.
2. Discipline: The enforcement of obedience to the organization through fear and violence.
3. Infiltration: The continued effort to gain a foothold in legitimate institutions to further profit or gain a level of protection from detection.
4. Insulation: The protection of the organization's leaders by separating leaders from soldiers, cell from cell, and function from function.
5. Monopoly: The control over certain criminal activities within a geographic area with no tolerance for competition.
6. Motivation: Power and influence resulting from the accumulation of wealth (this motivation separates organized criminal groups from terrorists, who are motivated by political or social gains).
7. Subversion: The undermining of society's institutions and legal and moral value systems.
8. History: Past experience, which has allowed entrenchment and refinement of criminal activities and practices.
9. Violence: Brutality used without hesitation to further the criminal aims of the organization.

10. Sophistication: Complexity of communication systems, financial controls, and operations.
11. Continuity: The continuation of leadership (like a corporation, the organization services the individuals who created and run it).
12. Diversity: A multiplicity of criminal activity types (organizations that do not depend on one criminal activity are more resilient).
13. Bonding: Connecting individual to individual, and individual to organization, for solidarity and protection, often through complex initiation rites.
14. Mobility: A disregard for national and jurisdictional boundaries.

This two-prong interview arrangement involved spacing each interview 1 week apart. Timing allows the participants to think about their interviews, but not so much time that they lose the connection (Seidman, 2006). The second interview allowed the participants to bring forward additional points left out in the first interview. The interviews were conducted over a 6-month period. Each interview lasted 20-90 minutes. No more than one interview was conducted per day. All participants progressed through the interview series during a 6-month period between April and October of 2007. Some interviews did not require a second interview since the information provided by the interviewee in the first interview was too limited to lead to rich follow-up, while some interviews did not require a second interview because the information from the first interview was significant and did not warrant further investigation. The interviews were recorded (for a portion of the interviews, based on the interviewees' comfort level with being reordered based on their law enforcement positions) and transcribed for the study.

When a recorder was not used, detailed notes to capture complete statements. Because the purpose of these interviews was only to identify resiliency characteristics, not all of the interviews took place face to face. In fact, many of the interviews were conducted over the phone. The follow-up interviews, in some circumstances, took place by simply having an interviewee submit additional details to me via email. The critical distinction in this study is that all interview questions focused on the organization's resiliency and not the individual AF-DTO drug traffickers' resiliency.

The participants were selected based on their experience with the AF-DTO, willingness, and ability (per employer's approval) to participate in the study. Each participants' backgrounds is fully detailed in Chapter 4. The interviewees encompass high-level law enforcement personnel, investigative reporters, and prosecutors with significant experience combating the studied organization. All participants have over 10 years of experience with the AF-DTO.

Data Analysis

A process of coding was used to evaluate the data using a program called ATLAS.ti. Durkin (1997) recommends using a type of program to best collect and analyze this style of data. ATLAS.ti minimized the time that I used in evaluating the data, without reducing its significance or validity. A few strict guidelines exist for when to stop the data collection process, such as, when resources are exhausted or when regularities appear; or when there is overextension (i.e., going beyond what is necessary) (Guba, 1978).

The recorded interviews were transcribed into computer text, per ATLAS.ti, were evaluated using horizontalization. I looked for patterns to be bracketed and labeled. Repetitive text was discarded, allowing for the remaining horizons to become the invariant constituents. This data (i.e., text) were clustered, thereby creating the core themes of experience (Moustakas, 1994). The data were organized into categories, followed by searches looking for connections and patterns between these categories, which are referenced as themes. After this process, an evaluation of the findings followed.

The data were stored on a work computer and backed up onto a rewritable CD-ROM. Any hard-copy notes taken were filed according to date taken. The hard-copy notes were scanned and placed into the same work computer and rewritable CD-ROM as backup. Copies were also emailed back to participants for their records. Lastly, updated copies of the dissertation were collected in the same manner.

By using the described proposed theoretical framework, I was able to form a basis for initial judgments on the collected information. However, these initial judgments changed slightly depending on the themes that arose from the modified Seidman three-interview process. While it is important to use a theoretical framework for an analytical case study (Mitchell, 2000), that framework may change form. The purpose of this format is to explore patterns (Huber & Van de Ven, 1995; Miles & Huberman, 1994) over the described time period and to explore concepts (Carley, 1993). These concepts can be found in both explicit and implicit forms and were coded appropriately in this study. The concepts are referenced in Table 1 using themes from the theoretical framework.

This research did not conflict with the Non-Medical Institutional Review Board (IRB) and did not require me to submit documentation because the study remained within its described format: i.e., conducting the modified three-interview stage of participants. Although the interviewees are human volunteers, the extent of their participation was providing voice interviews on record within a setting of their choosing. The researcher had no physical contact with these individuals, and the context of the interviews was within the scope of their permanent or previous employment. They were free to leave at any time and were not compensated for their participation.

It should be noted that the researcher completed the George Washington University (GWU) exam on IRB research in 2003. In 2006, the researcher submitted an inquiry to the GWU IRB office. At that time, the researcher was informed that this type of study did not qualify for their attention or assistance. According to the GWU IRB office, a full-board review of a study is required for studies that have greater than a “minimal risk” to subjects. A minimal risk is defined as when “the probability and magnitude of harm or discomfort anticipated in the research are not greater in and of themselves than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests” (U.S. Department of Health and Human Service, 2006).

Table 1: Themes from the Theoretical Framework

CONSTRUCT	VARIABLE	CODE
Adaptability	-Creative sophistication -Opportunistic	CS OP
Business Acumen	-Ability to organize the operational structure -Centralized leadership -Growth aggressiveness -Product/shipment control -Leadership development	OS CL GA PSC LD

Compartmentalized Structure	-Leadership protection -Decentralized components	LP DC
Optimistic	-History of success -Sense of entitlement -Confidence	HS SE C
Corruption	-Bribery -Blackmail	B BM
Diminished Societal Rule of Law	-Cultural glorification -Failure of government to govern	CG FG
International Reach	-Stable flow of product -Disregard for international boundaries -Networking/partnerships with international crime organizations	SP DB NPIC
Loyalty	-Internal discipline -Obedience -Control over personnel	ID O COP
Monopoly Goal Orientation	-Control over product -Kill competitors -Geographic control -Infiltrate competitors -Cooperation with adversaries of their enemies	CO KC GC IC CAE
Organizational Learning	-Refinement of activities -Mentoring and tutoring of membership	RA MTM
Recruitment	-Quickly replenish ranks -Higher salary than legitimate work -Large org membership -Member street smarts	QRS HS LOM MSS
Reputation	-Brutality -Attack on law enforcement and government -Revenge killings -Witness/victim intimidation -Creation of community of fear -Branding	BR ALEG RK WVI CCF BRA
Self Sustaining	-Financially independence -Legitimate business façade for money laundering and investments -Product and activity diversification	FI LBFM PAD
Situational Awareness	-Intelligence collection -Counterintelligence activity -Reduce visibility when needed -Deception tactics -Infiltration of legitimate businesses -Attention to minor details -Diligent	IC CA RVN DT ILB AMD DIL
Technology	-Technological superiority	TS
Trust	-Not trusting of outsiders -High family/org leadership trust	NTO HLT
Vast consumer base	-Vast consumer base buying product	VCB

Coding Legend

The coding legend was created from this study's literature review of organizational resiliency and the proposed theoretical framework. This study revealed additional constructs, variables, and codes.

Research Question

“A well-designed organization is not a stable solution to achieve, but a developmental process to keep active” (Starbuck & Nystrom, 1981, p. 14). The purpose of this study was to identify the resiliency characteristics of the AF-DTO and to ascertain whether these characteristics are applicable to this study's suggested framework. The questions explored are as follows: Does the AF-DTO operate as a resilient organization? If so, what are the organizational resiliency characteristics, and how do these characteristics protect and/or sustain the organization?

Scope of Data Collection

Specific types of data used came from a series of interviews with multiple people who have intimate knowledge of the AF-DTO. Other data in this case study derived from various open sources (journals, government reports, press, etc.). One area of data collection, which provided some challenges in both obtaining and reviewing data, was court documents. Court documents were a challenging area of data collection in both obtaining and reviewing. Some court documents can be extremely lengthy, numbering in the thousands of pages. Hence a thorough review of all of these documents was not possible due to time constraints. However, select court documents were reviewed, especially if recommended by interview participants (and obtained, where law allowed,

in spite of ongoing court action against AF-DTO defendants). The researcher created a timeline of events dating back to the earliest phase of data found. This timeline helped the researcher track and record the data accurately. The data were analyzed through the lens of this timeline and showed additional patterns not found in the interviews. The additional patterns were recorded and compared against those found among and between the interviews. These various patterns merged into the final analysis to provide inclusive data showing resiliency characteristics.

Criteria of Disciplined Inquiry

According to Sutcliffe and Vogus (2003), organizational resilience fits within the realm of psychology:

Positive psychology emphasizes the study of how people flourish, facilitating the good life and nurturing talent. Resilience is well established in this tradition as essential virtue, and embodiment of flourishing, and as both the source and result of efficacy and mastery. (P. 7)

Sutcliffe and Vogus also added that resilience is invoked in organizational theory, but insufficiently theorized. Nonetheless, for the purpose of this study, I have chosen to anchor it within sociology because “[the] modern study of organizations has been driven mainly by social science variations of natural science models” (Audet, Landry, & Dery, 1986; Behling, 1980). Although parallels of resilience exist at both the individual and group level (Sutcliffe & Vogus, 2003), this study maintained its focus on the group (i.e., organizational) level.

As explained by Yin (2003), four criteria are necessary to ensure the merit of a case study. These four criteria were strictly met during this study: construct validity, internal validity, external validity, and reliability. Construct validity is a vital component

to the researcher's ability to create a fair list of procedures used to gather information, while ensuring that the researcher maintains a fair approach. Internal validity, creating inferences from analysis, was accomplished by having an expert in the field of the AF-DTO review the codes that emerge from the data collection. The researcher used a coding agreement of 80 percent to ensure compliance, and diminish the possibility of researcher bias, as suggested by Fraenkel and Wallen (2000). The third criterion, external validity, establishes the generality of the findings. The study used a model created by the researcher and based on Weick's study of organizational reliability. However, this model was fluid and was expected to change upon final review of the findings. The researcher also used other theorized models listed in the literature review section to help identify core areas of focus. Reliability, the final criterion, was met through my assurances that others could replicate this study by following the detailed instructions and processes. The final results have been displayed in a text format detailing the key findings in visual boxes consisting of organizational resiliency characteristics followed by a detailed description of each in narrative form.

Limitations of this Study

Lincoln and Guba (1985) note that within a case study, a researcher may oversimplify or exaggerate the information, which produce inaccurate findings. To avoid these kinds of mistakes, it's vital that the researcher be aware of subjectivity during the gathering and examination of data to reduce the potential of distorting the actual findings. Within this study, the writing was completed at the researcher place of employment; however, the data were collected from professionals throughout the United States and

Mexico via phone and in person. Despite the various data collection locations, the study maintained its focus on one entity, using an approved method of questioning, in conjunction with the same recording equipment to ensure uniformity of the method.

Yin (2003) discusses one of the more common limitations of a case study: the difficulty of generalizing findings. He posits that case studies should not be generalized statistically. Although a single case study can confront existing theory, it is only a single study of a particular circumstance and will probably not change the existing applied process instantly.

The researcher of this study has specific and professional experiences both studying and working to dismantle DTOs, including the AF-DTO, those experiences cannot be generalized for this study, since generalizations from those experiences would compromise the quality and effectiveness of the data collection procedure for the purpose of this research. Lincoln and Guba (1995) discussed concerns that a case study may either oversimplify or overstate the findings, leading to distorted conclusions. To minimize the risk of both oversimplification and exaggeration, this researcher validated coding by using an outside source. A number of reports concerning the AF-DTO were classified, and therefore any data from those reports (i.e., archival records) were not included in this study. A small number of the interview participants had similar concerns regarding information they were able to share in this study. To address this concern, the researcher chose not to record or consider classified information for this study. However, it can be posited that the classified information may have provided additional insight to further the study. The AF-DTO is a highly secretive organization, and in order to protect others from

any personal harm, I did not attempt to contact a member of the AF-DTO for the purpose of data collection. Not having information provided directly from the organization is a limitation of this study; however, some data provided were from law enforcement participants who had spoken to AF-DTO informants or members of the organization under the custody of law enforcement.

CHAPTER 4: RESULTS

This chapter provides the results of the study. It begins with an explanation of the identification of resilient factors, followed by an examination of archival documents, a summary of findings from the review of archival documents, a discussion of interview data and interview participants, and the identified quotations, codes, and coding families. The chapter then describes a merging of the archival and interview findings. In order to correctly cover the interview findings, the data are presented in multiple segments: archival document analysis findings; interview data findings; and, finally, a culmination of those findings, intertwined, identifying the core resiliency characteristics of the organization based on both archival and interview data. Concluding the chapter is an analysis of these significant findings, which will make meaning of the participants' data and archival findings collectively. Lastly, a summary of the results and discussion of research questions are presented.

Discerning Resilient Factors

The goal of this historical case study was to uncover any pattern or themes resembling resiliency characteristics that may exist, or have existed, within the AF-DTO. Archival document findings were combined with findings from the interviews to reveal relevant information for further examination. Information was selected to demonstrate either a precursor to a resiliency trait or an actual resiliency trait, based on knowledge of these characteristics from the researchers in-depth literature review on organizational resiliency. As described in Chapter 3, themes were identified within the text of each of

the 10 interviews. Each theme was reviewed, and portions were selected and placed into groups of code families. These families were reviewed and combined with other relevant group families to create “super-codes.” Super-codes were created separately for both sets of data (archival and interview). Lastly, the two super-codes were combined to create a finalization of resiliency characteristics.

Archival Document Analysis

Archival documents, including court reports, have been fully reviewed. The analysis of such documents is provided in categories, which are necessary in order to present the information in a format allowing the reader to build an understanding from one group to the next. The review of archival documents is described in the following sections.

Historical Overview of AF-DTO Resiliency

Historical documents covering the AF-DTO are widely available from government and media outlets. They were a vital component of this study base, and they provided significant information about a number of characteristics responsible for the organization’s success and survival. A comprehensive analysis of these documents was performed and strongly assisted the study in achieving its outcomes.

“The most prominent Mexican drug trafficking organization that impacts the United States includes the Arellano-Felix Organization” (DEA Offers, 2003, p. 20). The AF-DTO is one of the most powerful criminal organizations seen in this lifetime. The AF-DTO officially formed in the 1980’s, after the arrest of an uncle of the AF-DTO family, Felix Gallardo (Willoughby, 2003). The organization grew into what it has

become today, international. An investigative reporter with Time Magazine (Shannon, 1988) reported in her story, “Border Monsters,” the brutal strength of this organization, writing:

so few boundaries—national, moral, legal—constrain the border’s worst bad guys Benjamin Arellano Felix, 49, and his kid brother Ramon, 36. The two baby-faced playboys head the Tijuana cartel, which sits atop Mexico’s \$30 billion drug-trafficking underworld and may be the most powerful organization in the country of any kind. Each year they smuggle to the U.S. hundreds of tons of cocaine, marijuana, heroin and methamphetamine ferried on ships, planes and inside truckloads of legitimate merchandise. The Arellano’s are thought to have hundreds of millions of dollars stashed away, and that’s after bribing Mexican officials, cops and generals to the tune of some \$75 million a year. (P. 69)

The AF-DTO reached White House attention. On November 26, 2002, President George Bush stated, “As head of DEA, Administrator Hutchinson has focused his efforts at dismantling high-profile drug trafficking organizations including the Arellano Felix organization” (Weekly Compilation, 2002, p. 2,099). Nine months earlier, on March 20, 2002, President Bush conducted an interview with Mexico’s Television Azteca and was asked, “Benjamin Arellano-Felix, the head of the cartel, suspect in Mexico, was apprehended there. Are you going to ask for extradition—for an extradition of this guy to the United States?” (Weekly Compilation, 2002, p. 464). President Bush responded by explaining the current U.S. indictment against the AF-DTO and the cooperation in place with the Fox Administration. It’s extraordinary to have a president not only mention a DTO by its name, but also to reference specific efforts used in targeting the organization. It shows the significance of such an organization because it has caught the attention of leaders from two nations.

Despite significant efforts from both Mexican and U.S. authorities, drugs continued to flow from Mexico into the United States, and the illegal organizations continued to find ways to thwart law enforcement's efforts to dismantle their operations (U.S. Department of Justice, National Drug Intelligence Center, 2003). These criminal organizations generate billions of dollars of profit and have the potential to disrupt financial markets in the United States. Drug smuggling makes up less than 0.5 percent of Mexico's gross domestic product, yielding \$2.5 billion in profits (Mexico City Contralinea, 2004). The money appears to be a significant factor in the strength of the AF-DTO.

The information in the following sections first describes the organization's structure—that is, what the operational structure of the organization looks like. This discussion is followed by a description of how the organization operates using the described structure. From this context, the chapter continues with a description of previous efforts to dismantle the organization (relevant is the fact that the archival documents in this area list previously identified strengths of the organization, as noted by law enforcement). Following that is a description of identified strengths that enable the organization to withstand the efforts by law enforcement to dismantle the organization. This presentation of findings will help the reader understand first the organization's make-up, then the kinds of operations that the organization conducts. From this point, the reader will have a full understanding of the organization's consistency (part of its strength) and will be better able to understand the following information detailing the organization's success and those factors responsible for the success.

AF-DTO Structure

The structure of the AF-DTO resembles that of a typical legitimate organization. It consists of five main divisions and one top command. Figure 11 shows the leaders of the divisions, and Figure 12 shows the functions of the divisions. The top leadership command is largely made up of blood relatives of the Arellano-Felix family, together with a council of advisors, or core. The core is responsible for making significant decisions and directing orders to five divisions. Although the cartel has a strong centralized decision-making process and a hierarchical structure, the family members, who make up the top leadership, accompanied by a core board of advisors, help the organization continue operating despite arrests of key leaders (Becerra, 2002).

Kenney (2003) describes DTOs as being highly organized: “compared with drug enforcement bureaucracies, trafficking enterprises are relatively small and flat” (p. 230). They also contain fewer management layers, and this structure allows for quick decisions and better protection of leaders. While their counterparts in law enforcement often contain thousands of participants organized within many management levels, the AF-DTO does not. Kenney notes that in 2000 the DEA had over 9,000 employees and 4,500 special agents organized into many layers. Kenney states, “information—the basic building block of intelligence—tends to travel faster when it flows through fewer processing channels” (p. 232). The opportunity to distort, suppress, or misinterpret information increases with more channels. Hence, the small flat structure of the AF-DTO allows for a much smoother transition of intelligence, which, as we have learned, is most effective when it is timely.

Another key hindrance to timely decision making is the “red tape” that authorities must go through to execute orders. This red tape does not exist in DTOs (Kenney, 2003). When a DTO needs to buy a piece of equipment, it does so on the spot. If it wants to change its mission, its goals, and its objectives, it can do so quickly. The ability to work quickly is essential to success, and DTOs have the edge in this key ability and use it to their advantage.

TIJUANA CARTEL/ARELLANO FELIX ORGANIZATION

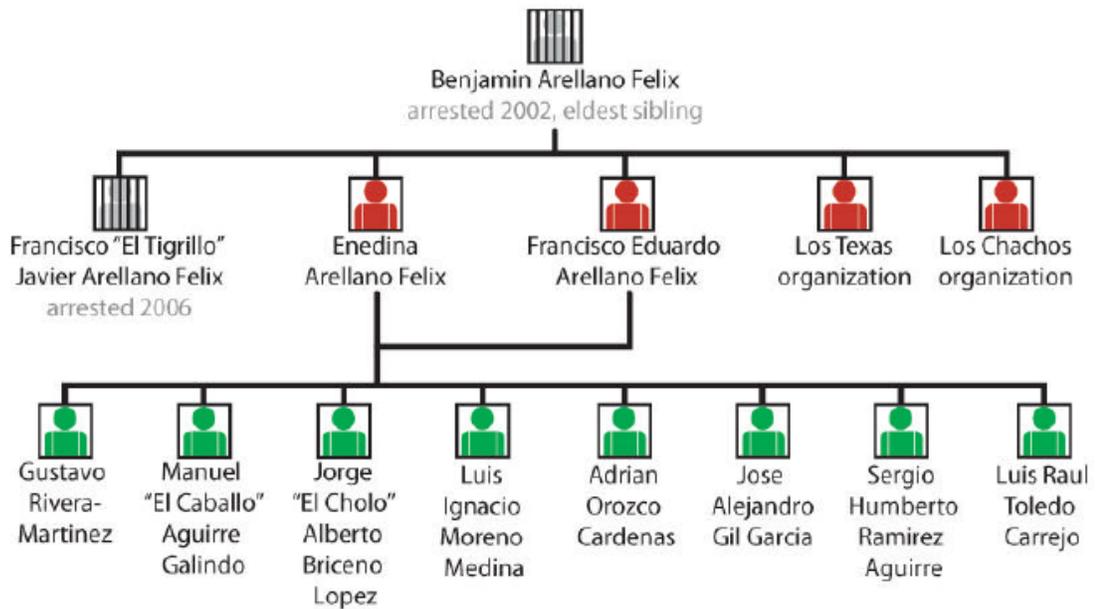


Figure 11. The AF-DTO leadership structure

Note. From Mexican Drug Cartels: The Evolution of Violence (p. 10), by Strategic Forecasting Incorporated, 2007.

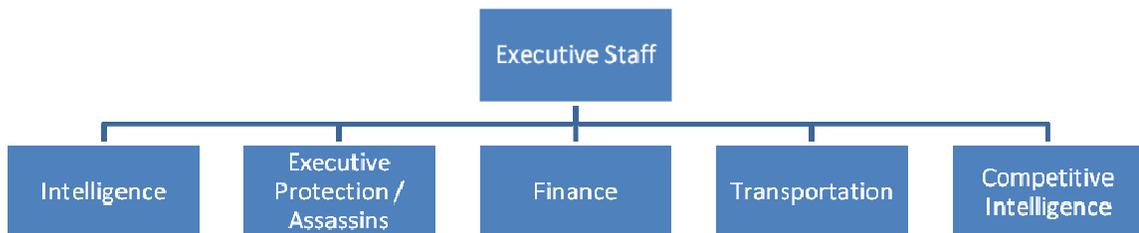


Figure 12. AF-DTO Functional Structure

AF-DTO Operations

The AF-DTO is made up of a number of divisions, each with a significant responsibility. The first division is charged with gathering intelligence and reporting that intelligence to the top command. The intelligence is gathered by infiltrating government institutions and police agencies. This division has a collateral duty of engaging foreign criminal organizations (largely in Colombia) to negotiate prices, shipments, routes for shipments, and quotas. The next division consists of assassins. Their primary role is the elimination of traitors, police, and rivals (they operate throughout northern Mexico and in the southwest portion of the United States). Their collateral duties involve protecting their top leaders and escorting drug shipments. The third division is the financial arm of the organization, dedicated to money laundering and investments. These employees are educated, young, and experienced in management and finances. The fourth division ensures that shipments reach ultimate destinations on the streets. The fifth and final division spies on rivals so that the AF-DTO can keep its competition in check (Becerra, 2002).

Historical Overview of Past Attempts to Dismantle the AF-DTO

1997-1999

Federal Officials Target the AF-DTO

A 1997 DEA press release announced a \$50,000 reward for the arrest of Ramon-Eduardo Arellano-Felix, a key member of the AF-DTO. It was drafted by the FBI after being placed on the FBI Ten Most Wanted Fugitives list. This small reward continued to grow as the U.S. government realized the complication and sophistication of the

AF-DTO. In that same year, a high-level target was arrested in Mexico as a result of U.S. information and efforts to dismantle the DTO at the top of its drug trade (Golden, 1997).

In July 1998, the transportation chief of the AF-DTO was indicted, with little impact on the organization (Dettmer & Maier, 1998). In that same year, then U.S. Attorney General Nora Manella stated, “The indictment ... will significantly disrupt the domestic operations [of the AF-DTO]” (Dettmer & Maier, 1998, p. 6). However, the organization continued to operate, even against odds with other competing organizations. Attempts by other powerful DTOs to take over or infiltrate the AF-DTO have failed in the past because of an inadequate understanding of the region. According to Dettmer and Maier (1998),

successfully infiltrating the system requires a deep knowledge of the region, particularly with regards to the idiosyncrasy of the people, their culture and the weak and strong points of the Mexican judicial and political system ... it is necessary to know whom to bribe, when and how. (P. 25)

U.S. Congressional Hearings

In 1999, the Assistant Secretary for International Narcotics and Law Enforcement Affairs for the U.S. Department of State testified before House Government Reform Oversight Committee, stating that Mexico had instituted a comprehensive national counternarcotics program that included the following:

- A three-pronged interdiction program aimed at detecting and deterring the illegal entry of drug shipments into Mexican territory, airspace, or waters;
- A longstanding eradication campaign that has destroyed more illicit drug crops than any country in the world;

- New specialized investigative units that build cases against the most significant drug traffickers and DTOs in close cooperation with U.S. law enforcement;
- A treasury ministry to better detect suspicious transactions and combat money laundering; and
- Law enforcement and health agencies working to detect and deter smuggling or diversion of chemicals used in drug production (Beers, 1999, p. 16).

Beers's testimony explained that Mexico had the following significant accomplishments combating the AF-DTO:

- Sentencing General Alfredo Navarro to 20 years in prison for bribery;
- Sentencing assassin Francisco Cabrera to 40 years in prison for killing a federal police commander;
- Formally indicting two AF-DTO brothers;
- Arresting key security and money launders; and
- Approving a key lieutenant for extradition to the United States.

In 1999, Ronald Brooks, then president of the California Narcotic Officers Association (and current director of the Northern California High Intensity Drug Trafficking Area Program), provided Congressional testimony to the House Subcommittee on Criminal Justice, Drug Policy, and Human Resources. Brooks's testimony was specific to the hearing topic regarding the importance of a drug kingpin's

extradition. Brooks testified that several murders in San Diego County had been directly linked to the AF-DTO and that the Mexican government

had not made an honest effort to eliminate the powerful drug Mafias [T]he United States and Mexico have had a mutual extradition treaty since 1980, yet the DEA reports the major cartels in Mexico, the Arellano-Felix ... organizations[,] continue to expand their powers and operate with virtual impunity. (P. 4)

2000-2003

Investigative Reporting

In 2000, PBS's Frontline (De La Montaigne) conducted an interview with the FBI agent who supervised the AF-DTO Task Force. Agent De La Montaigne provided valuable insight into the organization's strength, as well as possible factors leading to the organization's resilience. The organization uses violence to get things done. They will kill anyone who gets in their way and will make their own employees watch as they torture others as a way of letting them know that if they are not trustworthy, they, too, will be tortured and killed. The organization is a family business, which trusts only the family. Their top leaders are very intelligent people, and they know how to isolate themselves and prevent capture. Intimidation is key to stopping others from testifying against the organization. They will go after neighbors, grandparents, and friends to ensure that no one testifies. Despite government efforts in arresting key members of the organization, their activities have never been fully disrupted. The AF-DTO is very good at recruiting gang members in the United States to work for them in the United States to traffic narcotics, torture, and kill. The organization also recruits young adults who are wealthy and indoctrinates them into the drug trade. An example of the ruthlessness of the AF-DTO appeared in the *U.S. News and World Report* (1998), describing the

organization's killing of 19 people (including six children and two babies), who were dragged from their residences, shot, and killed on their patio in Tijuana because a family member crossed the AF-DTO.

In 2000, the British Broadcasting Corporation, through reporter Jose Baig in Tijuana, Mexico, reported that the AF-DTO handled almost all the marijuana, much of the cocaine, and a good part of the amphetamines trafficked into the United States, representing a monopoly over the drug products. Baig's research showed that approximately 20 years ago, the AF-DTO was a small group smuggling cigarettes and alcohol to and from Mexico, and grew into a very powerful DTO. He explained that most of the junior officers of the DTO are either dead or in jail, but the family organizations of the DTO remain strong because of the DTO's ability to use violence and keep competition, authorities, and the media away. Within the last decade, this DTO, according to Baig, is responsible for murdering two police chiefs and has networks of cocaine extending from Mexico to Columbia to the streets of the United States. "Their communication and interception equipment is, in many cases more advanced than the Mexican authorities. The money laundering operations are carefully planned" (Baig, 2000, p. 16). However, despite the advantages of the AF-DTO, Baig mistakenly predicted that the entire DTO would be dismantled by the end of the year (which would have been in 2001).

Mexico and the United States Working Together

In 2001, the *Washington Crime News* reported information relayed from the DEA stating that brothers of the AF-DTO were looking into moving the center of their

operations into Arizona due to police crackdowns in both Mexico and the United States. The AF-DTO was apparently looking at small-time dealers and gangs without widespread controls over their narcotic trafficking (Anonymous, 2001). In that same year, a *Congressional Research Service Report for Congress* (2001) reported that “Bush certified Mexico as fully cooperative in drug control efforts on March 1, 2001, citing the arrest of key members of the AF-DTO, the aggressive eradication programs, and continuing cooperation with the United States in a number of areas” (p. 1). This report also cites critical statements that Mexican authorities failed to weed out corruption and arrest major drug traffickers or to extradite Mexican citizens into the United States. However, praise was given to the Mexican Supreme Court’s 2001 ruling that Mexican citizens may be extradited to the United States for drug charges, so long as they are sentenced under Mexican guidelines. This measure, of course, would help in dismantling DTOs. But Mexico still would not extradite its citizens if it knew the United States would press for capital punishment.

High-Intensity Drug Trafficking Area Program Focuses on the AF-DTO

The White House Office of National Drug Control Policy (ONDCP) manages the nationwide High-Intensity Drug Trafficking Area (HIDTA) program, a unique effort that mandates equal domestic law enforcement participation for local, state, and federal agencies. To date, 28 HIDTAs are in existence throughout the United States and its territories. A review of each HIDTA’s annual reports and strategies revealed that four HIDTAs have the AF-DTO on their lists of top organizations to dismantle. The Southwest Border HIDTA, which covers the entire border area from California to Texas,

mentioned significant milestones in cases involving the AF-DTO (Office of National Drug Control Policy Southwest Border HIDTA, 2004), stating that the AF-DTO has been seriously disrupted by unprecedented law enforcement efforts by both the United States and Mexico. The report also credits conflicts with the AF-DTO due to many arrests and operational problems within the organization. The ONDCP Oregon HIDTA (2005) listed the AF-DTO as a primary target of its law enforcement operations. The ONDCP Los Angeles HIDTA (2004) also listed the AF-DTO on its list of annual significant accomplishments. Within this HIDTA, the Southern California Drug Task Force (SCDTF) conducted regional investigations into cocaine distribution, which was directly linked to the AF-DTO, in 2002. This task force initiated 43 wiretaps over a 22-month period, which revealed that AF-DTO activities stretched throughout the United States. Many of these cells were dismantled: in Los Angeles alone, 85 subjects were arrested, and \$2.2 million in cash was seized. Shortly thereafter, the investigation and arrests led to an all-out offensive, with over 400 domestic police officers targeting the states of New York, Minnesota, Connecticut, and California. The national effort led to 234 arrests of members or associates of the AF-DTO. Despite these arrests, the organization remained intact and operational.

In 2002, the U.S. federal government began a nationwide program with the HIDTAs, asking each HIDTA to identify priority targets (also known as CPOTs) (ONDCP, 2004e). These CPOTs represented the largest DTOs trafficking in their area of responsibility. The Los Angeles HIDTA listed the AF-DTO as one of its top three targets and requested nearly \$1.2 million in funding from the White House for law enforcement

equipment. This equipment was to be used specifically in operations aimed at dismantling AF-DTO operations in its region (i.e., travel, equipment, and personnel). In this same report, a HIDTA in the other corner of the country, the New England HIDTA, in Boston, requested \$245,000 in funds specifically to target marijuana operations run by the AF-DTO. The New England HIDTA described the AF-DTO as being one of the

most powerful, aggressive and arguably the most violent of the drug trafficking organizations [It] orchestrates the transportation, importation, and distribution of multi-ton quantities of cocaine, marijuana and large quantities of heroin and methamphetamine into the U.S. Violence, intimidation and corruption are the AFO trademarks. (P. 4)

The Midwest HIDTA, headquartered in St. Louis, Missouri, requested \$150,000 to target the AF-DTO operating in its region. The Nevada HIDTA requested multiple expenditures to target the AF-DTO within its region, as well as operations existing in its investigations stretching to Nebraska. The Northern California HIDTA requested \$222,000, while the Oregon HIDTA requested \$100,000. The operations of the AF-DTO spread all throughout the United States, thereby demonstrating the AF-DTO's ability to expand operations while under significant pressure from law enforcement.

Mexican Authorities and Prosecutors Attempts to Attack the AF-DTO

In 2002, Mexico's top organized crime prosecutor, Jose Luis Santiago Vasconcelos, disclosed that the cartels in Tijuana and other areas are currently working together to rebuild a network of gunmen to defend their drug territories (Murray, 2004). In an ironic twist, after law enforcement arrested top AF-DTO and leaders from another DTO, these rival DTOs forged alliances in prison to work together to help strengthen their cartels. This was confirmed by the Mexican and American governments (Murray,

2003). In that same year, an article in the *Economist* (Americas, 2002) referenced the demise of the AF-DTO subsequent to the capturing of an Arellano-Felix brother and the killing of another. The article claimed that greater trust among Americans and Mexicans had led to closer intelligence teamwork as key to the success against the AF-DTO. Indeed, there is a working relationship, despite a Mexican Supreme Court ruling that banned a prisoner's extradition into the United States if the prisoner faced a life sentence. But the AF-DTO was still operational, in spite of an increase in decentralization. Even the article acknowledged new data (at the time of the article) that said that although the AF-DTO appeared to be dismantled, other organizations have taken the lead.

Efforts After September 11, 2001

After the terrorist attacks in 2001, the AF-DTO, operating largely in Tijuana (Mexico), increased its kidnapping operations. In 2003, over 500 kidnappings were reported in that area, and experts began to see frightening similarities to activities that took place in the early stages of Columbia's drug trafficking formulation (Willoughby, 2003). Today, the AF-DTO is one of the most powerful and violent of the Mexican DTOs (U.S. Department of Justice, National Drug Intelligence Center, 2001) and has created new ways to produce funds after initially believing that U.S. borders would be much more difficult to penetrate. Shortly after 9/11, the AF-DTO soon found that the borders remained at relatively the same levels as before 9/11, and the DTO stepped up its drug trafficking into the United States.

United States Offers Significant Rewards

An anonymous reporter (DEA Offers, 2003) found that the United States was offering millions of dollars for the arrest of specific targets of the AF-DTO. The DEA was also reportedly offering an additional \$2 million for information leading to the arrest and conviction of the AF-DTO's top lieutenants (Gilberto Higuera, Gustavo Rivera Martinez, Efrain Perez, Manual Aguireer Galindo, and Jorge Aureliano). This was issued in large part as in response to the U.S. Justice Department's complaint that the AF-DTO brothers were operating an army of assassins used to shield the organization's smuggling operation (DEA Offers, 2003). In that same year, the DEA (2003) reported that the Fox Administration arrested key members of the AF-DTO and credited increased cooperation between U.S. and Mexican authorities since 2000.

DEA Reports Limited Success

The DEA (DEA Offers, 2003) reported that despite some success against the AF-DTO in Mexico, the organization remained powerful because it was well organized, had large amounts of financial resources, and was good at corrupting and intimidating public officials. The DEA attributes its limited success against the AF-DTO to not only increased cooperation with U.S. and Mexican authorities, but also a more serious attitude from Mexico about drugs in that nation. Time and again, the DEA reported that the arrests would not have been possible without cooperation from both governments working together. Interestingly, though, the report also attributes the AF-DTO's strength to its cooperation with other entities. However, instead of working with legitimate organizations, the AF-DTO worked with criminal organizations thousands of miles away

in Canada, Europe, Asia, and the Far East to obtain chemicals used in illegal drug production of illegal narcotics. The DEA also attributed the AF-DTO's success in smuggling drugs into the United States to the DTO's use of various innovative ways to conceal and transfer the narcotics (e.g., using carbon paper to pack drugs to conceal them from x-rays).

With limited success, the DEA detailed the arrest and killing of key AF-DTO members, but concluded that "the organization continues to operate" (DEA, 2003, p. 20). A White House Report (ONDCP, 2003) credited the following with helping to dismantle the AF-DTO: indictments, arrests, extraditions for higher ups, and unprecedented cooperation with the Mexican authorities. The report emphasized that the organization is under significant pressure and has moved into alien smuggling and kidnapping as a form for generating funds to substitute lost drug smuggling revenue. This adaptation from organizational learning ensured the safety of the organization.

Despite Increased Bounties from the United States, the AF-DTO Remained Operational

In September of 2003, the U.S. Department of State (2003a) released a poster and press release listing seven key AF-DTO members, with a total bounty of \$20 million. This was done in cooperation with the DEA and appears to have been done just 1 year following the key arrest of the AF-DTO leader, Benjamin Arellano-Felix (U.S. Department of State, 2002). This press release cited improved cooperation between U.S. and Mexican law enforcement agencies. It is unknown how effective the bounty had on the capture of some of these men, but just 1 year later, two of the seven listed by the U.S. State Department went into police custody (U.S. State Department, 2003b). The DEA is

not the only U.S. federal agency focusing large amounts of resources on the AF-DTO. In 2003, the U.S. Federal Bureau of Investigation (FBI) released a press statement detailing its efforts to dismantle the AF-DTO by announcing a Racketeer Influenced and Corrupt Organizations RICO Act (an anti-criminal organization prosecutorial tool) indictment against each of 11 top leaders of the organization. The article also details the prior arrests of two AF-DTO brothers in 2002 and 2003 and the killing of a third related brother in the same timeframe. Yet, the Defense Intelligence Agency, in 2003, reported that although the AF-DTO had lost a significant amount of its influence due to recent arrests, the cartel continues to control large portions of the drug transiting from Mexico into the United States. The organization continued to operate and demonstrated its resilience.

2004-2007

Limited Progress Against the AF-DTO

In 2004, there were progress reports in the attempts to arrest and dismantle key DTOs in Mexico. In a 4-year time span, 2000-2004, the Mexican press reported the AF-DTO suffering from 7,376 arrests, including two top leaders, five financiers, 10 top aids, 43 gunmen, 33 corrupt government officials, and 7,293 street-level drug dealers (Ciudad Juarez El Diario, 2004). Also in 2004, Mexico's attorney general announced that the five members of the AF-DTO would stand trial on organized crime charges (Mexico Attorney General's Office, 2004). In that same year, a Mexican court upheld the indictment of a known AF-DTO member (La Frontera, 2004b). And again in 2004, Mexico's state attorney general office sought the arrests of five violent men with links to the AF-DTO. Shortly afterward, an anonymous tip led authorities to all five suspects, who were found

in possession of AFI (Mexico's equivalent of the FBI) badges, bulletproof vests, and handheld radios tuned to police scanners (La Frontera, 2004c). This is a remarkable accounting of the organization's ability to acquire sophisticated equipment.

A 2004 DEA press release described key arrests in the AF-DTO and credited successes due to combined investigative efforts of both governments. Arrests were also made against the AF-DTO in the United States, and the pressure was kept on the AF-DTO by a U.S. government reward of \$5 million leading to the arrest of two of the DTO's key brothers. The DEA administrator was quoted in the press release stating that the organization was in ruins. A few years earlier, an investigative reporter revealed that Mexico's efforts in combating the AF-DTO were making a difference, thanks to their new President, Fox. However, Smith (2002), working for *Business Week*, quoted Mexico's President Fox as describing a new drug policy "that will focus on curbing drug use at home as well as quashing trafficking" (p. 57). However, Fox was unable to destroy the AF-DTO in the 6-month timeframe he allotted himself, despite injecting over 1,000 police to Tijuana (Willoughby, 2003). This flip-flopping demonstrates how some leaders believed the organization was near destruction only for others to determine later the survivability of the organization and its ability to bounce back from near failure.

In 2004, the Mexican press (Ravelo, 2004) reported that another cartel in Mexico's Tijuana region was attempting to gain influence, but lacked strong leadership after the arrest and death of two key AF-DTO members, which initiated a string of kidnappings and retribution assassinations against those within the AF-DTO who had betrayed them. This included Mexican police officers. The report details serious

corruption issues within the Mexican government and elections, all reflecting the AF-DTO's influence despite serious setbacks, arrests, and deaths of its members. More perplexing, though, is the investigative reporter's findings that the AF-DTO was being reorganized (thereby demonstrating resilience) under the leadership of other dominant Mexican drug traffickers in the region. In short, the head of the organization was cut off, but the organization grew another head in its place.

Violence continued throughout 2004. Authorities believed that the AF-DTO killed more people to gain control over its respective territories, including a rival drug lord in a region south of the AF-DTO's former control (La Cronica, 2004). A report by Mexico City Reforma (Drug Kingpins, 2004) revealed that the AF-DTO had joined forces with the brothers of the Osiel Cardenas DTO to smuggle drug shipments from South America into the United States. The article referenced a new type of cooperation between these two DTOs that led to the successful trafficking of 30 tons of cocaine into the United States.

Mexico Uses Its Military to Combat the AF-DTO

Mexico uses a considerable amount of its military to combat drug production and drug trafficking. Approximately 30,000 soldiers are involved in these efforts in the air, water, and ground. They use an average of 88 airships, 370 bases, and 18,000 military units, located nationwide, each month. Approximately 12,000 units are responsible for preventing drug trafficking on roadways. Some nine amphibious groups, made up of 1,512 units and 250 vessels, work jointly in this endeavor (Mexico City Contralinea, 2004).

However, the military was no more successful than the police at dismantling the AF-DTO. Although the military was effective in circling the Tijuana offices of the state attorney general's office and capturing Estrada Sarabia, who had been working in the offices as an undercover operative of the AF-DTO (La Frontera, 2004a), the AF-DTO was able to merely work in the shadows during heavy military presence.

White House Presidential Designation

On June 1, 2004, the White House, through a presidential designation of the Foreign Narcotics Kingpins Initiative, announced additional names as high-priority U.S. targets. These high-priority targets have usually been on the radar of authorities for years. Of the 10 additional international targets announced, two were key leaders in the AF-DTO and a third was the organization itself; all three were at the top of the list. The White House announced in this release,

This action underscores the President's determination to do everything possible to pursue drug traffickers, undermine their operations, and end the suffering that trade in illicit drugs inflicts on Americans and other people around the world, as well as preventing drug traffickers from supporting terrorists. (White House, 2004)

The Kingpin Act provided further support for law enforcement agencies targeting the AF-DTO. However, these agencies have been targeting the AF-DTO for decades and, until recently, made very little impact on the organization's ability to traffic drugs. The U.S. Department of Treasury (2004) announced a list of significant foreign traffickers; the top three traffickers listed were members of the AF-DTO. A \$2 million bounty offered by the U.S. State Department (2004b) did not help in an eventual capturing of one of this DTO's

top leaders, Benjamin Arellano-Felix. The organization remained operational despite the U.S. government's best efforts to arrest these key figures.

U.S. Anti-Drug Leaders Discuss Lessons Learned in Combating the AF-DTO

A former undersecretary for border security at the U.S. Department of Homeland Security, Asa Hutchinson (also a former DEA administrator), was reportedly credited with the first indictment of known terrorists for drug trafficking and oversaw the arrest of the head of the AF-DTO when leading the DEA in 2003. Hutchinson stated in 2004 that Mexico's President, Vicente Fox, "greatly enhanced the law enforcement cooperation and the rule of law in Mexico ... Mexican government has been very supportive from a different context" (Pappalardo, 2004, p. 66). Hutchinson describes Mexico's reasoning for combating DTOs: "They look at it from the standpoint of how the smuggling organizations are treating the Mexican citizens ... abusing them and endangering their lives ... they want to address it from that perspective, more of a safety perspective" (Hutchinson, as quoted in Pappalardo, 2004 p. 66). Hutchinson acknowledged that the U.S. perspective is different in the sense that we want to secure our border, stop the flow of drugs, and convict DTO leaders. According to Hutchinson, the two countries are targeting the same group for very different reasons.

Despite some failures, others have reported successes in dismantling the AF-DTO. In 2004, the White House Office of National Drug Control Policy's Annual High-Intensity Drug Trafficking Report stated,

The dismantlement of the Arellano-Felix Organization (AFO) continues with indictments, arrests, and extradition proceedings for the upper echelon and transportation and enforcement cells of that cartel, as well as unprecedented

cooperative efforts between U.S. and Mexican law enforcement. Multiple intelligence sources tell us that the remaining cells of the Arellano-Felix Organization are having difficulty getting cocaine from the source countries, and have been forced to turn to other sources of income such as alien smuggling and kidnapping. Of course, a lack of drug income makes the AFO even more vulnerable to the pressures being exerted by the Zambada-Garcia Organization (ZGO), currently making a play for the Tijuana plaza. (ONDCP, 2004, p. 140)

This statement was released by one of the 28 HIDTAs, the Southwest Border HIDTA, which covers the entire southwest border area between the United States and Mexico.

This HIDTA has intimate knowledge of the inter-workings of the AF-DTO because the DTO is one of this HIDTA's top strategic priorities. Despite this knowledge, the annual HIDTA strategy (2004c) stated that the AF-DTO is still operational and may be on the rebound. In May of 2005, the *LA Times* reported,

Much of the violence [in Tijuana, Mexico], say experts and law enforcement authorities, results from the continuing battle for control of the drug trafficking corridor through Baja California. With the Arellano Felix drug cartel weakened by arrests and killings, other organizations have been trying to gain control the Arellano Felix organization is struggling to maintain its power base. (Marosi, 2005, p. B9)

In essence, this article describes what can be interpreted as either the weakening of the AF-DTO or the resilience of the organization as it maintains its power in the drug trafficking world.

AF-DTO Strength Characteristics

The AF-DTO has adapted over time and has become transnational in scope while also displaying “a degree of flexibility and adaptability in methods and modes that pose considerable challenges for intelligence, law enforcement agencies and society at large” (Williams & Godson, 2002). The DTO has no choice: if it does not adapt, it will go out of business. Williams and Godson describe four types of “states”—also known as “political

conditions”—that categorize most of today’s countries. Williams and Godson theorize that DTOs survive best in the “weak state (corruption of government),” which allows opportunities for organized crime to grow with little interference. In the weak state, DTOs flourish and use the state as a home base. Successful criminal networks that continue to function are flexible and adaptable; can respond quickly to market opportunities and the actions of law enforcement; highly resist disruption, even after losses; can recruit new members; extend across national borders; can conduct legitimate business alongside illegal operations; can recruit police and corrupt politicians and judges (i.e., the decision makers); and possess safeguards against penetration as well as a high degree of redundancy that “makes them highly resilient to disruption and provides a significant capacity for reconstitution in the event that they are damaged” (p. 333).

The AF-DTO employs various types of techniques to ensure its survival. The strategic model, also known as the risk management model (Williams & Godson, 2002), provides an understanding of what makes up the formula of success within the AF-DTO. Figure 13 depicts this model graphically. The model’s assumption is that these criminal organizations seek not simply to maintain their existence, but also to maximize their profits while minimizing risks with authorities (Sovona, 1995). The theory looks at wit, with one entity attempting to outsmart the other. Because criminal organizations are interested in more than just survival, they are uniquely separated from legitimate businesses. DTO members worry about going to jail or being killed. Three measures that can be considered risk management strategies are (1) initiatives created for risk prevention (e.g., initiatives for protecting leaders, continued operation of the

organization, and the ability to work in low-risk environments); (2) defense measures and tactics used to minimize risks (i.e., incorporating counterintelligence and state-of-the-art technology to provide warning of law enforcement); and (3) measures built to mitigate potential harm “and ensure the organization exhibits a high degree of resilience even in hostile environments in which defensive measures have proved inadequate” (Williams & Godson, p. 337).

Other strengths include the following: criminal leaders can obtain a safe haven, will operate secretly, insist on the highest levels of protection, and develop high-level disguise and concealment products.

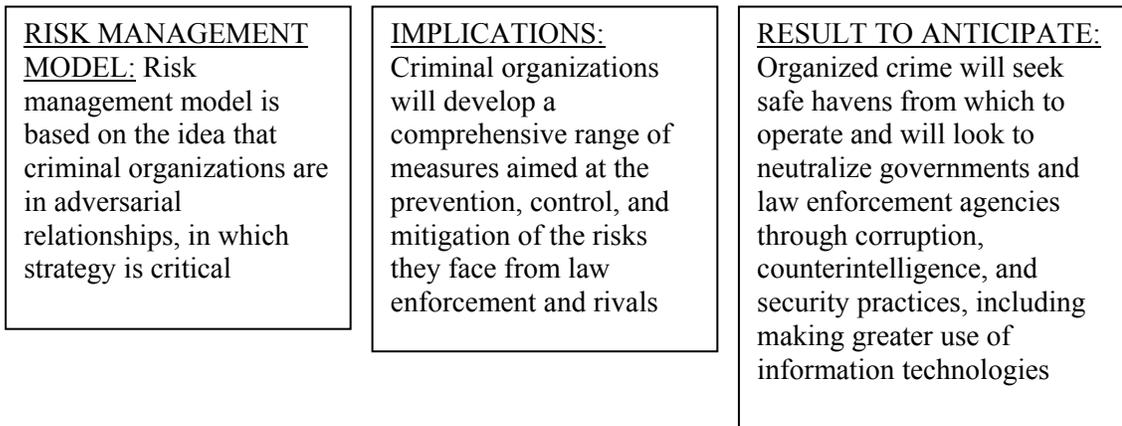


Figure 13. Criminal Risk Management Model

Note. From “Anticipating Organized and Transnational Crime” (p. 339), by P. Williams and R. Godson, 2002, *Crime, Law & Change*, 37(4).

Existing research describes factors that can lead to the dismantling of DTOs. This existing research mirrors the findings throughout both the archival data and interviews conducted for this study. These types of dismantling factors help to identify resiliency characteristics. Kenny’s (2003) article, “Intelligence Games: Comparing the Intelligence Capabilities of Law Enforcement Agencies and Drug Trafficking Enterprises,” revealed

interesting insights into factors that can lead to dismantling these types of organizations. First, intelligence is critical to drug enforcement. In order to create efficient programs to attack these DTOs, law enforcement needs to properly allocate resources and evaluate results, and the decision makers need timely and accurate information. “To destroy processing labs, intercept drug shipments, apprehend alleged traffickers, and confiscate illegal proceeds, law enforcers require knowledge about specific criminal enterprises and their methods of operation” (p. 112). The intelligence must be timely, dependable, and accurate.

However, intelligence is also critical to DTOs. Kenney posits that they need the same information in order to design efficient programs, assess results, and allocate resources in their business of production and transportation. They require information about government interdiction, enforcement programs, and eradication. In order to successfully launder drug procedures, they require information about banking systems and anti-laundering statutes in order to exploit the system. The timely flow of information (also known as intelligence) is essential to keeping abreast of counter-narcotics programs and policies so that “adaptations in trafficking operations will be effective” (p. 213).

In 2000, PBS reported on the AF-DTO and the organization’s involvement in the murder of two Tijuana police chiefs, dozens of prosecutors, police, lawyers, and journalists. AF-DTO members tortured as a means of intimidating others, while also getting information on law enforcement drug units. Two agents who endured torture were then killed. These two had their skulls crushed, slowly. Part of this organization’s survival is dependent on its ability to enact fear in others—to spread the word about its

ruthlessness. This fear tactic almost worked; the United States considered pulling its agents from Tijuana after many assassinations of authorities in that region. That same level of fear was seen a few years prior in the United States. Staglin of the *U.S. News and World Report* (1997) reported that federal drug agents in San Diego were increasingly concerned about safety after intelligence intercepts raised alerts that members of the AF-DTO wanted to kill U.S. agents for their function in confiscating drug shipments.

Dettmer (2001) describes sweep operations disrupting key cross-border smuggling routes. High-profile arrests were common, and seizures of cocaine were breaking records. These efforts placed pressure on the DTO to adapt. In late 2004, the Mexican press (*El Universal*, 2004) reported that DTOs in Mexico were forming alliances in order to preserve control over their own jurisdictions for trafficking. For example, the AF-DTO formed an alliance with the Gulf Cartel. This alliance influenced other DTOs in Mexico to form similar alliances to balance the power of other competing DTOs.

The AF-DTO employs strict rules with all of its employees and those wishing to do business with them. Traffickers in their regions can carry only small amounts of drugs (fewer than 10 kg of cocaine or 500 kg of marijuana) and must pay the AF-DTO a commission in order to do business in their regions. Anyone caught with more than the allowed amount of drugs is killed. The AF-DTO has also imposed high tariffs to deter others from the drug business (Becerra, 2002). With its base in Tijuana, it controls one of the most significant drug corridors into the United States (U.S. Department of Justice,

National Drug Intelligence Center, 2001). This level of control helps ensure the AF-DTO's monopoly and power, thereby ensuring its survival.

Understanding the DTOs requires one to look at the geography and demographics of the production, trafficking, and use. While the types of illegal drugs consumed in the United States are extensive, not all of these narcotics arrive from Mexico. For the most part, cocaine and marijuana make up the majority of drugs trafficked into the United States over the border of Mexico (U.S Department of Justice, National Drug Intelligence Center, 2003). Behind the efforts to traffic these substances into the United States exist wealthy, violent, and highly organized DTOs. The AF-DTO, in particular, has built relationships with existing street gangs in California, Texas, Illinois, and many other states to help distribute narcotics throughout America. The difficulty of fighting DTOs, accompanied by the new cooperation with U.S. street gangs, furthered the organization's ability to build its business through violence and control.

According to the DEA (Caldwell, July 2007a), Mexican law enforcement officials who were friendly to the AF-DTO were often rotated from their assignments. During such incidents, the corrupt Mexican officials would assist with the corruption of the incoming official. These meetings took place between the highest levels of the AF-DTO. The corruption covered all levels of government necessary to allow for a smooth order of drug trafficking business, without interruption. Monthly payments to high-level officials could range up to \$500,000. The corruption eventually led to Mexican officials traveling with AF-DTO shipments and personnel to ensure safety from detection or arrest.

Legitimate Mexican officials attempted to circumvent the corruption by moving the military into place to assist with taking down drug shipments. However, the AF-DTO simply adapted by paying off the Mexican army and navy commanders. The AF-DTO leadership expanded its abilities by creating a position to supervise the logistics of maritime shipments. The AF-DTO was also successful in having the corrupt law enforcement partners receive promotions by the Mexican government, which only furthered the success of the AF-DTO. A significant success of the organization was the corruption of the former Mexican president's personal secretary, who agreed to assist the AF-DTO. The secretary received a bribe of \$1.5 million. The level of bribery exemplifies the organization's ability to infiltrate the highest levels of government in order to ensure the organization's success and survival.

Recent reports (Stockhill, 2005) describe Mexican troops helping the AF-DTO in bringing illegal narcotics into the United States, while other reports (Carter & Ruiz, 2006) detail standoffs with U.S. law enforcement at border locations with Mexican military personnel driving hundreds of pounds of marijuana across the U.S. border, escalating to standoff with U.S. police before Mexican militia retreated back across the border. The Mexican military was thought to be very difficult for the AF-DTO to infiltrate.

The AF-DTO relies on technical assistance from law enforcement and uses around-the-clock wiretapping teams to wiretap offices throughout Mexico. "These wiretaps enabled the cartel to eavesdrop on rival traffickers, federal and state police, prosecutors, and on the American DEA's operations in Tijuana" (Caldwell, 2007, p. G6).

The AF-DTO was successful in corrupting at least one U.S. official, a U.S. immigration agent, who was later convicted. Caldwell (2007) states,

to facilitate its continuing drug trafficking, it's certain that the AFO continues to lavish huge bribes, always paid in U.S. dollars, on Mexico's corruption-riddled law enforcement agencies and on important Mexican government officials at the local, state and federal levels. The resulting corruption must be counted as the primary reason ... leaders are still at large, operating with seeming impunity under the noses of Mexican law enforcement in Mexico's largest border city, a scant 25 miles south of San Diego. (P. G6)

Caldwell (2007b) conducted a study on the brutality of the AF-DTO in his research report, titled *Cold-Blooded Killers*. He analyzed the efforts undertaken by the AF-DTO to ensure its survivability through sheer brutality and intimidation. He states, "The total number of killings committed by the AFO likely will never be known ... [and] surely reaches into the hundreds over the AFO's blood spattered, 20-year history" (p. G5). According to Caldwell, a U.S. investigation documented direct evidence of 23 such killings between 1989 and 2000. Five of these killings took place in the United States, which further demonstrates the organization's disregard for international boundaries. Documents show that those killed included informants, associates of the AF-DTO, rival traffickers, members of the Mexican military, police, a business man, and a Mexican prosecutor. These murders were extremely sadistic. A woman in San Diego was slain in her home in front of her teenage daughter. A Baja prosecutor was shot 120 times in Tijuana because he was investigating the AF-DTO. An AF-DTO enforcement team massacred 19 members of three families, including women and children, who were shot to death execution fashion. The organization kidnapped, savagely tortured, and executed

a number of Mexican federal agents investigating the organization. According to Caldwell, killing was just another cost of doing business.

According to Caldwell's investigative work reviewing court documents (2007d), once a brother was captured or killed, another family member simply stepped in to take on the reigns of leadership. Francisco Javier Arellano Felix was the youngest of the brothers and informants, and documents state that he inherited leadership after his brother Ramon was killed and his brother Benjamin was captured in 2002. It wasn't long, though, until Francisco, too, was captured. Francisco was arrested by the U.S. Coast Guard in 2006 and brought to San Diego.

The leadership structure included members from outside the family, as well. Ismael Higuera Guerrero served as the cartel's director of operations, furthering the findings that the AF-DTO had a business structure. He, along with his brother, Gilberto Higuera Guerrero, were arrested in Mexico and extradited to the United States in 2004. In court documents, both admitted to being lieutenants of the AF-DTO and pled to bribery, kidnapping, torture, and murder ordered by the AF-DTO brothers. In 2006, they both stated that the youngest of the brothers, Francisco Javier Arellano Felix, was leading the organization until his recent arrest. Despite these arrests, the organization continues to find replacements ready to take the helm. Caldwell describes a number of front runners, including an AF-DTO senior partner, Aguirre Galindo. However, as of the date of this study, it is unclear who is now running the organization.

A U.S. indictment (U.S. District Court, 2002) listing multiple AF-DTO family members and lieutenant as defendants provides additional insight into the criminal

activity of the organization, which in some respects supports the resiliency characteristics found throughout the work of this study. The indictment describes the AF-DTO as an “enterprise,” made up of multiple defendants who violated U.S. law. The following charges were made: affecting interstate commerce; racketeering; illegal trafficking of drugs; laundering of drug proceeds; kidnapping, torture, and murder of informants, rival traffickers, law enforcement, and other perceived enemies of the organization; and methodical bribing of Mexican law enforcement and military personnel. The AF-DTO was described as operating not only within Mexico, but also in the United States and Colombia.

The U.S. government uses Title 18 to define the organization as an enterprise based on its composition of leaders, members, and associates, working together, functioning as a continuing entity for the common purpose of achieving the goals and objectives of the organization. Such goals and objectives include enriching members through the trafficking of drugs into the United States; preserving and protecting the enterprise’s power of Tijuana and the Mexicali region through the use of threats, intimidation, and violence, including kidnapping, torture, and murder; instilling fear into others, including the Mexican media, law enforcement, rival traffickers, probable informants, and the Mexican public at large; and enhancing and promoting the activities of its members and associates.

The indictment supports findings that the AF-DTO has a business-like structure: “The Enterprise operated within a well defined hierarchical structure” (U.S. District Court, 2002, p. 4). The indictment also listed the organization’s top-tier leaders, followed

by second-level managers. It listed the activities of the organizational leaders, which included the hierarchical structure and roles associated with each level. The top leader has responsibility of overall decisions, including the organization, transportation, and distribution of drugs, as well as enforcement activities undertaken by other members. The indictment listed Alberto Benjamin Arellano Felix as this leader, followed by his chief advisor and brother, Eduardo Ramon Arellano Felix, “who was involved in, and consulted about, all major enterprise decisions” (p. 4). A third brother, Francisco Javier Arellano Felix, served in a leadership role within the organization, participated in most enterprise decisions, and was put in charge of operations after the apprehension of Ismael Higuera-Guerrero in 2000.

A second layer of leadership includes the senior partners, who participated in most major decisions, including decisions of murder. The indictment identified the senior partner as Manuel Aguirre-Galindo and claimed that he was retained by the organization due to his close connections to Colombia DTOs and due to his law enforcement and military contacts that assisted with drug trafficking operations. A second senior partner was Jesus Labra-Aviles, who was retained for the same reasons as Aguirre-Galindo.

The third layer described in archival documents is the organizational members labeled as lieutenants. Ismael Higuera-Guerrero was the AF-DTO’s top lieutenant, who was responsible for the day-to-day operations throughout Mexico, including the large receipt of drugs and the importation of those drugs into the United States. He had collateral duties of collecting the drug proceeds and policing the Tijuana area of Mexico, and kidnapping, torturing, and kidnapping enemies of the organization.

Higuera-Guerrero's brother, Gilberto, was not described in documents as having an official title; however, he was appointed by his brother to supervise the Mexicali, Mexico, operations, which included identical collateral duties as his brother, but only within a specific region of responsibility. Efrain Perez, who worked for Ismael Higuera-Guerrero, was tasked with organizing large shipments and supervising the shipments of drugs into the United States. Efrain's assistant, Jorge Aureliano Felix, was strictly responsible for the safe storage of drugs in Tijuana and for collecting proceeds. The leadership is concentrated in the family and then branches out to "trusted others" to take lower-level supervision duties.

The structure had a type of ambassador assigned to Mexico City, Rigobeto Yanez, who served as the initial point of contact for Colombian traffickers wishing to do business with Ismael. He also transported money to Colombia traffickers and supervised drug shipments outside of the Mexicali area. The organization's chief of security and chief enforcer was Armando Martinez-Duarte, a former high-ranking Mexican law enforcement official. He was charged with protecting the shipments from Mexican law enforcement. Under the direction of Gilberto, he would manage the kidnapping, torture, and murder in the Mexicali region.

The strengths of the organization's structure are apparent through details found in court indictments describing the method and means of the organization, which are listed in Figure 14 and included in the archival analysis based on their direct relationships in describing core strengths of the AF-DTO.

1. Negotiate with Colombians for purchase and transportation of drugs
2. Arrange for transmission of U.S. currency—in the form of wire transfers, cashier's checks, and bulk shipments—to Colombia to pay for drug shipments
3. Negotiate with Mexican marijuana growers for product to purchase and traffic
4. Use commercial fishing boats, commercial airlines, private planes, and cargo containers for shipments
5. Convoy large shipments of drugs overland throughout Mexico to the Tijuana region through a variety of concealment measures
6. Smuggle drugs into the United States using a number of means, including trunks of vehicles, secret compartments located in commercial vehicles, helicopters, backpackers, and small boats
7. Obtain vehicles to be used as load vehicles to transport drugs and cash, while recruiting others to drive these vehicles
8. Arrange for smuggling to Los Angeles, and other regions in the United States
9. Smuggle proceeds from the United States into Mexico
10. Bribe law enforcement and military officials in order to protect the enterprise leadership and drug shipments; to halt the arrest of enterprise members; to have law enforcement seize drug shipments from rival DTOs and provide those drugs to the enterprise for their control
11. Use codes and sophisticated equipment to communicate in order to disguise their identities and meaning of conversations
12. Use armored vehicles especially equipped with guns, bulletproof glass, smoke, oil, or nail dispensers to evade law enforcement and rival drug traffickers
13. Obtain houses in Mexico and the United States to store drugs, guns, money, and armored vehicles and to serve as regional headquarters for operations
14. Operate houses known as nests or caves to conduct wiretap operations and to monitor communications and operations of rival DTOs and law enforcement.
15. Purchase hundreds of assault rifles, Uzi machine guns, large-caliber handguns and rifles, and bulletproof vests for the use of the enterprise enforcement teams
16. Obtain law enforcement and military uniforms, credentials, and equipment to conduct assassinations of enemies
17. Have "rules" of the organization, which include not cooperating with law enforcement, and punish (possibly murder) those who violated the rules of the organization to make examples of them
18. Direct the kidnapping, torture, and murder of enemies, which includes law enforcement, rival drug traffickers, military personnel, and members of the media who write unfavorable stories
19. Negotiate with Colombia's Revolutionary Armed Forces of Colombia (FARC) for drugs and weapons (U.S. District Court, 2003. pp. 4-11)

Figure 14. AF-DTO Operational Strengths

In 2002, an *LA Times* investigative reporter, Kraul (2002), wrote an article, “The Collapse of Mexico’s Invincible Drug Cartel,” detailing the killing of Ramon Arellano Felix and the capture of his brother, Benjamin. Kraul interviewed the former head of the DEA’s Mexico Unit, Michael G. Garland, and hypothesized that these deaths would only lead to rivals fighting with one another to take the lead. Kraul stated, “You can expect a period of violence, first to settle vendettas and then as people try to position themselves to take over.... [The AF-DTO] ... has been mortally wounded” (p. 1). The federal attorney general’s delegate in Baja California, Arturo Guevara Valenzuela, doubted that drug shipments into the United States from Mexico would lessen. Kraul credits Mexico’s President Fox with the success against the cartel because of his efforts to quietly move 1,300 special police (army soldiers) into Baja, Mexico. Kraul cites Mexico’s state attorney general, Antonio Martinez, who believed that these units made a huge difference in anti-narcotic enforcement. Kraul also cites Erroll Chaves, the special agent in charge of the DEA’s San Diego office, who gave credit to the Mexican government. Kraul’s investigation revealed previous strengths and a strategy behind the AF-DTO’s continued survival. The AF-DTO learned to be brutal back in the 1980s through its leader, Miguel Angel Felix Gallardo, who was imprisoned in 1985 for the kidnapping, torture, and killing of DEA special agent Canarena. Before Felix Gallardo went to jail, he divided up his smuggling regions with his family. The family quickly learned that, despite its power of vast land throughout Mexico, its success depended on control of the Tijuana–San Diego region, a smuggling platform into the United States. The family employs “mules” (i.e., drug smugglers) to move drugs into the United States, not through large border

towns, but rather in isolated areas of the border where they could blend in with Mexicans entering the United States illegally. The AF-DTO collected money from rival suppliers who wanted to move narcotics through the AF-DTO-controlled regions—rivals who didn't contribute money were killed. As the AF-DTO grew, it became more businesslike. AF-DTO members flew to Peru, Colombia, and Panama to make deals in purchasing drug products. In doing so, the organization created monopolies of heroin, marijuana, methamphetamine, and cocaine. Shipments of drug supplies to the AF-DTO were orchestrated through specialized waterways along the Pacific coast—the waterways were so specialized that they had refueling points and logistical support along the routes. The organization also corrupted U.S. immigration and customs agents, but this tactic became much more difficult after the United States prosecuted those found. The organization suffered a significant blow in 2000 when its key accountant and chief operating officer, Ismael Higuera Guerrero were arrested. But despite the 2002 key arrests of high-level members, law enforcement officials at the end of that year admitted that the organization was continuing its operations—only now it was being run by the two lesser-known brothers, Javier and Eduardo (Sullivan & Jordan, 2002).

Despite all efforts to attack and dismantle the AF-DTO, “the organization continues to operate” (White House, 2002, p. 20). In 2006, U.S. authorities uncovered the largest underground drug smuggling tunnel found since tracking of these tunnels began in 2001. The tunnel, first noticed by Mexican authorities, was found with over 2 tons of marijuana and was under the border between Tijuana and San Diego County. John

Fernandez, the special agent in charge for the DEA in San Diego, stated that the AF-DTO was responsible (Spagat, 2006).

Robert Caldwell, the editor of the Insight Division (an investigative component) of the *San Diego Union Tribune*, has been investigating the AF-DTO for over a decade. In addition to including him as one of the 10 interview participants, I have consulted his publications for this study because they are significant, related, and meaningful to this study. In July 2007, Caldwell published the most extensive investigative report found by any media outlet in the world on the AF-DTO. His four separate special reports, all published in the same month, were the final documents analyzed for this portion of the dissertation and, by far, provided the most significant findings in this historical overview of resilience within the AF-DTO. Caldwell (2007a) describes the organization's 1993 accidental assassination of Mexico's highest Roman Catholic cleric as the organization's single biggest blunder that should have pushed the organization into near extinction. He states, "Unless AFO leaders could pre-empt that response [government action] they [the AF-DTO leaders] and the cartel would be in grave jeopardy" (p. G2). Caldwell describes an account with a senior AF-DTO lieutenant, Everardo Arturo "Kitti" Paez Martinez, obtained through testimony to a grand jury in San Diego. This account explains how the organization acted fast to prevent such possible extinction by moving its personnel into immediate action. Within hours of the assassination, the AF-DTO was colluding with Mexican officials and providing significant payoffs. The AF-DTO leaders began at the top and used two AF-DTO lieutenants, along with one of its leaders, Benjamin Arellano Felix, who paid Rodolfo Leon Aragon, chief of the Mexican Attorney General's Federal

Judicial Police (the Mexican equivalent of the FBI, which is today referred to as the Federal Investigative Agency), \$10 million dollars. The Federal Judicial Police was Mexico's lead law enforcement component in investigating DTO. In exchange for the bribe, Aragon would do what he could to protect the AF-DTO. Later on the day of the \$10 million bribe, a local commander was summoned for a meeting with leadership of the AF-DTO. Following that meeting, Benjamin Arellano Felix, his top lieutenants, and Mexican officials created a plot to protect the AF-DTO by allowing the Mexican government to find several AF-DTO safe houses in Tijuana, but only after any incriminating documents were removed from the locations. The AF-DTO also offered a small number of scapegoats from the squad who had killed the Cardinal. The AF-DTO leadership then temporarily fled their Tijuana stronghold from inner Mexico and the United States, only to return months later and rebuild the businesses. Years later, the Federal Judicial Police chief who had accepted the \$10 million bribe, Aragon, was arrested for accepting a \$1 million bribe from another DTO (Caldwell, July 2007a).

Caldwell (July 2007a) states that, until recently, the U.S. government has had little knowledge about how the organization operates, its chain of command, the degree of its drug trafficking, and its operational techniques, including how profits are laundered and what smuggling methods are used. According to Caldwell's report, it wasn't until 2002 that major breakthroughs made by the U.S. government shined light onto these areas, due to federal prosecution efforts in San Diego and the help of law enforcement experts. The totality of understanding can be found in what Caldwell describes as

thousands of pages of court documents, which were later assembled to support the extradition of key AF-DTO leaders who were wanted to stand trial in the United States.

The analysis for this portion of the dissertation is based on key findings from Caldwell (July 2007a), who writes, “These documents, contained in the extradition packages for 11 AFO principals in custody in Mexico, were delivered to the Mexican government beginning in 2005. The documents were subsequently obtained by *The San Diego Union Tribune*” (p. G4). Caldwell describes a number of items related to this study. Paiz-Martinez, the senior lieutenant arrested and placed in U.S custody in 2002, became the first senior AF-DTO figure to cooperate with the U.S. government against the organization. The details from his cooperation provide an important understanding of how the organization operates and survives. He was closely associated with the family members of the organization and was trusted by them. His tenure with the organization lasted 12 years, during which time he witnessed the daily activity of moving tons of narcotics across the border. Once the drugs arrived in the United States, they were shipped throughout Southern California and to other locations throughout the United States. Paiz-Martinez described his work as supervising this distribution network. He developed business relationships with the DTO’s counterparts in Colombia, who provided the AF-DTO with cocaine for sale. The organization, in 1990, developed a more lucrative line of product and distribution; it refined its efforts and increased the quality of its product. The AF-DTO built an alliance with Colombia’s Revolutionary Armed Forces (FARC). Under the agreement, FARC gave the AF-DTO cocaine for cash and weapons. Paiz-Martinez witnessed the most brutal aspects of the AFO operations, including

kidnapping, torture, and murder. He admitted to personally setting up several killings, some of them in San Diego. He monitored the AF-DTO radio communications, which ordered the killing of rivals, and witnessed the torture and killing of an AF-DTO associate at the hands of another AF-DTO associate who suspected the individual of cooperating with U.S. authorities.

Paiz-Martinez also outlined the significant corruption initiated by the AF-DTO, including bribes running into the millions of dollars per month. The AF-DTO “made Baja California’s local and state governments and their corrupt police agencies de facto collaborators in the Tijuana cartel’s drug trafficking” (p. G5). The corruption reached as far as Mexico’s attorney general, who received a bribe of \$3 million. Also, as mentioned earlier, the personal secretary of former Mexican president Ernesto Zedillo received bribes. The Mexican military was not immune—the AF-DTO found ways to bribe the army and navy. The AF-DTO relied on an extensive day-to-day bribe system to ensure a consistency of operations. A DEA overview of the bribes, as reported by Caldwell, describes a pay-off system providing bribes to sustain all areas of business, which includes

the protection during the arrival of cocaine shipments and marijuana shipments within Mexico, the transportation of that cocaine and marijuana to locations within Mexico near the United States/Mexico border, the storage of that cocaine and marijuana before being transported into the United States, the transportation of that cocaine and marijuana to United States Ports of Entry and points in between, and even sometimes the transportation of that cocaine and marijuana into the United States. (P. G5)

The DEA identified operations in which leaders of the AF-DTO were provided with key details about law enforcement’s efforts to attack the AF-DTO, and also provided the

leaders with information on the DTO's drug trafficking rivals. Corruption allowed the AF-DTO to obtain radio frequencies and codes used by authorities, so that the AF-DTO could monitor law enforcement efforts. These operations exemplify the AF-DTO's ability to gather intelligence and counterintelligence—a significant strength associated with the DTO's resiliency.

The latest unclassified research on the AF-DTO was published in October 2007 by Strategic Forecasting Incorporated, a firm that produces intelligence reports, many of which are used by the federal government, law enforcement, and the military. This research describes an organization in flux due to a high number of arrests and posits that the organization has “largely abandoned the drug trade in favor of other criminal enterprises—mainly kidnapping according to a Mexican attorney general's report” (p. 9). If true, this change demonstrates the viability of the AF-DTO to move from one business to another in order to remain operational.

The organization is highly structured and dependent on its family membership. With a family structure of seven brothers and four sisters—all of whom have, or have had, varying degrees of responsibility within the AF-DTO (Strategic Forecasting Incorporated, 2007)—they are now relying on just one family member who has not been killed, arrested, or fled; that family member is Francisco Eduardo. As of the date of this study, the clear leader is unknown, but the organization remains operational with Francisco Eduardo and other lieutenants, including Enedina, who is responsible for money laundering. Other than these active leaders, little now is known of the organization's operations. However, the organization's movement away from drug

trafficking may be the result of a new vulnerability: because the organization has relied heavily on strong leadership, especially from family, the diminishing leadership may be responsible for an inability to sustain drug trafficking operations. With just one brother left to operate the organization, the family structure allegedly no longer exists, and this presents a vulnerability to the AF-DTO, as shown by its recent transition into other criminal activities.

AF-DTO resiliency characteristics can also be identified by examining those characteristics identified and targeted by law enforcement. These characteristics are important to this study because they mirror those resiliency characteristics identified through a review of the interview and archival data. In 1998, the DEA administrator, Thomas Constantine, provided Congressional testimony before the Senate Foreign Relations Committee regarding international organized crime syndicates and their impact on the United States. In his testimony, Constantine illustrates four of Mexico's largest drug cartels, one of which he identifies as the AF-DTO. He describes these cartels as "the 1990s versions of the mob leaders U.S. law enforcement fought shortly after the turn of the century" (*International Organized*, 1998, p. 3). However, he describes the modern cartels as far more dangerous and influential. He states that the United States was able to dismantle U.S. mob organizations only after we acknowledged them and the dangers they posed to our way of life. He makes a unique parallel to the AF-DTO, insinuating that we, as a culture, have yet to fully recognize the dangers of Mexican DTOs and that part of the problem we have in fully dismantling these DTOs is that we do not fully recognize them.

Constantine outlines the following key thoughts, among others, on how to dismantle these organizations: (1) be patient, because it will not happen overnight; (2) go after the top leadership; (3) obtain greater assistance from U.S. and Mexican authorities; (4) find ways around the DTOs' encrypted technology and surveillance systems; (5) fight corruption; (6) understand how the DTOs operate and live; (7) learn from experiences with Columbian cartels—both U.S. and Mexican experiences fighting the Columbian cartels, as well as the experiences of Mexican DTOs imitating and collaborating with the Columbian cartels (*International Organized*, 1998, pp. 4-5). Constantine later addresses the AF-DTO specifically, stating

this organization is one of the most powerful, violent, and aggressive trafficking groups in the world. More than any other major trafficking organization from Mexico, it extends its tentacles directly from high-echelon figures in the law enforcement and judicial systems in Mexico, to street level individuals in the United States. (P. 8)

He describes how the AF-DTO kills Mexican law enforcement officials, informants, and journalists, as well as how it has made threats toward the DEA and FBI and a U.S. prosecutor. The AF-DTO uses Tijuana and San Diego street gangs as assassins. The DTO uses high-level communications equipment, conducts counter-surveillance, and has a well-trained security force.

Constantine (1998) substantiates his testimony by describing large bribes to Mexican police, approximately \$1 million in total every week to Mexican officials, to ensure no interference from these individuals. *Mexico City Contralinea* reported on the losing effort of the drug trafficking fight due to Mexico's military role, rather than traditional law enforcement. The Mexican army seizes approximately 80 percent of the

drugs seized because the PGR (the Mexican equivalent of the office of the attorney general) does very little and has been suspected to sell “protection” to drug traffickers. Nestares, a research professor with a special emphasis on drug trafficking who is teaching at the University of Madrid (also a member of the International Association for the Study of Organized Crime), found that although the PGR is rather good at dismantling organizations, it fails miserably in securing important intelligence that other Mexican government agencies, including the Army, could use to make bigger gains (Resa-Nestares, 1999).

Resa-Nestares also describes other problems. For example, Mexico currently combats drug trafficking by splitting the country into seven drug trafficking sectors. Nobody seems to be in charge of each of these sections; too many groups are acting alone. Another problem is the decreased efforts to combat DTOs that are relatively active in the drug traffic business. Resa-Nestares explains, “by combating drug cartels in decline, as in the case of the Arellano-Felix brothers, drug traffickers can be detained and prosecuted for violent acts committed previously, but this does not curtail the flow of drugs” (Resa-Nestares, 1999, p. 3). Resa-Nestares also describes a key problem with the Mexican army’s involvement—the PGR’s Office of the Deputy Attorney for Special Investigation into Organized Crime (SIEDO) has been unable to build a single case since the beginning of the drug mapping territory in 2003. SIEDO’s efforts now go primarily toward protecting witnesses. Resa-Nestares states that the PGR needs to do police work: “It’s very simple: gather information and then act” (p. 4).

Summary of Findings from the Review of Archival Documents

A review of the archival documents describes an organization using multiple aspects to ensure its resiliency. Core resiliency themes were detailed in Table 1. These themes arose from an understanding of resiliency characteristics based on both my review of archival documents and my interviews with the 10 participants used in this study. The framework used for this analysis was the hypothesized resiliency framework.

In summary, the archival record review revealed a number of AF-DTO strengths that protect the organization from total organizational failure. These strengths are presented in alphabetical order as follows:

1. Adaptability
2. Advanced technology and communications
3. Alliances with rival DTOs, U.S. street gangs, and officials
4. Cash flow (unlimited)
5. Compartmentalization
6. Corruption of officials
7. Counterintelligence
8. Creativity in generating funds through new ventures
9. Dependence on violence to intimidate officials, community, and rival DTOs
10. Dependence on violence to manipulate the organization's membership
11. Fear from AF-DTO leaders of prosecution, being killed, or organizational extinction
12. Flat, well-organized, hierarchal structure with few management layers
13. Flexibility

14. Geographic control
15. High degree of redundancy and duplication
16. Intelligence (timely)
17. Isolation of leaders
18. Membership recruitment
19. Monopoly over narcotics and trafficking lanes
20. Product protection
21. Protection of leaders
22. Relationships with partners (worldwide)
23. Fast replacement of leadership after leader-loss
24. Fast response to adverse situations
25. Rules and protocol for members
26. Secrecy
27. Trust from organizational leaders of organizational leaders (due to family associations)

Later in the study, a combined listing of both archival and interview data is presented in order of significance.

Interview Collection Data

Quotations listed are verbatim from each of the 10 interviews. To protect identity, interviews and participants are referenced in this study as “Participant-1,” “Participant-2,” and so forth. If significant amounts of text were not germane to the example, that text was removed from the quotation. Repetitious comments were removed, and tense was

sometimes changed to allow for improved readability. Specific identifiable comments that could lead a reader to identify the participant were also removed to protect the participant’s identity. The data indicated that each interviewee had significant experience with the AF-DTO. A brief background on each participant’s experience is listed in Table 2.

Table 1: Interview Participant Backgrounds

Participant-1	Over 20 years of law enforcement experience, with a majority of time spent investigating DTOs. Currently holds an executive-level position within a federal agency. Significant experience investigating the AF-DTO.
Participant-2	Served as an investigative reporter in Southern California assigned to the AF-DTO. Later became the editor of the investigative reporting section. Over 20 years of investigative experience.
Participant-3	Over 20 years of law enforcement experience. Serves as an executive in a federal agency with significant responsibilities over operations targeting the AF-DTO.
Participant-4	A high-profile news anchor with numerous awards for his undercover investigations of significant criminal organizations, including the AF-DTO.
Participant-5	A high-level federal agent residing in Mexico, with specific duties involving operations against the AF-DTO.
Participant-6	A federal prosecutor with significant experience prosecuting members of the AF-DTO.
Participant-7	Retired federal agent who led efforts from San Diego targeting the AF-DTO. Now retired, he works for an international intelligence firm.
Participant-8	Retired local law enforcement officer from the Los Angeles area that cofounded a statewide gang initiative, and cofounded the California Gang Investigators Associations. He is also a world-renown national speaker on gangs, drug trafficking, and organized crime and is often highlighted on programs on the History Channel, A&E, and the Discovery Channel. He conducts training seminars on the AF-DTO.
Participant-9	Retired police chief who now oversees state, local, and federal efforts targeting major DTOs, including the AF-DTO.
Participant-10	California special agent with over 10 years of experience targeting the AF-DTO.

Identified Quotations/Themes

A thorough review of data from the 10 interviews revealed a number of themes, quotations, and codes. Appendix F represents the significant quotes used to discern codes. I connected appropriate text with each of the selected interview codes and read through each interview a number of times before inputting the text into ATLAS.ti for formal evaluation and recording. ATLAS.ti assisted me with locating the reoccurring themes, which are as follows:

- Ability to kill or reach those protected by government
- Ability to organize the structure of the AF-DTO
- Adaptive
- Attack law enforcement/revenge killings
- Blackmail
- Blood in blood out
- Branded or trademarked themselves
- Bribery
- Brutality
- Business acumen
- Centralized leadership
- Victims/witnesses intimidation
- Compartmentalization
- Confidence
- Continued growth

- Control over personnel
- Control over product
- Cooperation
- Corruption
- Counterintelligence
- Create community fear
- Creativity sophistication
- Cultural glorification of traffickers
- Deception tactics
- Diligent
- Diminished societal rule of law
- Diversify based on environment and market
- Avoid business relationships with other DTOs
- Stable flow of product to traffic
- Family trust
- Financially strong and independent
- Geographic control
- Growing customer drug user base
- Hard to penetrate
- Historical success
- History of sustainability
- Infiltrate competitor trade lines

- Infiltrations of legitimate businesses
- Internal discipline and obedience
- International network/partners
- Intimidating reputation
- Kill competitions
- Large organizational membership
- Leadership
- Legitimate business façade
- Loyalty from members
- Mentoring/tutoring of membership
- Money laundering
- Monopoly
- No outside trust
- No respect for sovereignty
- Nontraditional corporation operation
- Organizational learning
- Pays more than legitimate work
- Protection of leaders
- Quickly replenish ranks
- Recruiting strength
- Reduce visibility when needed
- Refinement

- Ruthless reputation
- Situational awareness
- Street experience intelligence
- Superior technology
- Tough upbringing
- Transportation control
- Trust of membership
- Weakened government

These reoccurring themes were then separated into a number of categories (i.e., codes), which were then grouped into super-codes (i.e., families). The super-codes represent specific, yet general categories consisting of the initial codes. This researcher created the super-codes based on what appeared to be larger themes made up of identified codes having commonalities among them. In isolated occurrences, a single code simply was so different from all others that it stood alone and was elevated into the category of super-code for congruence purposes. The following list ranks the super-codes in order of strength (i.e., how often the code was revealed through the analysis of data). The numbers in parentheses represent the number of codes merged into the super-code.

- Ruthless reputation (9)
- Alignment (1)
- Structured (5)
- Attention to detail (1)
- Corruption (4)

- Awareness (1)
- Recruitment (4)
- Business acumen (1)
- Adaptive (3)
- Confidence (1)
- Intelligence (3)
- Creative sophistication (1)
- Monopoly (3)
- Cultural glorification (1)
- Trust (3)
- Diligent (1)
- Vast consumer base (3)
- Disregard for international boundaries (1)
- Decentralized (2)
- Diversity (1)
- Entitlement (2)
- Financially independent (1)
- Leadership development (2)
- Geographic control (1)
- Opportunistic (2)
- Growth aggressiveness (1)
- Organizational discipline (2)

- Leadership protection (1)
- Organizational learning (2)
- Loyalty (1)
- Weakened environment (2)
- Self-reliance (1)
- Advanced technology (1)
- Violence toward competitors (1)

This researcher used these super-codes to develop a list of 16 characteristics for examining participants' statements. Table 3 lists all 16 characteristics, along with the corresponding super-codes (i.e., families), codes, example statements, and participants who mentioned the characteristics. Collectively, the table provides a snapshot of relevant information, helpful in the reader's understanding of how I reached my findings. A great number of additional quotes not listed in Table 3 were used in the creation of the evolving data and can be read in greater detail in Appendix F.

Table 3: Characteristics, Coding Family, Interview Codes, and Example of Statements by Participants

Characteristics	Coding Family	Interview Codes	Example of Statement	Participants Mentioning
Adaptability	-Creative sophistication -Opportunistic	CS OP	“somebody takes the place of those knocked down” “adaptive to their surroundings”	P-4, P-2
Business Acumen	-Ability to organize the operational structure -Centralized leadership -Growth aggressiveness -Product/shipment control -Leadership development	OS CL GA PSC LD	“they did have an organization style” “two decades of sustained operations ... very smart business people who run the organization”	P-5, P-6
Compartmentalized	-Leadership protection -Decentralized components	LP DC	“they compartmentalize efforts” “walled off into cells”	P-7, P-8
Corruption	-Bribery -Blackmail	B BM	“corruption of Mexican officials” “they exploit weaknesses and use blackmail”	P-3, P-4
Diminished Rule of Law	-Cultural glorification -Failure of government to govern	CG FG	“The environment they work within allows them total control” “rule of law does not exist”	P-9, P-2
International Reach	-Stable flow of product -Disregard for international boundaries -Networking/partnerships with international crime organizations	SP DB NPIC	“had their hands on companies legitimately shipping goods in and out of U.S.” “distribution network from Mexico to the U.S.”	P-3, P-2
Loyalty	-Internal discipline -Obedience -Control over personnel	ID O COP	“total loyalty to one another” “It’s all about loyalty and the AF-DTO expects it”	P-5, P-6
Monopoly Goal Orientation	-Control over product -Kill competitors -Geographic control -Infiltrate competitors -Cooperation with adversaries of their enemies	COP KC GC IC CAE	“have control over a specific region” “have the ability to infiltrate a variety of areas for their own success”	P-5, P-9
Optimism	-History of success -Sense of entitlement -Confidence	HS SE C	“Lots of people try to join the AF-DTO for the money” “They always looked for ways to improve the organization”	P-8, P-10

Recruitment	-Quickly replenish ranks -Higher salary than legitimate work -Large org membership -Members street smarts	QRS HS LOM MSS	“able to recruit very well” “people want to be a part of it”	P-9, P-5
Reputation	-Brutality -Attack on law enforcement and government -Revenge killings -Witness/victim intimidation -Creation of community of fear -Branding	BR ALEG RK WVI CCF BRA	“...they killed and tortured their own for failing” “they have a trademark of fear”	P-2, P-6
Self-Reliance	-Financially independent-Legitimate business façade for money laundering and investments -Product and activity diversification	FI LBFM PAD	“have a lot of money to do whatever they want” “whatever the market will bear is what they will sell”	P-1, P-8
Situational Awareness	-Intelligence collection -Counterintelligence activity -Reduce visibility when needed -Deception tactics -Infiltration of legitimate businesses -Attention to minor details -Diligent	IC CA RVN DT ILB AMD DIL	“they have great street smarts” “very proactive in changing tactics based on enforcement efforts”	P-4, P-7
Technology	-Technological superiority	TS	“buy sophisticated equipment and communications” “They have good technology, i.e. encryption on phones”	P-10, P-1
Trust	-Not trusting of outsiders -High family/org leadership trust	NSO HLT	“they don’t work with unknown people” “they don’t make friends with other organizations”	P-1, P-10
Vast consumer base	-Vast consumer base buying product	VCB	“huge consumer base in U.S” “America provides an endless supply of users for the AF-DTO”	P-8, P-3

A merging of both archival data findings and interview findings into one synthesized format provides a clear and combined view of all relevant resiliency characteristics found within this study. All similar characteristics in these findings integrated to create this succinct listing. In short, it is the very heart of the data collection, narrowed down to the finest AF-DTO resiliency ingredients and characteristics.

The following list shows the resiliency characteristics in order of prevalence, starting with reputation and the six related components:

1. **Reputation** (related components: brutality; attack on law enforcement/government; revenge killings; witness/victim intimidation; creation of community of fear; branding)
2. **Corruption** (related components: bribery; blackmail)
3. **Business acumen** (related components: ability to organize the operational structure; centralized leadership; growth aggressiveness; drug shipment/product control; leadership development)
4. **Situational awareness** (related components: intelligence collection; counterintelligence activity; reduce visibility when needed; deception tactics; infiltration of legitimate businesses; attention to minor details; diligent)
5. **Recruitment** (related components: quickly replenish ranks; higher salary than legitimate work; large organizational membership; member street smarts)
6. **Adaptability** (related components: creative sophistication; opportunistic)
7. **Monopoly Goal Orientation** (related components: control over product; kill competitors; geographic control; infiltrate competitor trade lines; cooperation with adversaries of their enemies)

8. **Trust** (related components: not trusting of outside entities or individuals; high family/organization leadership trust)
9. **Compartmentalization** (related components: leadership protection; decentralized components)
10. **Optimism** (related components: history of success; sense of entitlement; confidence)
11. **International reach** (related components: stable flow of product/drugs; disregard for international boundaries; networking/partnerships with international criminal organizations/gangs)
12. **Technology**
13. **Loyalty** (related components: internal discipline and obedience; control over personnel)
14. **Self-reliance** (related components: financially independent; legitimate business façade for money laundering and investments; product and activity diversification)

While a number of the characteristics had many related components, others had none due to the uniqueness of what they represent. Together, these characteristics and components signify the study's final endeavor to best represent the essence of resiliency within the AF-DTO. While the initial list of resiliency characteristics included 16 characteristics, the study's final number is 14 (not including the two "environmental factors" described in the framework, which greatly benefit the AF-DTO's resiliency). Organizational learning was removed from the list because it better fits within the revised framework as a

construct being fed from the sensemaking construct, and it serves as the springboard to the creation of the later identified and discussed resiliency traits. Without organizational learning, the AF-DTO would be unable to manifest protective layers and strategies for success.

Summary of Findings

This section describes the key findings of the case, obtained through the evaluation of archival records and 10 participant interviews. This approach was best suited for studying this type of organization. The AF-DTO is a highly secretive and dangerous entity; therefore, data collection needed to be done in a manner that was both safe and highly relevant to the essence of the study. For these reasons, the archival record review and participant interviews were selected as the means for data collection. This proved to be highly effective in obtaining information needed to obtain data.

The archival records were first screened for relevant points prior to their inclusion in the study. The first portion of this chapter provided a thorough analysis of archival records directly related to the AF-DTO's continued sustainability. These findings were essential in the second portion of this chapter's discussion on the participant interviews. The archival record review is presented in a chronological order, which helps the reader follow the historically important operations of the organization and efforts of government to dismantle the organization. From this format, only the areas related to the study were identified for further exploration, which resulted in the selection of core themes, followed by codes resembling explanations for the AF-DTO's resiliency.

The next phase involved the exploration and identification of core themes and codes through the review of 10 participant interviews. Those interviewed for this study described an organization with a number of strengths that directly resulted in the organization's resiliency. According to Moustakas (1994), the essence of a phenomenon is achieved by explicating elements of the experiences that are germane and that transcend the specific experiences on which they are based. Seidman (1998) refers to this as developing "a deeper understanding and appreciation of the amazing intricacies and, yet coherence of people's experiences" (p. 112).

These findings were presented in the same manner as those of the archival records, first by a list of themes and then by codes obtained from those themes. These codes became the foundation of the findings and were used in conjunction with the archival record findings to create one solidified list of resiliency characteristics. In the solidified list, I presented the kind of holistic account that is required for a sound case study methodology, one that can garner a deeper appreciation and understanding of the case.

Moustakas (1990) believes that the next two stages of the process of sensemaking in phenomenological research are incubation and illumination. These stages follow an immersion into the study data. The first of these stages, incubation, involves the researcher withdrawing and contemplating the information to better understand what emerges. This is followed by illumination, which involves the researcher's awareness of a new understanding of the meaning of the participants' information (i.e., emerging themes). Through this work, the researcher examined and reported the results of

incubation and the common themes to better understand the core factors resulting in the AF-DTO's resiliency.

Initially, the study identified 17 core resiliency characteristics of the AF-DTO, listed here in alphabetical order, and were identified through this study. However, organizational learning was removed from the listing and placed within the framework as a major construct. That it no way diminished the effect of organizational learning and its effect on the resiliency of the AF-DTO, but rather signifies its importance to the creation of the other resiliency characteristics. Additionally, items 5 and 17 (diminished society rule of law, and vast consumer base) make up the environmental resiliency factors, also found within the framework (these are explained later).

1. **Adaptability:** The AF-DTO is quickly able to adapt to circumstances that threaten its existence. The business of drug trafficking requires the organization to find reliable workers and reliable trafficking routes to supply the organization's lifeblood of money in an ever-changing environment. Two subcategories assisting in the DTO's adaptability is the organizational ability to find unique measures facilitating success, which includes creative sophistication (using underground tunnels, intelligence, technology, etc.), combined with opportunistic efforts to simply find and create ways to succeed in highly difficult situations.
2. **Business acumen:** While the organization is made up of highly volatile individuals, these individuals operate the organization in a professional

business manner. The stakeholders of the organization are primarily concerned with making money—a single focus measure of success. Therefore, they create and follow the organizational structure, hierarchy, rules, policies, training, etc., which are necessary for running the organization with effectiveness. The organization is led by a centralized leadership that demands corporate growth. To meet this demand, the leaders establish rules and train their personnel to be highly effective. The organization does not tolerate slippage in its ability to make money and uses adaptive ability to find other ways to supplement lower-than-expected cash flow, which involves branching out to other ventures (e.g., trafficking other types of drugs and kidnapping for ransom).

3. **Compartmentalization**: The organization protects itself by separating out its components of operations and only allowing relevant information to be known by those with a “need to know.” The AF-DTO has so many compartments that losing one or two of them to law enforcement will not greatly affect the organization’s ability to survive. Additionally, any compartment that is compromised by law enforcement will not be able to share much information about other compartments of the organization due to the leadership’s ability to separate these compartments. Within this compartmentalization exists another layer for the leadership personnel, all of whom are separated from one another, and just a select few of whom know where everyone is at all times. The leadership structures allow the compartments to operate independently from

one another (decentralized) so that one does not heavily rely on the other for operational success.

4. **Corruption:** The organization's lifeblood is its ability to corrupt individuals and entire components of government. It accomplishes such corruption through the use of bribery, blackmail, and fear of death.
5. **Diminished societal rule of law:** The AF-DTO thrives in a country where the rule of law has been diminished in some areas and completely missing in others. This allows the organization to continue with very little disruption from authorities. The diminished societal rule of law has enabled the organization to gain cult-like status in certain parts of Mexico. This cultural glorification feeds back into the loop of diminished societal rule of law.
6. **International reach:** The AF-DTO has built a network well beyond its own borders, with other criminal organizations based in the United States, Latin America, and Asia. These relationships are needed to ensure drug availability and personnel to protect and sell the product. The AF-DTO has a total disregard for international boundaries, which further facilitates its ability to ignore the rule of law in other nations.
7. **Loyalty:** The organization demands loyalty from its members. Loyalty is ensured by strictly disciplining its employees for failure and forcing them to participate in inhumane acts on those who fail within their organization. Fear by some members is a close subcomponent of this characteristic.

8. **Monopoly Goal Orientation:** The AF-DTO is not constrained by governmental policies disallowing its dominance. The organization does not tolerate other DTOs to exist within its territory and kills competitors, including DTO members located outside of the AF-DTO's understood region of control. The AF-DTO only allies with rivals if, at that moment, the alliance is in the AF-DTO's best interest. The tactics used to ensure monopoly are severe.
9. **Optimism:** The organization's leaders believe strongly in what they do and believe that they have what it takes to perform. They do not settle for mediocrity, always striving for near perfection. The organization's long history of success helps to feed its leaders' belief that the organization is not susceptible to organizational failure. They have been so successful for so long that they have developed a sense of entitlement to not only the work that they do, but also the geographic regions and government. From this entitlement, the leaders have gained a strong sense of confidence, which in turn further feeds their winner mentality.
10. **Organizational learning:** The organization is constantly learning from both success and failure. The refinement of its activities and operations is vital to its growth and survival. A subcomponent of organizational learning is the AF-DTO's continued efforts to mentor its members about changes to better the organization. The organizational learning is often immediate, as in the case of lost drug loads or the successful law enforcement arrests of its members.

11. **Recruitment:** The AF-DTO largely employs individuals with proven records of loyalty and ability to carry out violence when needed. The organization is able to recruit using its reputation to kill those unwilling to join or accommodate the organization's needs. The AF-DTO's vast cash flow allows it to pay its members very well. The organization also recruits college graduates and individuals with specialty skills in business, banking, real estate, and so forth to manage the organization's assets. However, the organization's brutality comes from the recruitment of violent individuals who have "street smarts" and a tough upbringing, clearly able to handle the violence needed to excel the organization. Also important to note is the organization's ability to pay higher wages than legitimate work found in Mexico. Collectively, the AF-DTO has built a large and diverse organization.
12. **Reputation:** The strongest indicator to the organization's resiliency is its ruthless reputation for using fear and violence to get whatever it needs. Members kill and torture at will, with near impunity. Their victims include police officers, district attorneys, politicians, military personnel, witnesses, family members of those who crossed the organization, reporters, rival DTO members, innocent women and children, and so forth. The organization's reach is international. The organization has created a community of fear and branded itself as an organization that will stop at nothing to get what it wants. This reputation is often all that is needed to ensure compliance from those who otherwise would be unwilling participants.

13. **Self-reliance:** The organization has a proven history of being able to go underground and unnoticed for a period of time during highly turbulent times (such as the AF-DTO killing of a high-level priest). The organization has wealth spread throughout many countries and within many industries, including legitimate businesses. It is financially independent and has an intricate network of money laundering operations that have proven vital to the organization's ability to move drug proceeds into other ventures. Equally important is the organization's ability to involve itself in other illegal activity (e.g., kidnapping for ransom, selling counterfeit documents, and trafficking other drugs such as methamphetamine, which was not a primary product for the DTO earlier). The organization has become so large that it used its illegal funds to create legitimate businesses that, ironically, could sustain the organization without the organization ever having to traffic narcotics again.
14. **Situational awareness:** The AF-DTO uses its vast networks and resources to gather information (i.e., intelligence) on adversaries, including law enforcement, government, and rival organizations and individuals. This intelligence, along with counterintelligence operations (infiltrating law enforcement, government, and rival organizations) provides the organization with a true understanding of the "battlefield" in nearly real time. The organization reacts to the threats based on the information it obtains. The organization's situational awareness is further assisted through the use of deception tactics and efforts to pay attention to the smallest of details that could

go wrong. The organization is constantly vigilant and diligent in operations and acts accordingly to both threats and opportunities.

15. **Technology:** Advanced communications systems (scanners, police radios, phone systems, etc.) are vital to the organization's success. The organization purchases the latest and most sophisticated equipment from all possible sources. The organization also buys upgraded vehicles with armor and other protective and deceptive features. The latest in bulletproof vests and other protective armor is common. Skilled core members are experts in the use and understanding of these advances. Additionally, the AF-DTO has superior technology and equipment compared with those attempting to attack them.
16. **Trust:** The organizational leaders are related to one another through blood. This creates a level of trust not seen with the majority of other members. The organization rarely allows a nonfamily member to have organizational control. The AF-DTO leadership has not been infiltrated due to information shared with authorities from any of its leaders who were related by blood. The leadership also lacks complete trust of its lower-level members, often having these members tortured and killed for simply being under suspicion of assisting their adversaries or law enforcement.
17. **Vast consumer base:** The AF-DTO is dependent on the U.S. drug users to ensure the organization's continued success and growth in the drug trade. With a vast consumer base, the AF-DTO will always have customers to sell to and make money from.

These resiliency characteristics are the result of a culmination of both archival review and interview data. These characteristics sustain the organization during times of significant pressure to collapse, but also remain during normal operational times when no such pressure exists. Although these characteristics are highlighted here, it remains highly important for the reader to remember that multiple additional strengths make up a number of these resiliency characteristics. The generalizing and narrowing down to the finest elements was an essential component of this study in order to help make sense of such significant and diverse data.

CHAPTER 5: INTERPRETATIONS, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

This study was a historical case study of organizational resiliency within the AF-DTO. As such, it was an analysis of interview data and archival records used to determine if, by the conceptual framework definition, the AF-DTO is a resilient organization. Secondly, the study set out to identify the core resiliency factors sustaining the organization. Both of these objectives were met, and 14 (plus two environmental factors) core resiliency characteristics were identified demonstrating the resilience of the AF-DTO.

The archival records provided valuable historical information concerning the AF-DTO's successes, setbacks, and failures. These records revealed an understanding of factors sustaining the organization over time. The interviews provided similar information. The separate findings of these two research endeavors, combined with the final phase of combining the core similarities, helped to create one synthesized list of core resiliency characteristics sustaining the AF-DTO. The conceptual framework, created by this researcher for the study, is partially based on Weick et al.'s (1999) work on mindfulness, which allowed this researcher to test the findings' applicability to the research questions. Weick et al. (1999) proposed a mindful infrastructure for high reliability, and this researcher used the infrastructure in the creation of a new model for organizational resiliency specific to the studied organization. The results presented in Chapters 4 suggest that portions of the framework are correct, in relation to the AF-DTO; however, other additions were needed to create an accurate framework truly depicting

resiliency within the organization, based on the study's finding. Finding 1 discusses areas of the framework that are relevant to this study, but also addresses Question 1 below by confirming that the AF-DTO is a resilient organization. Finding 2 addresses the additional constructs needed to have a true AF-DTO resiliency model. The last section of this chapter discusses implications for research and practice. Recommendations are also discussed.

Research Questions Answered

This study featured two major research questions.

Question 1 (General Question): What role does organizational resilience play in the prevention of organizational failure within highly volatile organizations?

While it is uncertain what role organizational resilience plays within volatile organizations, it is clear what role organizational resilience plays within the sustainability of the AF-DTO. It became apparent through this study that generalizing resiliency characteristics to organizations other than the AF-DTO would not be appropriate. The AF-DTO operates in a much different environment than other organizations, including other criminal organizations. Therefore, the answer to this question rests on what role organizational resilience plays in the prevention of organizational failure within the AF-DTO, and that is the essence of this study.

The AF-DTO has developed core resiliency characteristics that explain how the organization has learned to sustain itself within a volatile environment. Organization resiliency prevented organization dismantlement. The organization was able to learn from failure and apply methods to counter any such future attack on its vulnerabilities.

Organizational resiliency was not an end state, but rather an evolutionary and, at times, revolutionary cycle that allowed an organization to better itself based on its ability to apply new learning to its way of conducting business. Organizational resiliency, as it turns out, is not in itself an applied technique, but is rather what one can define an organization as having obtained after demonstrating its ability to fight back to prevent failure. What this study revealed is that organizational resiliency within the AF-DTO is applicable only when the AF-DTO applies its resiliency characteristics to any number of situations that, if left unchecked, could lead to organizational failure. For example, when the United States changes tactics at the border points for drug detection and interdiction, the AF-DTO adapts to this change, thereby allowing its narcotics to flow, relatively freely, into the United States. If the AF-DTO failed to adapt to the changes, it would lose its ability to traffic narcotics—that is, it would lose its financial lifeblood.

Organizational resiliency is achieved only through a number of phases described in the AF-DTO resiliency framework (i.e., cycle). Organizational resiliency does not prevent organizational failure, as insinuated in the research question, but rather organizational resiliency is the phase reached by implementing any number of AF-DTO resiliency characteristics. The AF-DTO became resilient against a number of efforts to destroy it, and from each of these efforts, the organization's leadership learned how to adapt and implemented the necessary change to survive. It is more accurate to describe the role that organizational resiliency plays within the AF-DTO by examining episodes of organizational hardship and the actions then taken by the AF-DTO. Therefore, organizational resiliency does not prevent failure; rather, it is a concept used to describe

organizations, like the AF-DTO, that are able to survive any number of actions and practices by not failing when extreme conditions present a likelihood of organizational failure. Organizational resiliency can best be described and understood through the lens of human beings. Resilient human beings are not resilient simply because they bounce back time and again from significant hardship, but rather, and more importantly, because they *take actions that lead to* their resiliency (Braverman, 2001). These actions—for both human beings and organizations—are the essence of resiliency. This understanding leads to the study's second and final question.

Question 2 (DTO Question): What is the essence of the experience of resilience from the perspective of law enforcement and justice personnel who were personally assigned to dismantle the DTO?

The perspective of law enforcement and justice personnel assigned to the AF-DTO detail an organization demonstrating 14 core resiliency characteristics (plus two environmental factors), each one made up of a combination of core themes. These core resiliency characteristics include adaptability, business acumen, compartmentalization, corruption, international reach, loyalty, monopoly goal orientation, optimism, recruitment, reputation, self-reliance, situational awareness, technology, and trust. Collectively, this group provided a number of themes that were similar to those of the archival documents.

The AF-DTO's resilience frustrates those charged with dismantling the AF-DTO. Despite a number of efforts over 20 years, the organization continues to find ways to sustain itself. Simply stated, the organization is able to do whatever is necessary for survival, well outside the normal boundaries of legitimate businesses. Those providing

the data determined that, although the organization has a number of resilience characteristics, it is able to maintain that resiliency because it operates within a region of the world that has little regard for the rule of law. Second, the AF-DTO has a vast consumer base of drug users in the United States. These two environmental factors, as shown in the framework, were vital to the organization's survival. The organization has free rein to operate with near impunity and a constant flow of money from its success of selling to American drug users. With these two environmental factors in place, the organization simply has to bounce back from setbacks when attacked. These setbacks allow the organization to develop strengths, which are characteristics of the organization, part of its organizational memory allowing it to apply its knowledge, adapt, and act. Adaptability occurs through the organization's capability to respond to any number of adverse situations and find creative ways to endure. The organization is creative in tactics and strategy to address danger and is highly opportunistic through its creativity to find ways to survive.

While the AF-DTO is not a typical company, law enforcement describes a leadership structure highly concerned about its bottom line. The structure, as described earlier, contains a well-thought-out hierarchy with a centralized management structure under the direction of an implied transactional leadership arrangement. The organization finds ways to increase profits, which leads to its additional activities involving kidnapping for ransom and methamphetamine trafficking and threatens others so that it can achieve its goals

Those charged with leading the organization, delegate responsibility to lieutenants of the organization, each of whom manages a component of the organization's structure. This business platform worked very well, despite a number of their ranking members and family leaders being killed or arrested. The AF-DTO simply mentors and trains new members to take the reins when a void is apparent.

Compartmentalization is one of the largest headaches for law enforcement. The AF-DTO separates its activity in what is referred to as "cells." Each cell operates independently and only shares information with others on a need-to-know basis. This isolation of the cells prevents one cell from accidentally bringing down other cells when under attack from authorities, thereby representing a "loosely coupled system" (as described by Weick, 1976) and a "highly reliable organization" (as described by Weick, 1999). Each leader of a cell within the family is highly protected by a number of well-armed men. The leadership protection allows the organization to remain operational during turmoil.

Law enforcement says that the AF-DTO leadership strongly believes that no matter what occurs, the organization will find ways to survive. This optimism carries through from its senior leaders down the chain of command to its core members who are leading efforts on the ground level. Robb (2000) describes a similar format of a resilient organization that begins with the organization's culture. In the case of the AF-DTO, the culture is reflected through the significant family control. The family members inspire a level of confidence throughout the organization that has become endemic. The long history of organizational sustained success further fuels the sense of entitlement.

By far, the organization's ability to corrupt and blackmail officials is a foundational resiliency characteristic. The AF-DTO uses its significant cash flow to pay off those in Mexico who either would be potential problems or can help reduce problems. Those unwilling to take bribes are often blackmailed or killed. Those receiving payments include high-level members of city and state government, including elected officials, police, and military. Even U.S. authorities have been convicted in the past of accepting bribes from the AF-DTO.

The AF-DTO has a reach well beyond its borders. The organization has networked with criminal organizations in Latin America, the United States, and other nations to further its efforts. The AF-DTO depends on international support for the lifeblood of the organization—drugs and/or the products used in the production of drugs (i.e., methamphetamine production). The AF-DTO imports violent U.S. gang members to serve as enforcers of the organization both in Mexico and in the United States.

The loyalty of those within the organization and those who cooperate with the organization remain a vital component to the organization's success. The AF-DTO demands loyalty from its members and business partners. Often out of fear, loyalty is provided without question. This level of loyalty makes it difficult for law enforcement to infiltrate the organization and also limits the number of members defecting to assist authorities. The few defectors who are caught by the AF-DTO are severely tortured and killed as examples to others.

The AF-DTO has a monopoly mentality regarding its operations and effectiveness. Law enforcement describes the AF-DTO as an organization that is

intolerant of competition and that inflicts serious damage against competitors. The organization has control over vital geographic regions needed to conduct its operations. It kills competitors, infiltrates trade lines, and cooperates with adversaries of enemies for the sole purpose of remaining the dominant force in its region of control.

The AF-DTO is an incredible recruiting machine. It not only recruits gang members, as described earlier, but also recruits college graduates and non-drug-users to facilitate a number of its business operations. It recruits in great numbers and can easily replace members killed or arrested. The AF-DTO offers much higher salaries to recruits compared with legitimate employment wages in Mexico. It also recruits members possessing “street smarts,” who understand violence and can sustain an organization based on violence because they grew up in violent neighborhoods and found ways to get through their adolescence using a criminal mentality.

The reputation of the AF-DTO is known around the world. The organization prides itself on fear and intimidation and uses its reputation to influence others. Its reputation is based on its ruthless attacks on police, elected officials, members of the media, even women and children. This reputation often prevents victims from pressing charges or becoming witnesses during a prosecution. A community of fear is evident and favors the criminals. The AF-DTO branded itself nationwide and uses its violent reputation to its advantage for sustainability.

The AF-DTO does not greatly depend on others for its success. It has evolved into a self-reliance organization that, like a bear in winter, has fattened up to survive scarce times. It has such a significant cash flow that loss of proceeds due to law enforcement

confiscation do little to truly affect the sustainability of the organization. The AF-DTO buys legitimate businesses to diversify its funds and uses these some of these businesses to launder drug money. The AF-DTO is able to change its lines of business (i.e., kidnapping, drug production, and trafficking) to sustain any change occurring that affects the bottom line.

Situational awareness is a frame of mind for the AF-DTO. The organization is constantly aware of its surroundings and has backup plans in place when authorities attack. The AF-DTO collects both intelligence and counterintelligence. It can foresee problems and act accordingly. Like a turtle seeing danger, the AF-DTO can withdrawal until danger is gone; it rarely gets surprised by authorities. The organization pays attention to the smallest of details and works toward preventing errors from occurring again. An aura of diligence is apparent. Weick's work on sensemaking (1999) and Schwandt and Marquardt's work on organization learning (2000) are relevant and meaningful components in helping to better understand the occurrences of AF-DTO success.

The technology possessed by the AF-DTO is far superior to those of the authorities, especially in Mexico. The organization uses sophisticated surveillance and communication equipment, accompanied by an array of dangerous weapons and high-tech methods for transporting drugs. The AF-DTO is able to make purchases of new technology more quickly than authorities, who often must await bids and bureaucracy.

Trust is a unique component of the AF-DTO. It is largely a family-run business, rarely allowing nonfamily members to rise to high levels within the organization. The

business develops trust with lower-level members (i.e., lieutenants) and provides them with greater control over operations only when trust has been earned. The leaders do not trust others and do not allow its lower-level members to know any more than what is absolutely needed to get the job done.

In July 2007, Caldwell published an investigative report, titled *The Evidence*, in which he provides government verification describing the operations of the AF-DTO. His report further supports findings from this study's interviews describing aspects of an organization that used legitimate businesses as fronts for money laundering, murders, extortion, bribery, and racketeering. It further supports the notion that the organization's resiliency is partly dependent on trust and intimidation because once its former high-ranking members struck deals with U.S. officials for lenient sentences and/or witness protection in the United States, both trust and intimidation were removed from the AF-DTO arsenal and, as a result, officials were able to discover operations of the AF-DTO. When officials learned of these operations, U.S. efforts to minimize AF-DTO efforts were strengthened. Caldwell states, "Taken together, the extradition documents provide the most detailed and hitherto secret information yet available on the Arellano Felix Organization" (p. G6). The cooperating AF-DTO leaders included assassins and business leaders who truly understood the organization's capabilities and strengths. From their testimony, we have further learned about aspects that helped the AF-DTO survive times of stress.

The AF-DTO has a massive process of systematic bribes to officials, and this process is funded through the DTO's extreme cash flow from illegal narcotics. The bribe

process is also funded through the DTO's ability to launder money, assisted by its ruthless reputation to use force against anyone felt to be a threat to the DTO's survival.

The Narco Bosses, the final investigative report used in this study (authored by Caldwell, 2007d), highlights the organization's structure, business operations, family trust, and leadership of the AF-DTO. The information summarized was from thousands of pages of court documents, including sworn affidavits from former members of the AF-DTO, including the organization's top lieutenant, Everardo Arturo "Kitti" Paez Martinez, who identified Alberto Benjamin Arellano Felix as the cartel's leader (Alberto now in Mexican custody awaiting extradition to the United States). "Kitti" was described as a CEO type, "[more] an astute businessman and manager than the criminal boss" (p. G4). This revelation supports the study's findings through the interviews that the organization operated as a business, but was ruthless underneath. Court documents detailed Benjamin's account of sending his most ruthless assassin to murder a prosecutor to set fear into the prosecutor before his death. The court documents time and again describe Benjamin as the leader who authorized a number of killings. The trust factor is strengthened as court documents show Benjamin's brother, Eduardo Arellano Felix, as a close and constant advisor who eventually signed off on the cartel's killings, and with no remorse. The late Ramon Arellano Felix was known as the cartel's primary enforcer and was known for his ruthlessness in the killings of others. He was portrayed as a sadistic killer who threatened his common law wife, whom he would have killed if she made any mistake that resulted in his apprehension. This further demonstrated the disregard for human life and how the organization's leaders used threats and fear to gain compliance

and safety from those around them. The disregard for human life and the use of threats and fear are likely reasons for the DTO's initial success.

Conclusions and Discussions

Support of Weick's Criteria

The conceptual frame for this study is partially based on Weick et al.'s (1999) study on mindfulness. Weick et al. proposed a mindfulness infrastructure for high reliability. As discussed in Chapter 1, the terms "reliability" and "resiliency" can be interchanged. While portions of the conceptual frame were accurate in describing the AF-DTO's resiliency, others were not. It was clear from the findings that an entire attached universe of characteristics was essential to the AF-DTO's success.

Strengths of the Study

This research study's strengths are mainly derived from the study's design. This research study has strong validity and reliability because of its research design, peer review, member checks, richness of documentation, willingness of participants, access to the relevant archival data, and personal significant experience in understanding the organization based on professional experience in both law enforcement and government policy. This researcher followed Yin's (2003) recommendations for reliability by including thorough accounts of how the case study was performed so that others can execute the same study.

By the end of the data analysis phase, this researcher had achieved convergence and saturation of the data. Answers to the research questions emerged quickly from both archival data and interviews. As additional data were gathered interactively, the findings

were converging into patterns that remained steady through the end of the collection period. The convergence provided me with confidence that some data collected were represented in the initial proposed framework and that other data collected were resiliency characteristics specific to the AF-DTO. Since the interview data were conducted after the review of archival records, this researcher conclusively determined that saturation of the data had been reached as little new data emerged from the 10 in-depth interviews; only supporting and reinforcing data had emerged.

Findings for this study emerged from both interview and archival data. The researcher reviewed archive records first and then conducted the interviews. The sequence for the identification of areas of interest that appeared to be related to the research questions and purpose of the study. The findings presented were found tied to organizational resiliency characteristics did appear in both sources at a significant level of confidence and are, indeed, the resiliency characteristics of the AF-DTO.

An additional strength of the study arrived from the peer review of coding samples and transcript checks by participants. This helped to improve the reliability of the findings. First, all 10 transcripts were reviewed and approved by the participants, a form of member check defined by Merriam as “taking data and tentative interpretations back to the people from whom they were derived and asking them if the results were plausible” (1998, p. 204). Additionally, I provided all participants with an opportunity to alter any portion of their transcripts if they felt an alteration was needed or warranted. None of the 10 participants found any reason to change the content of their transcript.

An additional level of strength to enhance validity occurs through the use of peer examination (Merriam, 1998). One of the 10 participants was asked and agreed to review the documents and to provide the researcher with codes. The individual selected has considerable experience combating DTOs, including significant current and past experience with the AF-DTO. No additional codes were added, and no objections or concerns were made regarding the coding results.

The most significant strength of the study is that the participants interviewed have significant experience with the AF-DTO and derive from a diverse group of organizations and entities. A number of the participants are undercover agents who focused years of their work on the AF-DTO. Others have prosecuted high-level AF-DTO members and conducted years of investigative reporting. A number of these participants hold high-level or secretive positions within agencies that target the AF-DTO and its members worldwide. The experienced participants provided the study with legitimacy in research collected and reviewed. Clearly, these were excellent sources of data, including the researcher's my law enforcement background and were essential in obtaining interviews with these participants.

Implications and Recommendations

This section discusses the implications and recommendations from this historical case study concerning organizational resiliency within the AF-DTO. By answering the two proposed research questions, the study has implications for the theory of organizational resiliency, for future research, and for practical use by law enforcement and government-type organizations. The findings and interpretations have direct

implications for enforcement and government organizations attempting to dismantle the AF-DTO by targeting the core resiliency characteristics. By focusing law enforcement efforts on the study's identified 14 resiliency characteristics (and two environment factors), authorities may become better and more successful at dismantling organizations similar to the AF-DTO. Additionally, legitimate organizations may better their odds for survival during turmoil by applying a number of these AF-DTO resiliency characteristics. A number of these resiliency characteristics can be applied to corporations and businesses, worldwide.

Implications for Theory

Prior to this study, organizational resiliency literature failed to address how organizational resiliency takes place within a highly volatile criminal organization such as the AF-DTO. There were no identified core resiliency characteristics for DTOs, and this shortfall created a void. The subject is difficult to study because a dangerous organization will likely harm, even kill, those gathering such data. This study was successful at linking this subject to Weick's (1993) theory of sensemaking, Weick et al.'s (1999) theory of mindfulness, and Schwandt and Marquardt's (2000) theory of organizational learning. These three constructs became key components of the study's AF-DTO resiliency cycle.

Contributions to Theory

Sutcliffe and Vogus (2003) contend that it's critical to determine what exact attributes give rise to resilience. They also lament the paucity of research that attempts to

determine these attributes, particularly at the organization level. The attributes identified in this study help to fill that research gap. They are the main contribution of this study.

Additionally, this study's findings add to the existing body of research conducted on case studies of high-reliability organizations by Smart et al. (2003). It also adds to Scott's (1994) high-reliability theory, Hinrich's (2002) high-performance work system, and Hamel et al.'s (2003) four categories of organizational resilience. It also sheds new light on Garmezy's (1991) theory that resiliency cannot be guaranteed but simply facilitates the capacity to recover.

Weick (1993) asked the question, "How can organizations be made more resilient?" (p. 628). This study identified characteristics that allows the AF-DTO to be more resilient, thereby answering Weick's question and incorporating more recent theories of mindfulness, sensemaking, and high reliability. Sutcliffe and Vogus (2003) state, "Organizational resiliency is an essential corollary for positive organizational scholarship because it begins to articulate how organizations behave efficaciously and thrive amidst adverse conditions" (p. 7). Weick (2001), whose theory is the basis for this study, believes that organizations prepare themselves for failure, much like nuclear aircraft carriers do, and that these preparations alone are the main ingredient to the organizations' survival—the organizations are always preparing for the worst. The AF-DTO study found that through the AF-DTO resiliency framework, the organization was constantly on guard for threats, so much so that it killed innocent people both inside and outside of the organization to simply send a message that the organization will not tolerate mishaps or failure.

While the AF-DTO prepared for failure by setting up contingency plans, which included multiple loads crossing border points at the same time to better the chance of at least a portion of the loads getting through, the organization's success was based on its fundamental ability to make sense of these threats and implement methods for self-protection. This is what Lagadec (1993) described as "an event that may be considered as an abrupt and brutal audit: at a moment notice everything that was left unprepared becomes a complex problem, and every weakness comes rushing to the forefront" (p. 54). This study found that this occurred often, and what the AF-DTO enacted to counter the problems was through its ability to become aware of hostile occurrences. According to Wildavsky (1998), resilience is such a vital component of survival because it provides the ability to deal with unexpected threats after they become evident. What Wildavsky and Lagadec describe blends well with the study's findings, especially with Weick's theory of mindfulness.

This study supported Weick et al.'s (1999) theory of mindfulness, the foundation for the proposed conceptual framework for this study. Mindfulness, according to Weick (2004), is the passkey into high-reliability organizing. Weick interchanges resilience with reliability. Hence, this study connects with Weick's work on mindfulness. The resiliency characteristics identified through the data collection were the result of the organization's sensemaking, which occurred due to mindfulness of threats to the organization. Mindfulness is the phase of the organizational resiliency cycle in which the organization becomes aware of threats based on its ability to identify with the five variables of improvisation, shown later in the revised conceptual framework. Sutcliffe and Vogus

(2003) share with Weick and others a belief that resiliency and mindfulness are connected. Sutcliffe and Vogus theorize that organizational resiliency results from enhancing particular competencies, such as the processes that encourage mindfulness and enhance capabilities to recombine and deploy resources in a new way. The AF-DTO needed to reach the phase of mindfulness so that it could make sense of what was actually occurring. This researchers findings support this theory and also support the work of Fiol and O'Connor (2002), who describe mindfulness as “a way of seeing the information gained through scanning, a way of evaluating that information, and a way of acting on it that contrast[s] with many of the assumptions of traditional approaches” (p. 13). This description of mindfulness falls within the AF-DTO frame, which enhances mindfulness by giving it greater meaning and significance since it is a required component needed for an organization to move into the next phase in the resiliency cycle, which is sensemaking.

Weick's (1988) work on sensemaking has a strong relationship with the AF-DTO knowledge-building process (the connection found in this study with organizational learning, which followed the sensemaking phase, as seen in the revised conceptual frame). The sensemaking described by Weick translates into how individuals actively attempt to understand the world around them. This study's findings significantly contribute to his work in this area, including his earlier work (Weick, 1979), in which Weick postulated that organizations are entities attempting to transform various forms of data into information that is understood for self-maintenance. Sensemaking develops a set of practices that assist in the understanding of acquired information. Weick's later work (1993) on sensemaking describes the ability to make order and retrospective sense of

what occurs. In this later work, he directly connects sensemaking to resilience. The AF-DTO's process of sensemaking allowed the DTO to accomplish what Weick theorizes. The sensemaking allows the organization to examine threats, and this examination leads to the DTO's ability to learn and implement changes for survival.

Schwandt and Marquardt (2000) posit that organizations that can adapt quickly and continuously will be able to survive. Organizations that do not or cannot learn by adapting to events will falter. The ability to adapt and reinvent is a key indicator of survival: "by increasing the speed and quality of their learning they can succeed in a rapidly changing global marketplace" (p. vii). The AF-DTO does just this. Through the framework proposed in this study, the organization quickly becomes aware of faults, makes sense of them, and then adapts using any number of its core resiliency characteristics.

In order for the organization to reach sensemaking, it must first begin at a phase theorized by Rerup (2001) as improvisation. Rerup believes that an organization must be awakened, and this occurs through the five phases shown on the revised conceptual framework of the AF-DTO. This study's findings strongly agree with Rerup's framework and used his theory to create the initial theorized conceptual framework and the final framework based on new data from this study. These new data build upon Rerup's theory by describing additional phases and characteristics. Further, this study's findings point to a resilience cycle: the AF-DTO moves through all phases of this cycle and then returns to improvisation with new problems. This cycle is supported by Weick (2004), who believes

that a resilient organization will maintain a commitment to resilience—it will seek out what may go wrong and prepare plans and contingencies to work out catastrophic events.

At the sensemaking phase, the AF-DTO demonstrated its ability to learn from what it was making sense of. Wildavsky (1991) found that resiliency is related to the organization's ability to learn. This supports Putnam (1995), who theorized that organizational learning is a possible construct of organizational resilience. Findings from this study show that organizational learning is an essential component. Monday and Myers (1999) theorized that organizations learn and become stronger even through the transition to becoming resilient, which is a gradual process: “[a resilient organization] thrives by positively adjusting to current adversity ... it strengthens its capabilities to make future adjustments” (p. 5). The AF-DTO used its ability to learn to create resiliency characteristics, to do exactly what Monday and Myers posited. Carroll (1998a) and Weick et al. (1999) found that organizations must learn as much as possible from small precursor problems, transmit learning effectively across organizations, and improve processes based on proactive learning. Cole's (2001) findings concurred by associating resiliency with learning. The AF-DTO paid attention to the smallest of failures and learned from these mistakes and inputted new learnings, new methods to circumvent similar future failure.

What is missing from the collective research on organization learning is a comparison with criminal organizations. In this study, a rotation of constructs was needed to facilitate an understanding of how the AF-DTO created characteristics to become resilient. It appears that organizational learning is simply an aptitude to allow the

organization to implement its ability to create these characteristics to survive. This concept is strengthened through Carl et al. (2002), who found that a system can build and augment the capacity for learning and adaptation. Adaptation is one of the key findings in the organizational resiliency characteristic listing of the AF-DTO, further strengthening the notion that organizational learning is not the end result, but rather a tool to be used to create characteristics of resiliency. This contributes to existing theory by Beunza and Stark (2003), who hypothesize from their research that organizations have the ability to adjust to turbulent environments by bringing the environment within the organization—that is, the organization can get accustomed to the threat and train to be resilient against it. The AF-DTO resilience cycle provides a better of understanding of their theory by showing that the AF-DTO environment is a key factor to the organization’s resiliency, that the organization has, in some degree, brought the environment “into the organization” only in the sense to make the environment a linchpin to resiliency and controlling that environment (which is the drug supply to drug-users, and the lawless society in Mexico).

While not all of the core AF-DTO resiliency characteristics were identified collectively by existing theory, this study adds a number of additional components to the conversation surrounding organizational resiliency. This difference further strengthens the notion that criminal organizations like the AF-DTO operate on a much different level than legitimate corporations and that, therefore, the unorthodox measures undertaken by the AF-DTO to prevent failure are not written about in the same context. However, interestingly, some of the core resiliency characteristics identified through this study were

identified by other researchers. For example, with the 16 identified AF-DTO resiliency characteristics (which includes the two environmental factors later shown in the revised framework), this study was able to build upon the work of several theorists and offer contributions for alterations to others. The following paragraphs describe these contributions and alterations.

Weick (2001) believes that certain organizations survive in turbulent environments because they are always on guard, are always aware of their vulnerable surroundings, and therefore institute protective measures to ensure their existence. The AF-DTO contained these vital resiliency characteristics for sustainability; however, the AF-DTO is always operating in a turbulent environment and therefore it is on guard for dangers.

Grove (1997) theorized the necessity of leaders: “In order to survive and grow, and prosper in the global marketplace, key corporate leaders must develop aptitude for change and must develop and foster organizational resilience”. While this study clearly demonstrated the need for leadership, as described in data within the business acumen construct, it is also clear that the AF-DTO leaders do not foster “organizational resilience,” but instead harshly manage their organization out of fear (reputation construct), as a form of transactional leadership, and don’t focus on instilling or fostering resilience. The corporate sense found in legitimate corporations does not apply equally to the AF-DTO.

One of the AF-DTO’s resiliency traits is leadership. This builds upon the work of Yukl (2002), who states,

When a group is under extreme pressure to perform a difficult task or to survive in a hostile environment, the role expectations for the leader are likely to change in a predictable manner ... they look to the leader to show initiative in defining the problem, identifying a solution, directing the group's response to the crisis. (P. 37)

The AF-DTO has a number of leaders who are compartmentalized, and no one leader at the time can make all of the necessary adjustments on behalf of the organization. What this study found is that compartmentalization of leadership components serve a primary purpose of isolating the internal organization commands from one another for protection, but that isolation forces decision making to often be made within a variety of compartments, and at times decisions cannot be made by the leadership structures because organization members are in fear of being killed for failure and simply withhold information. Therefore, it is often these lower-level employees who take matters into their own hands and carry out violence as a form of redemption from the mistakes they may be held accountable for. This demonstrates a lack of information being presented to a leader for further direction. The AF-DTO lives by a simple rule—"don't mess up or you will be killed." This complicates any theory truly attempting to discuss leadership and learnings.

Kendra and Wachtendorf (2002) describe four dimensions of organizational reliance. They state that the organizational resilience phenomenon is a "socially constituted adaptability to unpredictable ambient forces" (p. 102). Their findings suggest that in similar types of major events, a resilient organization must have leaders who are problem solvers. Although the AF-DTO relies on problem-solving leaders, it also relies on members who are problem solvers.

Hinrichs (2002) conceptualized resiliency as the ability to restore and preserve efficacy. In order for an organization to survive, it must be able to adapt. This study supports adaptation as a core resiliency trait. Bandura (1989) and Caproni (2001) detail important factors relative to efficacy and how the group is led and structured. Both the leadership and the structure of the AF-DTO were important findings in organizational resiliency characteristics. Braverman (2001) defines resilience as needing two components: (1) exposure to significant stressors or risks and (2) a demonstration of competence and successful adaptation. While adaptation is a component identified through this study, this study found that the exposure to significant stressors or risks was not a component trait of resiliency, but rather an occurrence that leads the AF-DTO to improvisation, the beginning point of the study's resiliency framework.

Another core resiliency trait identified through this study is the AF-DTO optimistic belief in itself and its ability to be successful. The notion of optimism being an organizational strength is supported by Bandura (1989) and Wood and Bandura (1989). A group's shared belief in its capabilities can have a great impact on itself. What this study contributes to this theory is the notion optimism and fear can both be used simultaneously. This study explains how to differentiate between these two in a criminal culture that demands optimism from its organization through the threat of fear of violence against those who resist. The AF-DTO can instill fear, but also has two levels of optimism, one that is real (held by the leaders) and a false level held by much lower employees working out of fear and providing an impression of optimism.

Hamel (2003) created a framework for organizational resilience based on three modes: revolution, renewal, and resilience. The AF-DTO sees change as occurring not only revolutionary, but also evolutionary; the DTO leaders believe that change does not always need to happen immediately.

This study also contributes to the work of Weick and Quinn's (1999) theories on evolutionary and revolutionary change. It provides an example of change occurring revolutionary (immediately) due to imminent organizational threats or evolutionary (gradually) as the organization slowly alters its operations based on its own growth and learnings to better improve efficiency. The AF-DTO can adapt (a key component of its resiliency characteristics), and that adaptation can take years to formulate. For example, when the United States clamped down on methamphetamine made in the United States by Mexican DTOs, the AF-DTO lost significant money. However, over a period of 2 years, the AF-DTO was able to create identical methamphetamine production labs in Mexico, adapt these labs to the DTO's current line of illegal drugs, and ship the drugs into the United States alongside the DTO's other narcotics. Adaptability, used by Wildavsky (1991) to describe resilient organizations, is a characteristic of resiliency; it is not a construct of the AF-DTO framework. Wildavsky (1988), years earlier, theorized that resilience is the capacity to deal with unanticipated incidents once they have occurred—that is, resilience is about coping with incidents that are expected and unexpected. This study found that the characteristic of adaptability was an essential resilience component to cope with a variety of changes and threats and builds upon the work of Levinthal and March (1981, 1993); Sitkin (1992); Weick, Sutcliffe, and Obstfeld

(1999); Eisenhardt and Martin (2000); and Teece, Pisano, and Shuen (1997)—all of whom theorized that an organization’s resiliency is based on its ability to be adaptive. Also, in relation to the adaptability characteristic, this study builds upon Woods’ (2004) work on system resilience, which describes a resilient organization as having a buffering capacity—what a system or organization can adapt to during a potential breakdown.

Other theories affected by this study’s findings include O’Neal’s measures of resilience (1999), Nowack’s work on cognitive hardiness (1989), Youkin and Betz’s (1986) psychological hardiness scale, Wagnild and Young’s (1993) resiliency scale, Jew’s (1999) resiliency scale, Conner’s (1992) organizational resilience questionnaire, Doe’s (1994) dissertation on creating a resilient organization, Lagadec’s (1993) three stages causing organization serious harm, Bruneau et al.’s (2002) four dimensions of resilience, and others. The AF-DTO defies the logic of these other theories. The AF-DTO operates in an environment that law enforcement and legitimate government have very little control over. There is a vast consumer base. The territory of operations fails to have a consistent and effective rule of law. The AF-DTO can cheat its way to success, whereas legitimate corporations are bound by rules, red tape, and societal guidelines. Simply, the AF-DTO will do whatever it takes to survive, and that includes a number of behaviors not accepted in society. For example, Martin (2004) created a model for business resiliency while Horne and Orr (1998) examined the behaviors of resilient organizations (through their organizational resiliency inventory tool). Rerup (2001) examined an organization’s ability to remain resilient while experiencing an unexpected incident. The AF-DTO operational structure is more aligned with Perrow’s (1984) Normal Accident Theory,

which theorizes that when organizations are involved in dangerous work, failure is to be expected. The AF-DTO leadership expects a number of their drug shipments to be confiscated, they expect a number of their employees to be killed or arrested, and they operate in this environment of danger where failure is to be expected. A contributing factor to Perrow's study is that if applied to AF-DTO-style organizations, failure is not only expected, it's the primary cause for resiliency because it kicks off the improvisation process, which eventually leads to the AF-DTO-style organization creating resilience characteristics.

Porter's (1985) claim that identifying competition is the core of organizational success or failure is not applicable to the AF-DTO. The AF-DTO has very little to no competition to sell or traffic products. Rather, the AF-DTO operates within a criminal environment—an environment that Comfort (2001) was concerned about because such little research exists on this environment and organizational resiliency. No attention has been given to the measurement of a DTO-like system's capacity to function under severe threat. In the DTO context, there is no measure of the "organizational fragility curves for organizations performing under stress" (p. 116). This void in research impacts the ability to find existing literature helping to support findings relating to resiliency of an organization like a DTO.

O'Connor and Fiol (2002) theorized that resiliency is about recovering from error. This study found that much more goes into being a resilient organization. Recovering from an error is but a natural phase of a resilient organization, and in order for an organization to recover, the components described in this study must be present. This

study confirms the theory of Collins and Porras (1994), who describe an organization's ability to possess core values to become more resilient. In the context of this study, core values relate to resiliency characteristics of the AF-DTO. Weick and Sutcliffe (2005) summarize the concept of resiliency with one question—does the organization possess the skills to make do? In the context of the AF-DTO, thus far, the answer is a resounding “yes.” The skills that Weick and Sutcliffe refer to are the AF-DTO resiliency characteristics.

Mallak (1997) theorized that resilience is the ability to thrive and survive in difficult conditions. While this study concurs with such a statement in the context of the AF-DTO's ability to bounce back from setbacks and failure, it brings into question the nature of Mallak's conditions. This study found that the AF-DTO operates in an environment that provides two key favorable conditions (vast drug consumer base and lack of true government effectiveness). These two conditions help, not hinder, the organization. However, if either of these conditions were to cease, then Mallak would be correct in the sense of observing an organization's resilience when the conditions it operates in are not favorable to the organization's survival (i.e., a dried-up consumer base or the implementation of an effective government in Mexico to better enforce the rule of law).

Hamel et al. (2003) describe changes in organizational survival: “continued success no longer hinges on momentum. Rather it rides on resilience—on the ability to dynamically reinvent business models and strategies as circumstances change” (p. 53). The renewal was identified through this AF-DTO study as being the outcome equaling

resilience. While the AF-DTO is not a traditional business, its business acumen is one of its core resiliency characteristics. What this study found different from the work of Hamel et al. is that the AF-DTO did not put great emphasis on working vigorously toward its future. Instead, the organization simply found ways to not create or become a significant failure, and this was largely accomplished through nontraditional concepts clearly not found within a legitimate business structure, including blackmail, torture, killing, and extortion. The components of renewal, as outlined in this study, further the work of Carl et al. (2002), who conducted research showing that massive transformation is unstoppable and that resilient organizations contain the necessary components for reorganization and renewal.

McCann's (2004) four dimensions of organizational resiliency include the abilities to absorb shocks and surprises, creatively explore alternatives, broadly access resources, and execute transformation change. While this AF-DTO does not contract these findings, it does build upon them. The AF-DTO does absorb shocks and surprises in the organizational learning construct and does create alternatives, as seen through the resiliency characteristics. It also does broadly access resources (distilled in the resiliency characteristics) while executing transformation change (as shown through the AF-DTO's ability to adapt and renew itself). However, compared with legitimate businesses, the AF-DTO does so much more in the beginning stages (observed through this study's AF-DTO resiliency framework) prior to reaching the four dimensions described by McCann.

Implications for this Study's Original Conceptual Frame

The conceptual frame for this study, combined with the study's findings, shows slight adjustments to the constructs created from the organization's mindfulness. The conceptual framework took for granted other vital factors necessary for resiliency after mindfulness is achieved; mindfulness in the case of the AF-DTO simply allowed the organization to implement a number of organization-saving tactics to ensure its survival.

In considering a theoretical lens for this study, it was proposed that a lens using Weick et al.'s (1999) framework for reliability would be best suited to explore organizational resiliency. This researcher modified this framework based on additional research showing the interchangeableness between reliability and resiliency. This section will discuss whether this assertion, using the modified framework, proved true by comparing the study's findings. Concluding this section will be final thoughts regarding possible future directions for a sensemaking framework based on findings of this study.

Weick (1995) and Weick et al. (1999) have created an impressive theoretical foundation for reliability/resiliency. This review will consider whether the outlined components of the conceptual framework (modified using Weick et al., 1999) were present with the AF-DTO and whether other characteristics appeared that were not expected.

Analysis of the archival records and interviews found empirical evidence of all components of the conceptual framework, but with additions and modifications. The revised conceptual frame for this study, the "AF-DTO Resiliency Cycle," is shown in Figure 15. The revised frame shows an organization operating within a continuum of both evolutionary and revolutionary change, based on environmental stressors causing the

organization to adapt to its environment and refine its ability to fight off failure.

Resiliency within the AF-DTO is like a ball; it does not have a beginning or an end. The organization's resilience is clearly based on the organization's ability to adapt—that is, to find ways to survive. The ongoing process of learning, as an organization and as individual leaders of the organization, does not cease. And in catastrophic events, the organization simply adjusts and, if need be, replaces leaders killed or imprisoned.

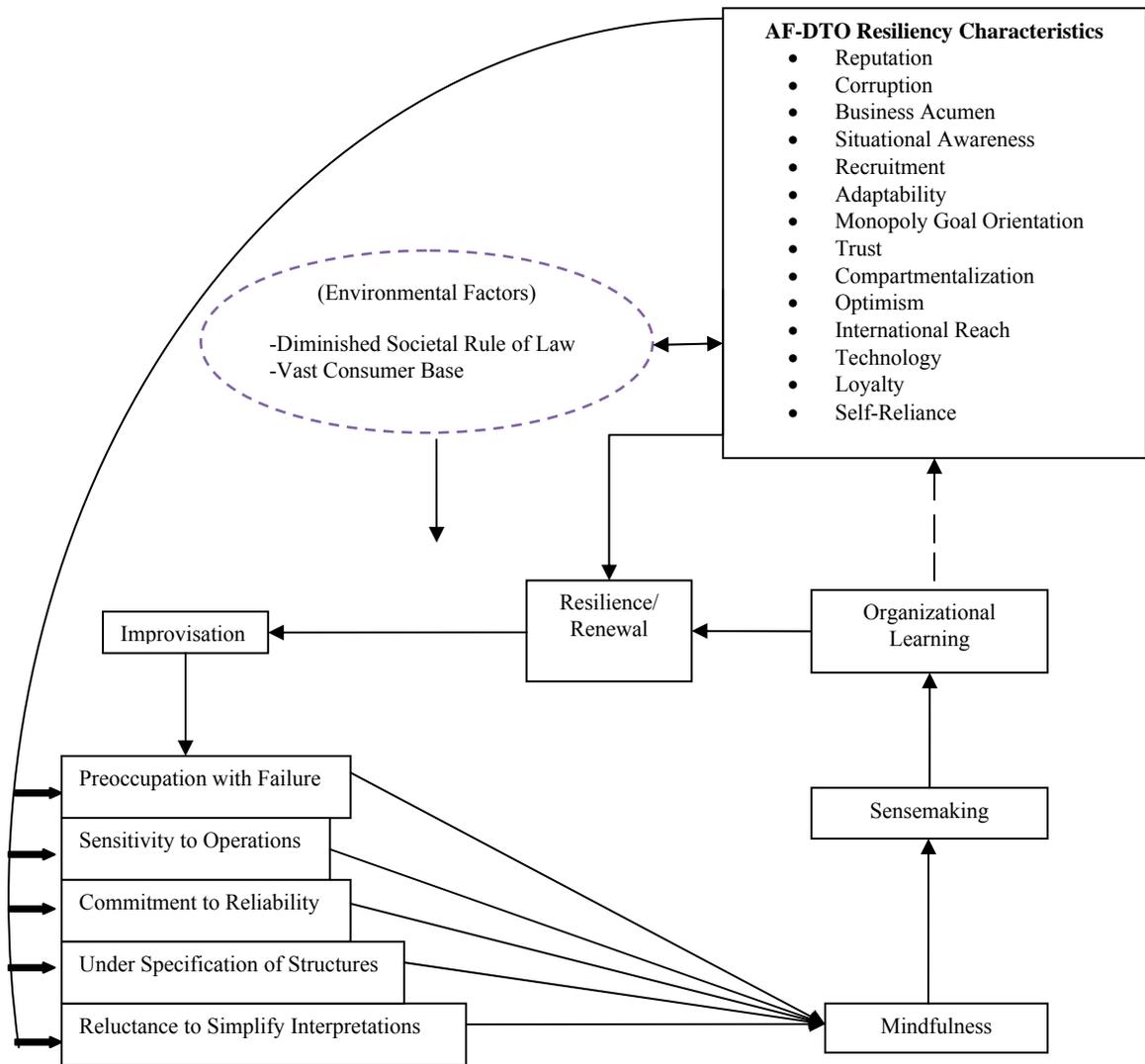


Figure 15. Revised Conceptual Frame: “AF-DTO Resiliency Cycle”

The simplest way to explain the resiliency cycle is for one to think back to being a child in a park playing with other children on the merry-go-round–style swings where children run circles pushing the circular object and other children remain on it for the ride. All along children are jumping on and off as it continues to maintain rotations. The revised conceptual frame is much like that merry-go-round, which includes

improvisation, the five constructs, and mindfulness, sensemaking, organizational learning, and resilience. Through each rotation, a characteristic becomes evident at the organizational learning construct, and the characteristic become a part of the organizational memory (for a description of organizational memory, see Schwandt & Marquardt, 2000). The characteristic then remains while waiting for further rotations for others to join them. All along, the resiliency framework is affected by two environmental facts: diminished societal rule of law and vast consumer base. These two areas have been in existence prior to the birth of the AF-DTO, and combined, they have proven to be the lifeblood allowing the organization to develop resiliency characteristics.

The diminished rule of law in Mexico allows the organization to thrive and build upon itself. The vast consumer base is the American drug-using public, and this never-ending customer base will always buy the product. These environmental factors can affect the AF-DTO resiliency efforts and the AF-DTO's resiliency characteristics. However, only the resiliency characteristics (and not the resiliency universe) can affect the environmental factors because a number of the resiliency characters (all of which were formed through organizational learning) can alter, and have altered, the environmental factors (i.e., corruption of government and variables of the business acumen construct).

Uniquely, a portion of the resiliency characteristics relate back to the inputs for mindfulness. According to Rerup (2001), improvisation, which leads to the five mindfulness inputs, is hard to maintain because it constantly requires attention. What this study proves is that improvisation is maintained through the organization's consistent

cycling through this framework, using the resiliency characteristics to support the five inputs to mindfulness. For example, the DTO's resiliency characteristic of preoccupation with failure is enhanced by the resiliency characteristics of trust, loyalty recruitment, corruption, and reputation. Next, the second input of sensitivity to operations is affected by the characteristic of situational awareness. The third input, commitment to resilience, is supported by the organization's international reach, technology, monopoly goal-oriented structure, and optimism. The fourth input, under specification of structures, is supported by the characteristic of compartmentalization. Lastly, the final input, reluctance to simplify interpretations, is supported by the self-reliance and business acumen characteristics. Collectively, the entire organization demonstrates constant ability to adapt; therefore, the characteristic of adaptability is rightfully connected to all five mindfulness inputs.

In conclusion, while the conceptual framework is helpful in understanding one aspect of organizational resiliency, it is inadequate to sufficiently account for the entire process of resiliency within the AF-DTO.

Implications for Practice

The intent of this study was to provide law enforcement and political leaders with a better understanding of how highly resilient organizations operate and how to better use resources to target the core resiliency factors of the organization in an all-out effort to fully dismantle the organization. However, this study also provides legitimate organizations, interested in creating or sustaining a resilient atmosphere, with an understanding of characteristics that can be studied and applied to their organizations in

order to sustain similar success as seen within the AF-DTO. Obviously, those AF-DTO characteristics relating to criminal behavior would not be appropriate, however, others would be, which include business acumen, situational awareness, recruitment, adaptability, compartmentalization, optimism, international reach, technology, loyalty, and self-reliance. Each of these characteristics is constructed of additional variables, as described earlier. The characteristics collectively can provide a strong framework for corporate resilience.

This study has done two things: (1) proven that the AF-DTO is a resilient organization and (2) identified the core resiliency characteristics sustaining the organization. To further this study's efforts, it would be prudent for the U.S. and legitimate governmental organizations in Mexico adopt a strategy to dismantle the AF-DTO by refocusing their efforts on these key resiliency characteristics, while also addressing the two key environmental factors, all of which help to sustain this organization. If proven successful, similar efforts should then be applied to the remaining four Mexican DTOs operating in similar fashions along the other portions of the Mexican border. Next, the United States should compare the AF-DTO with U.S.-based organized crime (including the Mexican Mafia, Aryan Brotherhood, Nazi Low Riders, and Black Guerilla Family) and attempt a similar strategy against these organizations. Simultaneously, the U.S. government should compare the AF-DTO with worldwide terrorist organizations and, if relationships are identified (which is inferred earlier through research), should then use a similar strategy by focusing on the resiliency characteristics. Lastly, the United States should focus on the final tier of domestic

terrorist groups, organized street gangs like MS-13, White Fence, Bloods, and Crips in an effort to dismantle the leadership. According to Kleiman et al. (2002), these findings may also assist government efforts in dismantling other criminal organizations, such as terrorist groups and street gangs, which appear equally resilient.

According to Hinrichs (2002), “Even organizations that have enjoyed stable environments in the past are now facing uncertain technological, economic, political, and cultural change” (p. 3). What the AF-DTO demonstrates is that legitimate organizations targeting the AF-DTO must have superior technology to keep up with the AF-DTO’s ability to obtain advanced technology. With cyclical U.S. federal and state funding, the ability to remain a constant pressure to the AF-DTO remains a constant question. The leadership change of organizations and governments can affect continued sustained efforts against the AF-DTO. Also, the obvious red tape that exists within legitimate organizations targeting the AF-DTO is a clear hindrance to sustained success.

Heyman and Campbell (2004) point out a very important factor in the battle to dismantle DTOs: very little is truly known about them, and this creates a challenging problem to address. Collecting information on a highly secretive and dangerous organization obviously makes such efforts extremely challenging. However, better real-time intelligence is needed, which includes further technology for wiretaps and, most importantly, the ability to use human intelligence (i.e., undercover agents) to infiltrate the organization, as was done successfully in the United States against organized crime syndicates.

Implications for Future Research

A number of areas for future research are warranted. Understanding how important brutality is to the AF-DTO appears understated. If such brutality were removed from the resiliency characteristics of the organization, would the AF-DTO remain a resilient organization? The same can be said for any of the listed resiliency characteristics; however, brutality was the most prominent research finding, followed by corruption. If we could remove from the AF-DTO the characteristics not used by legitimate organizations, it would be interesting to discern if the AF-DTO could remain resilient based on any of the outlined studies in this dissertation describing resiliency characteristics of legitimate corporations.

Additionally, research should examine the remaining four DTOs in Mexico and explore similarities or differences between these organizations. Research should examine the success and failures of these organizations and create a tool to identify if any of these DTOs appear more resilient than others. Research should also look at the top- and bottom-performing DTOs for similarities and differences. Further research could expand beyond the borders of Mexico to DTOs in other nations.

As previously noted, DTO and terrorist organizations have similarities (Hutchinson, 2002). A study examining similarities and differences between these two types of organizations is warranted and could lead to a better understanding of how to target these types of organizations for dismantling. Hoffman (2004) wrote an article citing the resiliency strengths that businesses can learn from al-Qaeda in order to achieve a similar resiliency. While this researcher doubts that a crossover of strengths would be

useful, it would be an important undertaking because those newly identified characteristics can better help law enforcement to adapt.

While studies have attempted to measure organizational resilience (O'Neil, 1999), none have studied a high-level DTO. This AF-DTO study did not measure resilience, but rather focused on identifying resiliency characteristics. A quantitative study would better address any effort to measure such resiliency. Further, developing a tool to glean out the elements of resiliency would be helpful. According to Comfort (1994), "almost no attention has been given to the measurement of an inter-organizational system's capacity to survive under severe threat" (p. 116).

However, one of the most useful future studies should involve (1) comparing the AF-DTO with an organized crime entity in the United States that has since been fully dismantled and then (2) locating an organization that, at the time of its resiliency, mirrored the AF-DTO of today. This research could further assist U.S. law enforcement in working with Mexico to create a similar effort in dismantling not only the AF-DTO, but also any other criminal organization sharing similar resiliency characteristics.

Smith (2002) describes organizational resilience studies as generally focused on crisis avoidance. Therefore, a study examining the recent interest in organizational resiliency is warranted. This will better help the community interested in crisis avoidance discern from studies which could assist in organizational performance when compared simply to studies which attempt to theorize resiliency frameworks with no intention of use for practicality purposes.

Sutcliffe and Vogus (2003) believe that researchers should pay more attention to resilience because current theory fails to fully take into account the totality of what a resilient organization means. With the variety of explanations provided in this study's literature review, it's clear that these definitions are widely spread out, and few resemble others. Having a collective effort to thoroughly scan through all existing resiliency frameworks and using the most common of findings to present a revised theoretical framework of resiliency seems warranted. Of course, as realized from this study's findings, some organizations, due to their line of business (i.e., illegal activities), appear to operate on a much different playing field that could skew the results if compared against legitimate organizations. Therefore, as Wolin et al.'s (1999) findings suggest, it may not be possible to arrive at a universal framework for resiliency because resiliency is an abstract term and can be described in the context of individuals, organizations, or the environment.

Conclusion

In 2008, the leadership structure of the AF-DTO remained operational despite the numerous arrests of key leaders (Strategic Forecasting Incorporated, 1997). Its continued operational status gives credence to the idea that the organization can replace its membership, find leaders ready to take the helm, and ensure survival. It also supports findings from the interviews, which time and again describe an organization that is adaptive and able to find replacements for those killed or arrested. Simply, this is an organization which refuses to die.

This study introduces important findings to the conversation about organizational resilience. This study demonstrates the process through which the AF-DTO remains resilient. The process begins with improvisation, a core construct, and continues on to the five variables of preoccupation with failure, sensitivity to operations, commitment to reliability, under specification of structures, and reluctance to simplify interpretations. These five variables then lead to a mindfulness (i.e., situational awareness) of volatile occurrences, followed by the organization's ability to make sense of these threats and adapt to them, thereby either creating a resiliency characteristic or using an existing resiliency characteristics to remain resilient. Due to the nature of the business, the AF-DTO is on a constant state of alert and must continue to cycle itself through this framework beginning with the initial phase of improvisation. As described in the framework for this study, the AF-DTO operated within an environment supporting its resiliency. Two environmental factors are essential to the organization's success: (1) the vast consumer base in U.S. drug users and (2) the diminished societal rule of law in Mexico.

The core findings from this study, while supporting the framework, clearly identified a number of AF-DTO resiliency characteristics: reputation, corruption, business acumen, situational awareness, recruitment, adaptability, monopoly goal orientation, trust, compartmentalization, optimism, international reach, technology, loyalty, self-reliance, diminished societal rule of law, and vast consumer base. Each of these characteristics are made up of other similar characteristics, which are responsible for creating these characteristics. To fully appreciate each of these characteristics, the

reader should pay close attention to earlier sections of this study outlining the subcomponents of each of these resiliency characteristics. They are vitally important to the complete understanding and awareness of each characteristic.

Throughout this study, this researcher recognized the significance of remaining open to alternative explanations. In the beginning of the study, I had a strong indication, supported by personal work experience and the literature, that certain factors would be present in the findings of this study. While some of these assumptions were found to be true through the research, a number were not, and this was the biggest surprise of the study given my extensive professional work directly related to the AF-DTO. With a strong saturation of data, including archival records and personal interviews, this study demonstrates the characteristics responsible for resiliency.

The results of this study will better aid domestic and international law enforcement and military in attacking not only high-level DTO resiliency characteristics, but also other, similarly structured organizations such as prison gangs (which control domestic street terrorism activities within the United States and abroad through the use of over 100,000 U.S.-based, low-level gang members), as well as worldwide terrorist organizations like Al Qaeda (which continue to grow and threaten democracy and challenge weakened governments). Lastly, it's expected that legitimate businesses and corporations can model a number of the AF-DTO resiliency characteristics (as long as they do not cross criminal, moral, and ethical boundaries) for their own use, in an attempt to move their organizations towards a model of resiliency.

Organizational resiliency must find its place at the forefront for both practitioners and theorists to better the world we live in. A melding of these worlds, working together in order to better understand what creates resiliency in a variety of contexts is essential in efforts to dismantle thug organizations while helping to improve the success and longevity of legitimate organizations and institutions. Through the efforts of this study, this researcher is certain that contributions to the field have been made and that others will continue to advance upon the foundational work of organizational resiliency.

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APPENDIX A: INTERVIEW QUESTIONS



Interview Questions

Before each interview, I (1) introduced my study and its purpose for learning more about resilience with the AF-DTO; (2) emphasized to each participant that there are no wrong or right answers and that I am interested in their opinions; (3) reminded participants that they do not have to answer any question that they do not want to; (4) asked for the participants' permission to be tape recorded; and (5) asked whether they had any questions before beginning the interview and let them know that they could ask questions at any time.

1) **Interview 1:** Establish the context of each participant's experience with the AF-DTO. Identify core resiliency characteristics of the organization.

- How long have you known of the AF-DTO?
- How long did you specifically work on projects related to the AF-DTO?
- What year did you first begin, and last end any work/research on the AF-DTO?
- In what capacity/position did you work?
- Detail for me the following:
 - Corruption: Did the AF-DTO exploit weaknesses and the blackmail of public and prominent figures?
 - Discipline: Did the AF-DTO utilize enforcement of obedience throughout the organization through fear and violence?
 - Infiltration: Did the AF-DTO demonstrate a continued effort to gain a foothold in legitimate intuitions to further profit or gain a level of protection from detection?
 - Insulation: Did the AF-DTO utilize protection of the organization's leaders by separating them from the soldiers, cell from cell, and function from function?
 - Monopoly: Did the AF-DTO demonstrate control over certain criminal activities within a geographic area with no tolerance for competition?

- Motivation: Did the AF-DTO demonstrate sole motivation, power and influence resulting from the accumulation of wealth?
 - Subversion: Did the AF-DTO demonstrate subversion of society's institutions and legal and moral value systems?
 - History: Has the AF-DTO allowed entrenchment and refinement of criminal activities and practices?
 - Violence: Has the AF-DTO demonstrated its use of violence without hesitation to further the criminal aims of the organization?
 - Sophistication: Does the AF-DTO use advanced communication systems, financial controls, and operations?
 - Continuity: Does the AF-DTO act like a corporation? Does the organization service the individuals who created and run it?
 - Diversity: Does the AF-DTO participate in illicit activities to further insulate the organization from dependence on one criminal activity?
 - Bonding: Does the AF-DTO demonstrate bonding at the individual-to-individual and individual-to-organization level, for solidarity and protection, often through complex initiation rites?
 - Mobility: Does the AF-DTO demonstrate a disregard for national and jurisdictional boundaries?
- Can you recall an unsuccessful operation against the AF-DTO?
 - Did your efforts completely dismantle the organization?
 - Why or why not?
 - Can you describe for me the leadership of the AF-DTO?
 - What AF-DTO strengths were apparent?
 - What AF-DTO weaknesses were apparent?
 - What strengths were apparent in efforts to attack the AF-DTO?
 - What weaknesses were apparent in efforts to attack the AF-DTO?
 - What types of resources did the AF-DTO have that sustained their operations?

- Did arrests make a difference?
 - What made a difference?
 - How long would that difference last?
- How did the community treat the AF-DTO?
- How did political leaders treat the AF-DTO?
- At what level of sophistication did the AF-DTO operate?
- Was the AF-DTO's organizational structure important in how it survived?
- What actions did the AF-DTO take to sustain itself when it was under attack?
- What actions did the AF-DTO take to rebound from setbacks?
- If you were completely in charge of attempting to dismantle the AF-DTO, what would you have done?
- What types of resources, equipment, plans, etc. were used in attempts to dismantle the DTO?
- Were efforts to destroy/dismantle the AF-DTO focused on targeting their leadership, their operations, or other components/activities?
- Did the DTO appear to be aware of what was occurring (attempts to destroy/dismantle their operations)?
- Can you describe how the AF-DTO appeared to understand what was occurring to dismantle/destroy their organization?
- Was there a point where it seemed the AF-DTO was about to collapse, but it didn't?
 - If so, what kept the organization from falling apart?
- Now having answered many questions, what resiliency characteristics would you like to mention or discuss?

2) **Interview 2:** If a second interview is needed, it is to clarify responses from a previous interview or to ask new questions based on learnings obtained by me during the interviews and archival records review.

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APPENDIX B: STUDY APPROVAL

THE GEORGE WASHINGTON UNIVERSITY MEDICAL CENTER

WASHINGTON DC

Date: December 14, 2006
To: David Schwandt, PhD

From: Alfred Katz, M.D.
IRB Vice Chair, Committee on Human Research
Institutional Review Board Panel#1, FWA00005945

Re: Correspondence dated 11/29/06
Subject: **IRB#080659** -- *An Historical Case Study of Organizational Resiliency within the Arellano Felix Drug Trafficking Organization*

Risk Level: Minimal
Status: Active
Expiration date: 12/13/2007

This is to certify that the Institutional Review Board has **fully approved** the above referenced protocol via an expedited review process pursuant to Federal regulations 45 CFR 46.110 (1), 46 FR 8392. The IRB determined that this project qualifies for expedited review under category # 7.

The anniversary date of this project is **12/13/2007**. HHS regulations at 45 CFR 46.109(e) require that **continuing review** of research be conducted by the IRB at intervals appropriate to the degree of risk and **not less than once per year**. The regulations make **no provision for any grace period extending the conduct of the research beyond the expiration date of IRB approval**. Please mark your calendar now to insure that the IRB receives a renewal request 30 days before the anniversary date of the project, if this study is expected to extend beyond one year.

This protocol has been approved for a **maximum number of 10 subjects** to be enrolled at this site for the duration of the project. If you wish to increase enrollment beyond this number, you must submit a modification request to the IRB and obtain approval before exceeding this number.

Investigators are reminded that the IRB must be notified if the project is altered in any way (change in location, personnel, number of subjects, age of subjects, or any change in research protocol). If you have any questions, please do not hesitate to contact the Office of Human Research either by email at ohrirb@gwumc.edu or via phone at 202-994-2715.

AK/amp

APPENDIX C: RESEARCH CONSENT FORM



Research Consent Form

An historical case study of organizational resiliency within the Arellano-Felix Drug Trafficking Organization

GW IRB number: **080659**

Principal Investigator: Dr. David Schwandt Telephone number: (703)726-3788

1) Introduction

You are invited to participate in a research study under the direction of Dr. David Schwandt of the Department of Education, George Washington University (GWU). Taking part in this research is entirely voluntary.

2) Why is this study being done?

You are being asked to take part in this study because of your expertise and/or knowledge of the studied organization (Arellano-Felix Drug Trafficking Organization). Your professional positions/experience with this organization (past or present) lends credibility to such a study. The purpose of this study is to explore and identify organizational resiliency traits within the Arellano-Felix Drug Trafficking Organization.

The research will be conducted at the following location(s): Various throughout the United States. A total of 10 participants at approximately 8 institutions will be asked to take part in this study. You will be one of approximately 10 participants to be asked to take part at this location.

3) What is involved in this study?

If you choose to take part in this study, you will meet with me and answer questions regarding organizational resiliency within the Arellano-Felix Drug Trafficking Organization. The interview will be audio recorded and the session could last between 20-90 minutes. If necessary, a follow-up interview will take place and will transpire in the same manner as the first interview. The following activities are specifically research related: *1) one-on-one interviewing 2) audio recording 3) follow-up interview (if needed).*

The total amount of time you will spend in connection with this study is between 20-90 minutes.

4) What are the risks of participating in this study?

There are no physical risks associated with this study. There is, however, the possible risk of loss of confidentiality. Every effort will be made to keep your information confidential; however, this cannot be guaranteed. Some of the questions we will ask you as part of this study may make you feel uncomfortable. You may refuse to answer any of the questions and you may take a break at any time during the study. You may stop your participation in this study at any time.

5) Are there benefits to taking part in this study?

You will not benefit directly from your participation in the study. The benefit to science and humankind that might result from this study is a better understanding of organizational resiliency traits within a drug trafficking organization, which may be later used to better help law enforcement target these identified traits.

6) What are my options?

You do not have to participate in this study if you do not want to. Should you decide to participate and later change your mind, you can do so at any time.

7) Will I receive payment for being in this study?

You will not be paid for taking part in this study.

8) Can I be taken off the study?

The investigator can decide to withdraw you from the study at any time. You could be taken off the study for reasons related solely to you (for example, not following study-related directions from the investigator) or because the entire study is stopped.

9) How will my privacy be protected?

If results of this research study are reported in journals or at scientific meetings, the people who participated in this study will not be named or identified. GW will not release any information about your research involvement without your written permission, unless required by law.

10) Problems or Questions

The Office of Human Research of The George Washington University, at telephone number (202) 994-2715, can provide further information about your rights as a research participant. If you think you have been harmed in this study, report this to the principal investigator of this study. Further information regarding this study may be obtained by contacting Paul Chabot, student researcher, at telephone number (202) 489-6656. For problems arising evenings or weekends, you may call the same number.

*Please keep a copy of this document in case you want to read it again.

APPENDIX D: RECRUITMENT SCRIPT



An historical case study of organizational resiliency within the Arellano-Felix Drug Trafficking Organization

IRB #: 080659

Student Researcher: Paul Chabot

“Dear Sir or Madame.....

“I’m a student at the George Washington University and would like your assistance in obtaining information relevant to my study, *An historical case study of organizational resiliency within the Arellano-Felix Drug Trafficking Organization*. I’m looking for professionals who have detailed knowledge of this organization and would like to participate in the study through the process of an interview.

“The purpose of the interview is to identify organizational resiliency traits within the Arellano-Felix Drug Trafficking Organization. You have been selected based on your expertise with this organization. The interview(s) will take place at a location, date, and time of your choosing. It would be most helpful to me, though, to have all interviews completed by the end of February 2007. Because of your expertise with this organization, I would like to include you in my study by conducting an in-depth interview lasting 20-90 minutes. A follow-up interview will take place, if needed.

“The interview(s) will be audio-recorded and I will take notes during its duration. The data will then be transcribed using a process of coding and theming. I can provide more information on this process if you so wish. Additionally, I will provide you with a copy of my dissertation proposal, prior to the interview, so that you may be familiar with the overall purpose and background of the study. You can also decline to read this proposal.

“Before the study begins, I will ask that you review and sign two documents: 1) Informed Consent Form, and 2) Audio Consent Form. These two documents provide greater depth into the entire process, as well as my expectations and your rights. The interview may only take place once both documents are signed.

“Thank you for the opportunity to include you in this study. May I continue to explore your participation and provide you with the Informed Consent Form and Audio Consent Form? Do you have any questions? Your contribution to this study is much appreciated.”

...end...

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APPENDIX E: AUDIO RELEASE



Audio/Video Release Form

I hereby authorize Paul Chabot to use my audio recording for the purpose of his dissertation entitled, *A historical case study of organizational resiliency within the Arellano-Felix Drug Trafficking Organization*. I have indicated below the name I wish to appear with my voice. I understand that by signing this form, I am releasing all recordings to him for this expressed purpose. I will not receive any compensation for this now or at any time in the future. I further certify that I am over the age of 18 years.

Name (Print): _____

Signature: _____

Date: _____

Please initial: Audio only: _____

Name to be used with video/audio in presentation
(please print clearly) _____

Investigator's initials _____

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APPENDIX F: SIGNIFICANT EXCERPTS FROM INTERVIEW DATA

(Please note that the letter “P” represents “participant”)

<p>P-1</p>	<p>...very resilient</p> <p>They are difficult to infiltrate...they don't work with unknown people</p> <p>They have good technology, i.e. encryption on phones</p> <p>They do an after-action report and learn from their mistakes</p> <p>...and the organization is always learning how to do things better</p> <p>...centralized leadership structure using retailers and distributors</p> <p>...and the organization grows another head if one is knocked off</p> <p>...the AFO has a lot money to buy whatever they want and they can buy what and whom they want</p>
<p>P-2</p>	<p>...pursues and uses corruption on a massive scale</p> <p>...lots of money on bribes to law enforcement and government officials and sometimes to the military</p> <p>Bribery is a way of life for these guys</p> <p>Every public and prominent they suborn with bribery becomes a potential target for blackmail</p> <p>...they rarely have to resort to blackmail because they are so effective in bribery</p> <p>...the rules through oppression</p> <p>They killed and tortured their own for failing—they ate their young</p> <p>...launder huge amounts of case very successfully</p> <p>...investing or purchasing or establishing so-called legitimate businesses.</p> <p>...they have been discrete about not spreading disinformation around among the lesser family members because they don't really have a need to know the operational details and the secrets of the cartel</p> <p>...the price for defining their control or the price for not paying tribute or taxes ... was death</p>

...would kill people who try to move narcotics through the so-called Tijuana Plaza

A very unfortunate subculture in Mexico that glorifies these drug traffickers

The rule of law does not exist where they operate

They are directly involved in subverting the rule of law by buying governments by bribing officials

Very good at changing how they operate and traffic their drugs

They are diligent

Buy advanced communication systems and equipment

Intercept rival communications including law enforcement and other drug cartels

They wiretap people they use a variety of communications to break codes

They monitor police communications

They don't adopt any of the conventional processes or systems of a legitimate corporation

Supplement their drug money by running a kidnapping for ransom racket

They operate throughout Mexico and the United States

They kill people here in the United States

Their drug trafficking requires a distribution network ...from Mexico to the United States.

...and their cocaine comes from Columbia and that involved international smuggling

It is a family organization which gives it great strength

Blood loyalty runs very deep—it's a family operation

Lot of money which allows them to bribe ...by information or anything they want

The sheer amount of money they control in an internal strength

...brutality ... sadistic...enjoyed it...killed in horrific ways... torture people

	<p>...successful in establishing their domain ... intimidating opposition</p> <p>...family structure</p> <p>People are reluctant to take them on</p> <p>...adaptive to their surroundings is key to their resiliency</p> <p>...counter their opposition and still do very well by paying attention to what was going on around them</p> <p>...law enforcement is learning ... how successful the AFO is at trafficking very large quantities</p> <p>...diversity their products ... also now including methamphetamine</p> <p>...more successful than anyone could have imagined. This demonstrates their confidence.</p>
P-3	<p>...organized well connected, particularly when it came to the transportation of drug shipments</p> <p>...able to organize well ... had their hands on companies that were legitimately shipping goods in and out of the United States</p> <p>Corruption of Mexican officials</p> <p>The Arellanos were pretty tight when it came to control ...shipments and movements.</p> <p>...good at organization</p> <p>They are very much enforcement oriented</p> <p>...squelch issues using a variety of means, including assassination</p> <p>They were feared by man and that was always a factor which works in their favor</p> <p>...they were able to compromise trade lines</p> <p>...very sophisticated—they were able to compromise workers at parts, seaports, land border or other areas on the Mexican side</p> <p>On the American side ... creating front companies</p> <p>They used muscle to control the area</p>

<p>They took it upon themselves to be a very large entity</p> <p>Anyone who would invade that area was going to pay a hefty price whether that price be having to now pay them and work for them, or pay funds to use the traffic lines, or they would be killed</p> <p>They would use the latest technology</p> <p>They knew how authorities went about doing businesses</p> <p>They were always protective of their operations by collecting information on authorities and trying to get into legitimate organizations by collecting information on authorities and trying to get into legitimate organizations including Mexican law enforcement organizations.</p> <p>They would use encryption</p> <p>They were able to move finances and disguise capital</p> <p>They were forced to find other means of managing their money which meant moving their money and investing that money ... in real estate ... disguising capital</p> <p>Our efforts to effect the organization did have some impact ...however it appears that the organization had other people in the pipeline to replace those who were taken down ... leaves a temporary vacuum ...filled by others in the pipeline.</p> <p>...the closer you get to home and you get at the top lieutenants, it does have an effect to some extent</p> <p>...brains and brute is how I would describe them</p> <p>They had some leadership but when it came to the operations and how they were formulated, you also had the brute which carried great significance for them to be successful.</p> <p>We didn't see the community worshipping this organization like they did with Escobar in Columbia ... the community appreciated the donations, however most of the community was afraid</p> <p>The organization was taking hits from law enforcement both within Mexico and the United States; the organization used its money to hire people to continue trafficking.</p> <p>Not much in the form of competitors</p>

	<p>...at times if there was a short void it was immediately filled by others hired by the organization</p> <p>They could simply recruit and bring in new people</p> <p>They are no longer as organized as they were before ... a lot of infighting ...a lot of family arrested or killed.</p> <p>Good business sense</p> <p>... key was brutality but I think the key was that business smarts the business sense it's just that they added on the brutality and that made them that much more effective</p> <p>The U.S. needs to works closer with Mexican counterparts</p> <p>We [the United States] need to have insight from their [the AF-DTO's] perspective about what is truly occurring and who are the main players and entities</p> <p>...[the United States] should try to keep the AF-DTO on the defensive and not the offensive</p> <p>...to be successful against the AF-DTO, we needed all law enforcement players sitting together at the same table looking at developing the target in the very beginning states ... it's easier said than done</p> <p>...but we [the United States] probably could have got more permission along the way which could have brought their dismantling...</p>
P-4	<p>...they exploited weaknesses of others and used blackmail</p> <p>...Mexico government is so corrupt; even the supposed good guys like the cops</p> <p>...corruption is endemic</p> <p>The violence is much more brutal than what we are used to here in the U.S. ...kill children and women and torture.</p> <p>Violence and fear is all around; they will stop at nothing</p> <p>These crooks have given up cars and houses, cash and just walk away from it</p> <p>Money loses it meaning because of how much they make</p> <p>They have the organization very compartmentalized ... the left hand does not know what the right is doing ... set up like a CIA cell ... have a money guy who</p>

passes the money to a dope guy ... one may not know who the other is

...they translate information and intelligence by keeping it compartmentalized

...trafficking money which is making its way into the United States, such as Bell Gardens City Council

The cartels have moved into a number of U.S. cities ... and bought homes there

...throwing a lot of money at legitimate institutions ... buy legitimate products like boats and turn them into smuggling items ... small businesses very susceptible ... happening all over Los Angeles

...the police never have the resources that this drug organization has ... they have better planes, better boats, better equipment, better surveillance, better communications and more sophisticated weaponry

They are using American banks ... making billions of dollars per year ... drug banks in the U.S. and Mexico ... this is without doing anything illegal

They act somewhat like a corporation and military structure sense ... in the corporate world one gets fired, but in their world you get killed ...extra motivation to get it right

They have money, inflict fear and have a good level of organization ... have law enforcement on their side

Informants are important to helping authorities break inside, but it's very hard to do as even innocent people in the organization who were not informants get killed just for being under suspicion

...connection ... with the Mexican Mafia Orange County tried to set up a link with the organization. The bigger one gets with shipments for the AFDTO the closer you can get connected to the leadership

Most of the brothers are dead or locked up or dead ... we have not seen any lack of drugs crossing the border

Somebody is taking the place of those knocked down

Once it gets stamped out at one place, it comes back at another

There is tremendous resiliency, I don't know how you stop it

Money has got to be the key ... if people weren't making money from drugs it

	<p>would go away.</p> <p>Leadership is an important component of the AFDTO</p> <p>They have great street smarts ... don't have to be a college graduate</p>
P-5	<p>Used violence and obedience</p> <p>Instilled fear</p> <p>...separate their operations and functions to keep them safer from detection and apprehension</p> <p>...have control over a specific region ... very little goes through their region without them knowing about it</p> <p>They will kill anyone who crosses them.</p> <p>...no regard to society, laws or norms</p> <p>I don't see them trying many new techniques ... they pretty much stick with what now works for them</p> <p>They do what they want, how they want ... the only thing they change now is their routes if they have looses</p> <p>They will go after those they hire who screw up by letting big loads get taken down</p> <p>...(the AFDTO) does not have a business model ... just a bunch of self-employed people working together to continue a venture ... reminds me of what we learned about Chicago with Capone ... the individuals in the organization still had the freedom to do what they wanted as long as they didn't counter Capone ...if a leader of a cell did wrong, they would kill that person, same with the AF-DTO</p> <p>...they are into kidnapping, extortion when times are running low.</p> <p>They are innovative ... tunnel in 2005 known as the "mega tunnel," ... we knew the tunnel existed ... we called our crew in, the commandant of the Mexico equivalent to the district attorney were notified by our people ...but when the commandant was notified, he showed up, then left and never showed up again, another guy showed up and said he needed to research what was going to be done about it ... then a third guy comes and they go to PGR, fed prosecutors office, they want to interview the witnesses before going to the tunnel ... they had to fly</p>

in a Mexican prosecutor and get a search warrant ...it was to stall to let AF-DTO know what was going on ...it was an AF-DOT tunnel ...we lost any real good intelligence or arrests

Never going to fully dismantle the AF-DOT because they are very profitable ...people want to be a part of it...they didn't stop making Fords when Ford passed away.

People coming up through the organization will simply take the lead if someone falls

They have branded themselves

In the past the Tier 2 leaders were stepping up to take control when the leaders were killed or captured

There really isn't a true leader due to success of law enforcement by taking off the Tier 1's and Tier 2's and now you are seeing realignment

...total loyalty to each other

They did take pause when Javier got hooked up because they didn't have a clue what happened, but that only lasted for a week or so ...they simply moved on and kept the organization alive

They have lots of money

They have lots of personnel

They have a high level of protection due to their ability to buy corrupt officials

Arrests barely made a difference, kind of like a hiccup ... after a week or so they were right back at doing their business

They did have an organization style ... they run crews and run with an iron fist through their structure ...they know who is in control and who they answer to

If the organization was under attack they attacked back and went after law enforcement; this is their biggest threat ... maneuvers against them by Mexico law enforcement resulted in the killing of cops and or officials to send a clear message to back off

They are an old and established organization

They gave a long-standing success, a strong history, which helps them as well

	<p>They have been allowed to build over the years, generations, and that has made them resilient</p> <p>They know what to expect and what to do to counter problems</p> <p>The fact that they are so in-tune with efforts to disrupts them that they adapt</p> <p>They are aware of what is going on ... aware of their surroundings</p> <p>Their influence at all levels of government is very important to their success</p>
P-6	<p>A lot of corruption caused by the AF-DTO ... once you are bought no way out of it ... anyone who has family is in danger ... government is corrupt ... police are corrupt</p> <p>Simply having money to pay off authorities is all it takes</p> <p>It's all about loyalty and the AF-DTO expects loyalty from its members</p> <p>There is a very exact hierarchy in place to ensure compliance with little mistakes made</p> <p>1993 the AF-DTO went underground to hide and remain low-key due to pressure. They lost business because of this. The stumbling block was the killing of a priest so they went into hiding and the lieutenants were running things</p> <p>Their leaders were protected</p> <p>...the AF-DTO had enforcement crews</p> <p>One leader did not know where the other lived; just one or two trusted people who knew were everyone was</p> <p>The AF-DTO has over two decades of sustained operations ... very smart business people who run their organization ... they ran it like typical leaders would run any business</p> <p>They are a strong alliance which has pooled their network of resources</p> <p>Use of violence and intimidation to get things they want</p> <p>They are the most violent and notorious organization in that region and because of that, they do get what they want</p>

	<p>They have a trademark of fear</p> <p>They network of cooperation they have is significant because they work with police and politicians to get what they want</p> <p>They are able to infiltrate any organization and this is the main reason they are so successful</p>
P-7	<p>...in order to operate in this manner, they have to basically corrupt government officials</p> <p>...they create intimidation ...use threats and acts of violence ...killing of police officers and public officials</p> <p>They tried to assassinate the editor of a newspaper in Tijuana who was publicly speaking out against the organization ... anybody who makes a comment ...they will try to get to those people</p> <p>...they are a poly drug organization</p> <p>If law enforcement seizes a load of cocaine or other drugs, they organization still makes a profit ...</p> <p>...very much like the Italian organized crime ... they have infrastructure ... they layer themselves ... they insulate themselves to subordinates and they give orders to maybe just a few organizational individuals and it's up to those individuals to pass along the instructions to lower-level members.</p> <p>Government is afraid to pursue them</p> <p>...identified individuals whom they felt were cooperating with law enforcement would be killed</p> <p>The AF-DTO generates better sources of intelligence and information than law enforcement does on them</p> <p>...they always invest in legitimate businesses ...they buy property ...they use straw purchases to hide the true ownership of those assets ... use these locations primarily to launder money</p> <p>They compartmentalize efforts or responsibilities so that they give an order for example to a component that not everybody knows that only a few people know based on a "need-to-know" situation because they don't want everybody to know in case somebody turns into an informant, that they can't testify ... certain heads of the organization only have one or two individuals whom they trust that they pass along instructions and those individuals will then go through another layer or</p>

maybe even another layer before it makes its way down to the individuals charged with executing the orders

The organization moved into Tijuana and once they gained a foothold, they wanted to control that whole area because it's a very important corridor

Keep in mind that these are corporate structures in the sense that profit is everything ... more profit they can generate the better and that includes eliminating, killing their rivals

...corruption and bribery Destroy the fiber ... in terms of government infrastructures

They became very expansive in terms of distributing drugs which impacts the morality of Mexico

They generate violence which creates unsuitability within the government

They kill more people than some terrorist organizations

...generate a specter of violence

... they always try to become more and more sophisticated ... so that the organization can grow

They become more compartmentalized

They use more sophisticated means of smuggling drugs across the border

They become more efficient in terms of bribing ... threaten and intimate whoever they want

...more sophisticated in their communications ... in the way they communicate with one another

They generate more and more profits which means that they have become that much better as an expert at laundering money

Background checks on new employees

...they use U.S. gang members out of prison and bring them to Mexico to act as enforcers and on security details

They bond through violence and fear ... and working in very dangerous situations because they rely and trust one another which is why they have such camaraderie

No respect for sovereignty issues such as violating airspace with airspace bringing

	<p>in drugs through countries</p> <p>It's a very tiered type of organization ... CEO likes and then individuals who handle enforcement, protection, contract killings ... money launderers who specialize in wire transfers ... property and hiding that property from others ... legal experts ... structured along a corporate infrastructure</p> <p>I don't think they were ever on the verge of collapsing ... was crippled due to several enforcement actions by government and arrests but I don't think it was ever on the verge of collapse ...</p> <p>The unfortunate nature of the beast is that when you take out the heads of the organization, they do a very good job of mentoring and tutoring other individuals to step in and assume greater responsibility... in the event of arrests of key figures, there are always other who will takes the reins.</p> <p>There is always somebody who will step up and take the reins</p> <p>They always restructured their operational activity based on what law enforcement was doing</p> <p>...very dynamic</p> <p>...very proactive in changing tactics based on enforcement efforts focused on them</p> <p>They structure is very much like a corporation</p> <p>...many of their members are not highly educated, but they are very street smart</p> <p>...very corrupts and that helps them with bribery and that helps them and they are known for being poly drug dealers which diversifies their products</p> <p>They have no regard for human life</p> <p>They have been tutored by the Columbians that if you generate enough violence and threats and you intimidate you can control an entire country which is what they have done</p>
P-8	<p>...their level of violence has gone up as they have always been known for their level of violence</p> <p>...close association with the Mexican Mafia (located in the U.S. prison system)</p>

During Vicente Fox presidential reign in Mexico, he did target the AF-DTO and because of that, you saw other DTOs in Mexico rise in power in other regions

They have a wonderful intelligence network that operates within their organization and outside

...created a terrorist technique ... people were reluctant to testify against them ... they were able to reach even those under government protection in Mexico

...over the years they became more and more sophisticated ... engaging rogue agents from terrorist groups to increase their ability to utilize military intelligence against the government

...whatever the market will bear is whatever they will set ...making methamphetamine was primary for them ... selling marijuana, cocaine and heroin

...tried to put down a legitimate newspaper [in Mexico]

...establishing legitimate businesses and construction ...able to put their money into just about anything ... moneymaking ventures is common ... into banks ...counterfeit documents ... technology involved in producing counterfeit documents and providing them to the illegal to utilize and smuggle drugs across the border ... into human trafficking using their drug smuggling routes

...connected with U.S. street gangs

It reminds me of the Italian Mafia ...corruption influence is so big ... difficult to put that kind of organization down

...family style organization with family members

... very good at separating the drugs the guns the money

...at times when law enforcement was within an AF-DTO house they might come up with a few items or just or just one specific item which demonstrates that the AF-DTO was very good at also separating its people as well as its products from capture ...lessen the damage that law enforcement was able to do

...they control the gateway to San Diego ... gatekeeper ...huge gateway for drugs totally controlled by the AF-DTO

The average person in Mexico has very little hope ... lower class ...very limited. Lots of people try to get into the AF-DTO business to make money

...huge amounts of money controlled through investments and banks

	<p>...communications are excellent ... able to by satellite phones ...bought technology from the Middle East ... use of computers and sophisticated banking schemes require a high level of sophistication that we didn't see before</p> <p>I see the AF-DTO like the TV series, the Sopranos ... there is an aspect of a corporation ... have corporate and legal advisors ... majority has to deal with family relations ... family cohesiveness ...willingness to risk in the name of the family ... they are more loyal than corporate</p> <p>...they do approach prospective new members at a time of need</p> <p>...they have a hatred for the U.S.</p> <p>...huge consumer base</p> <p>...ability to attack law enforcement and government with sincere boldness ...this also helps them keep their own people in line</p> <p>...walled off into cells so that you cannot destroy the entire organization if a cell is taken down</p> <p>...corruption of the government in Mexico is the most important to them</p> <p>When their high-level members were killed, it had an effect ... kind of like a good football team ... if you had one bad quarter, you would try to comeback and kick butt the next quarter ... that's kind of what they do, they'll lick their wounds and retreat, but then come back and attack stronger ... the U.S. waits too long to attack after having success Need to attack again right away ... this is the only way to succeed against them</p> <p>AF-DTO keep coming back swinging</p> <p>...lots of money</p> <p>The people that grew up in this organization grew up in a tough environment ...does not require a lot of talent ... requires a tough type of an individual who can handle adversity because that's how they've grown up their entire lives</p>
P-9	<p>...large and violent organization</p> <p>...have an ability to infiltrate a variety of areas for their own success</p> <p>The environment they work within allows them to have total control over their operations ... this same environment makes it difficult for U.S. law enforcement to infiltrate</p>

	<p>They are able to recruit very well</p> <p>...quickly replenish their ranks</p>
P-10	<p>...blackmail of prominent officials</p> <p>...own legitimate businesses to launder money and stash away large sums of cash</p> <p>...high level of fear and violence generated by them among their employees and enemies</p> <p>They kept their leadership and organizational components separate from one another to better protect the leaders and the organization</p> <p>... had no regard for boundaries within the U.S. or Mexico</p> <p>...always looking for ways to improve upon their ways of doing business</p> <p>They are a highly violent group</p> <p>... very well funded and use that money to buy sophisticated equipment and communications</p> <p>...became involved in other illegal operations to either keep the business afloat during turbulent times or to expand their current base of operations to bring in more money ... this includes human smuggling</p> <p>...they will send groups to other drug territory to make hits</p> <p>...Mexican police sell intelligence to the AF-DTO</p> <p>... money to corrupt</p> <p>... high level of street level knowledge and training</p> <p>... equipment is superior to that of the authorities</p> <p>The AF-DOT paid their people well so they were able to replenish their ranks, if needed.</p> <p>...high amount of money the AF-DTO paid its people lead their people to feel that the risks were worth it</p> <p>Operation United Eagle did have an impact ...trained Mexican cops in the U.S. and sent them back to Mexico ...need to do more of that</p>

<p>They are ingrained in all levels of government</p> <p>...have good communication, with an estimated 200 plus people who work with the police and Tijuana helping the drug trafficking organization with surveillance.</p> <p>If someone gets arrested in the organization, someone else will take that person's spot</p> <p>The organization has a stronghold on Tijuana, it controls the territory</p> <p>The organization has appeared to have moved from drugs to also an enforcer organization keeping enemies out of their Tijuana territory</p> <p>They don't make friends with other organizations (DTOs)</p> <p>...has a very good business sense</p> <p>...are brutal ... if they suspect you are weak they will get rid of you if you are part of their organization ... for example if a cop working with the organization who knows a lot and could be sell them out would most likely be killed</p> <p>They have infiltrated the Mexican government ... not allied with any other organization</p> <p>They appear to have transferred from a trafficking organization to an enforcement organization</p> <p>At the top of the organization you have families and nephews ... highly insulated organization ... below you have six to eight lieutenants, each having crew leaders who each have a small group. The bottom level includes escorts, kidnappers and those committing extortion, murder, surveillance of police and selling dope. No one component has too much knowledge about what another may be doing</p> <p>... outstanding communication equipment</p> <p>...very large membership</p> <p>...infamous reputation ... control through fear and terror</p> <p>...no red tape like government to operate</p> <p>...linked themselves to U.S. street and prison gangs drug distribution and other criminal activity related to the business</p>
