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Local Law Enforcement's Ability to Transform Inputs Into Counterterrorism Outputs

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Chief Academic Officer
Eric Riedel, Ph.D.

Walden University
2018

Abstract

Local Law Enforcement's Ability to Transform Inputs Into Counterterrorism Outputs

by

Melissa S. Gresham

MS, Eastern Kentucky University, 2010

BS, Embry-Riddle Aeronautical University, 2007

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Public Policy and Administration

Walden University

November 2018

Abstract

Leadership within local police organizations should be able to, but do not, process information and create actionable strategies aimed toward proactive counterterrorism practices. This problem could lead to future terrorist attacks within the United States if police agencies do not adjust their tactics in response to growing terrorist threats. A possible cause of this problem is that leadership within local law enforcement agencies is reactive in nature and as a consequence, do not encourage officers to engage in proactive strategies. Using Easton's conceptualization of systems theory as the foundation, the purpose of this case study of a single law enforcement agency in the southwest was to explore how police leadership influences counterterrorism strategies. Research questions focused on how police leadership processed information within their organization to develop counterterrorism tactics. Data were collected from interviews with police leadership and officers, observations of policing activities, and document review of policies, directives, and unclassified reports. These data were coded and analyzed following Yin's procedure for schematic analysis. The results indicated that this agency has a successful counterterrorism strategy based on 6 organizational pillars of leading, proactive, learning, processing, policy, and communication. This study may promote positive social change by helping police leaders identify which system inputs provide the best detail for developing counterterrorism policy, and what community partnerships help police identify terrorism threats.

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Dedication

Local law enforcement members face ambiguity daily as they protect the United States from criminal and terrorist activity. These brave men and women sacrifice traditional work for long hours, unknown circumstances, job complexity, and social implications. My dedication and support to local law enforcement begins with this study to support their efforts in protecting Americans from domestic and international terrorism. Their skills and passion will persevere beyond our enemy's capability to attack.

Acknowledgements

I received a lot of support throughout my Ph.D. program! Thank you to my family, friends, and colleagues! Your motivation and advice were much appreciated, and I could not have completed this study without your support. The department selected for this study was incredible to work with and I appreciate their willingness to learn from research. Finally, thank you to the faculty at Walden University, my Chair and Committee, that guided me through a seamless dissertation!

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Chapter 1: Introduction to the Study

Introduction

Policing terrorism in the United States continues to be an area of focus for federal, state, and local law enforcement agencies. Continued terrorist activity within the United States and abroad demonstrates the vulnerabilities that exist in local and national strategies. These vulnerabilities, such as reactive policing strategies, increased calls-for-service, and understaffing of officers, highlight the need to close gaps in the existing protocols of these organizations. Local law enforcement agencies are the first to respond to attempted and actual threats and therefore must proactively fill their gaps to prevent attacks in their communities (Burns, 2014). The goal of an effective counterterror strategy is to prevent terrorist activity from coming to fruition (Burns, 2014). This goal places an intense focus on early detection as a means of prevention. As Burns (2014) noted, early detection of terrorist planning is the best method to foil terrorist attacks within the United States. A primary reason is that the success of a terrorist attack primarily depends on the detailed planning that can be conducted about the target (Laqueur, 1977). Therefore, the preparation stage is critical to terrorist success. However, this stage also gives local law enforcement the best opportunity to prevent the attack from reaching the deployment stage (Homeland Security and Emergency Services, 2016). For police organizations to prevent such attacks, advanced systems and leadership must be present within local law enforcement agencies (Homeland Security and Emergency Services, 2016).

Police organizations rely on a complex network of inter and intra organizational systems that work cooperatively through leadership collaboration. Some of the subsystems within the holistic system are information related, while others are computer-based training. However, the most sophisticated technology, equipment, and training cannot replace the organizational leadership necessary to drive outcomes (Abrahamson & Goodman-Delagunty, 2014). Information technology subsystems contain embedded information, but those subsystems do not create the conversations needed to operationalize information (Abrahamson & Goodman-Delagunty, 2014). Transformational leadership is when a leader uses their ability to motivate behavior through trust and influence (Vito, Higgins, & Denney, 2014). This style has contributed to the success of police operations and leadership's ability to implement policing strategies (Mazerolle, Darroch, & White, 2012). Additionally, police leaders who develop local coalitions and utilize all information within their system are more successful in taking an all-hazards, proactive approach to prevention (Ratcliffe, 2016). Policing terrorism requires a proactive policing strategy, and success is dependent on the leadership and their ability to collaborate, network, and analyze terrorist-related information within their system (Ratcliffe, 2016).

Regarding such information, a plethora of data are available to local U.S. police organizations through cooperative relations with the federal government, fusion centers, state police, community reports, and arrest records. Yet, the ability of police leadership to effectively process these data is not certain. One study shows that police leaders are still traditional in their attitudes and practices and rely on the federal government to counter

terrorist operations (Taylor & Russell, 2014). Local police involvement, however, is critical to the nationwide success of counterterrorism efforts (Taylor & Russell, 2014). A review of the literature demonstrates a gap on how leaders process information within the police system to drive their officers toward proactive policing specific to terrorism. A study was, thus, needed to determine how police command personnel process information to lead an agency that will prevent terrorism.

I conducted this study to help fill that gap. Terrorist organizations and their ideology will continue to evolve, and members of these organizations will change their tactics to find gaps, as historical evidence shows. This evolution coincides with counterterror strategies and exploits contemporary vulnerabilities. This study was needed to ensure that local law enforcement leadership have the capabilities to properly analyze available data and develop effective protocols that will allow them to stay ahead of terrorist tactics. The social implications of this study could lead to more foiled attacks from local police involvement rather than federal government reliance.

This chapter summarizes the research literature related to local law enforcement leadership and their ability to process information within the police system. The background section also describes the knowledge gaps related to this study and outlines why it is needed to fill those gaps. Following the background section, the problem statement and purpose of the study section provides concise relevance and intent for the research.

This chapter identifies the theoretical foundation and rationale for design and methodology selected. Definitions are provided for clarity on key words used throughout

the research. The final sections include assumptions, scope and delimitations, limitations, and significance.

Background

Traditionally, members of police organizations within the United States are focused on keeping their communities safe and protecting the public. Police strategies include crime prevention, investigations, enforcement, and public order. The terrorist attacks on September 11, 2001, exposed many gaps, including communication and information sharing, in the federal and local policing systems in the country. Many years after this incident, on April 15, 2013, the Boston Marathon bombers further exploited vulnerabilities. In addition, the attackers found additional ways to bypass policing strategies.

Terrorism prevention requires a different level of systems thinking and proactive leadership. Yet, police organizations in the United States are more organizationally aligned in terrorism response and postevent investigative activities (Randol, 2013). Additionally, the terrorism prevention strategies set forth by the federal government are not compatible with traditional policing strategies (Randol, 2013). To fulfill the counterterrorism mission, local law enforcement leadership will need to understand their police system, including the environment in which it operates, and produce preventive-oriented outcomes (Randol, 2013).

In reviewing the literature, I found few studies on police organizations as a system. However, certain aspects of police systems have been studied individually. Police leadership and information processing are two components of a police system, but they

have not been combined into a single study, according to my review of the literature. Recent studies show that transformation leadership style among police leaders is critical to successful implementation of organizational outcomes (Mazerolle et al., 2013; Sarver & Miller, 2016). Along with transformational leadership, police leaders must understand all the factors within their system. There are many factors that relate to policing terrorism, such as detection and prevention, and leadership must be able to direct their officers to proactive counterterrorism outputs.

The literature includes several academic studies that focus on the various root causes and trajectories of the phenomenon of terrorist activity. Many researchers have examined the causes of terrorism or the gaps in the system that were exploited (Randol, 2013, LaFree, 2012, & Hewitt, 2013). In contrast, Dahl (2011) studied the failed domestic terrorists' attacks in the United States. He found that 73% of terrorist attacks in the United States between 1987-2010 were failures because of local law enforcement intervention. More specifically, of the 89 thwarted domestic terror plots, 66 were foiled through human intelligence (HUMINT) from members of the public, covert police operations, or police informants (Dahl, 2011). In a separate study, Hewitt (2014) examined 38 terrorist prevention cases and found that routine policing was a factor in identifying and capturing terrorists in 55% of the cases. It is evident, based on these data, that local law enforcement play a critical role in foiling terrorist attacks by their daily operations. Thus, police leadership should continue directing their organizations toward proactive counterterrorism outcomes.

Problem Statement

There is a problem within local law enforcement agencies in the United States with regard to their ability to proactively counter terrorism within the community. Specifically, leadership within local police organizations should be able to, but have not, process information and create actionable strategies aimed toward a proactive counterterrorism tactic. This problem could lead to future terrorist attacks within the United States if police agencies do not adjust their tactics in response to growing terrorist tactics (LaFree, 2012). A possible cause of this problem is the leadership within local law enforcement agencies are still reactive in nature and do not drive their officers to engage in proactive activities. Terrorist organizations are continuously looking for gaps to exploit (Randol, 2013), and police leadership needs to proactively fill those gaps to stay ahead of terrorism. My analysis of the leadership within a local law enforcement agency as part of this qualitative case study was intended to contribute knowledge about this under-researched topic.

Purpose of the Study

The purpose of this qualitative case study was to analyze the leadership within a local law enforcement agency in north Texas. I analyzed leaders' ability to lead proactive policing strategies specific to counterterrorism tactics by using information available in their police system. Systems theory, which was developed by Easton (1953), was used to examine this complex problem that requires all individual components within the system to recognize their contribution to the solution (Stroh, 2015). I examined the department's

leadership to determine how they use their system to produce proactive counterterrorism outputs.

I triangulated data from interviews, document reviews, and observations. Data were collected by interviewing the department's leadership and the officers within the department. I asked questions about participants' leadership style, information processing, available data in their subsystem, counterterrorism-specific outcomes, community partnerships, and policy versus practice implications. I also reviewed leadership training documents, the department policies, and any federal or state directives. Finally, observations from meetings, operations, and training were made to determine actual performance compared to policy direction.

Research Questions

The central research question for this study was, How does the local law enforcement department's leadership process information within their system to produce counterterrorism outputs? The subquestions were

RQ1: Which inputs provide the greatest source of counterterrorism planning for the department leadership?

RQ2: What partnerships in the system increase effective counterterrorism planning?

RQ3: How can the systems theory expand public policy and extend into a police organization?

Theoretical Foundation

Police leadership are an integral part of the broader public policy system. There are many factors within the system that drive their decision making such as operational objectives, human resources, constraints, and outcomes. The political environment in which public officials operate input demands into their system, such as city council requests, citizens complaints, or social implications, that the leadership will need to convert into output (Easton, 1965). This process is a systems theory aimed toward political life (Easton, 1965). A tenet of systems theory is that a public organization is a system of behaviors that is exposed to an environment of influences in which it is required to react (Easton, 1965). A police organization is influenced by a variety of inputs such as the city council, citizens, businesses, schools, federal demands, and criminal activity, to name a few. The leadership must be able to process the inputs in their environment and align their outputs with organizational objectives.

Counterterrorism is an objective of police organizations within the United States. The various inputs into the police system can be analyzed to create a proactive counterterrorism output. Systems theory can be used to understand how information is processed within a system to produce the desired output. Termed *web of decisions* by Easton (1953), organizations have a network within their decision-making ability to add value to the social system in which they operate. Police add value to the community by managing their web of decisions to produce counterterrorism-related outputs. In this study, my focus was on how the police leadership can process their inputs to produce a value-added output.

In conducting the study, I also extended systems theory into public policy. Based on the literature review, there is little research linking a police organization to a system. Studies using the systems theory have been used in public policy, but are limited and not current. The legislative process is a system and involves complex processes with a web of decisions ultimately leading to a desired outcome based on demands or inputs (Drewry, 2008). Police organizations also function as a system; however, before this study, researchers had not applied systems theory to a specific police agency. Systems theory is general and can be applied to many organizations. In this study, I sought to extend the theory into the analysis of police systems.

Nature of the Study

I determined that a case study was the best design for this study. I analyzed a local law enforcement's leadership and their ability to process information within their system to create counterterrorism strategy. The objectives of a case study are twofold in that (a) it is empirical and involves examination of a phenomenon in real-world context and (b) researchers draw upon multiple sources of data with many variables that merge in a triangulating fashion (Yin, 2014). This study took place within the department selected and encompassed examination of the leadership in their day-to-day operations. The variables within the police system are plentiful and require multiple sources of data collection (Cairney, 2012).

The triangulation of three sources of data created credibility and reliability in the study. A case study includes an all-encompassing method with various data collection methods (Yin, 2014). I obtained data from interviews with the department leadership,

review of police policy documents and training material, and observations from meetings and/or training. The data were managed with NVivo 11 software and were analyzed using the logic model (Yin, 2014) further explained in Chapter 3.

This case study can also be used to expand the systems theory. It is aimed toward a system, not a population, and can generalize the theory for future research. A single case study is much like a single experiment. Generalization from a single case study is possible (Yin, 2014). However, results from a case study produce a generalization of a theoretical proposition, not a sample (Yin, 2014). I wanted to gain empirical evidence from the use of systems theory and go beyond the selected department by viewing a police organization as a system. In doing so, I sought to contribute to a police systems theory.

Definitions

Complex system: Systems that have properties like nonlinearity, emergence, self-organization, and coevolution (Morcol, 2012).

Complexity: The types of relationships among elements, more than in the number of elements (Morcol, 2012).

Domestic terrorism: A phenomenon that involves acts that are dangerous to human life and that violate federal or state law; appear intended (a) to intimidate or coerce a civilian population: (b) to influence the policy of a government by intimidation or coercion: or (c) to affect the conduct of a government by mass destruction, assassination, or kidnapping; and occur primarily within the territorial jurisdiction of the U.S. (Federal Bureau of Investigation, 2016).

System: A group of elements that are interdependent with properties that are holistic rather than being a mere sum of the properties of; systemic relations are nonlinear; and transitions can occur between systems and nonsystems (Morcol, 2012).

Systems theory: A theoretical framework that is holistic, taking into account the interrelationships and interdependence between the parts of a system, as well as the relationship between systems and their environments (Hammond, 2003).

Terrorism: The deliberate creation and exploitation of fear through violence or the threat of violence in the pursuit of political or ideological change (Hoffman, 1954).

Transformational leadership: A variety of follower attitudes and behaviors, including followers' positive emotions, job satisfaction, affective commitment, self-efficacy, creativity, and proactive behavior (Lanaj, Johnson, & Lee, 2016).

Assumptions

There are factors in this study that are believed to be true, but cannot be verified. It was assumed the leaders at the selected department exhibits leadership competencies from their experiences in law enforcement. It was also assumed the participants answered with honesty and did not attempt to influence the results of the study. The assumption was the selected department leaders are interested in improving their agency by finding gaps in their counterterror strategy. Finally, it was the assumption the leaders will agree to a face-to-face interview, or phone interview, and respond voluntarily.

Scope and Delimitations

The purpose of this study was to analyze the leadership in a north Texas local law enforcement agency and their ability to process information within their police system to

produce counterterror policing strategies. The selected department was chosen for this study because of the target rich community and destruction that could be caused from a sophisticated terrorist attack. The department polices a city that contains an NFL headquarters and development worth $5.7 billion in capital investment, and three other investments including a park worth $2 billion, office buildings worth $700 million, and upscale housing worth $1.7 billion. Medical facilities are also included in these developments. This area is an ideal target for any terrorist organization. The police department is responsible for keeping the community safe and protecting their citizens.

Only the selected department was analyzed in this study. Information during the interviews may reference federal, state, or other local agencies regarding information sharing, but only the leadership within the selected department was analyzed. Systems theory was used as the theoretical construct. Other theories could be applied to this study, such as leadership theories, organizational theories, or group theories, but systems theory was selected as the best alignment construct to analyze the selected department as a system of interconnected parts producing an outcome.

The selected department is one local police agency of more than 12,000 departments within the United States (Bureau of Justice Statistics, 2013). This study can be transferred to other local law enforcement agencies. Transferability recognizes the uniqueness of the local environment with each qualitative study which could preclude some agencies with varying factors (Yin, 2016). Additionally, transferability in this study could build new studies at a higher conceptual level (Yin, 2016). While this study is looking through systems theory to analyze the selected department, it could be used to

analyze the residing city as a system which includes all business partnerships, city departments, and collaboration within the system to produce outputs accomplishing a specific city goal.

Limitations

The limitations related to this study were in the form of methodological and transferability. The data was collected from three methods of interviews, document reviews, and observations. There were many forms of data that could not be collected because of classification issues related to policing operations. This study was limited to unclassified information that was only obtained from open source documents or observations. The department reviewed the interview notes to ensure only unclassified information was used in the study.

The transferability of this study also contains some limitations. While the study can be used in similar agencies or at a higher conceptual level, the selected department may have resources that similar agencies do not have dedicated to counter terror operations. The socioeconomic status in the selected departments city presents external pressures on the police department that may also not be found in similar agencies. These external pressures require the police department leadership to respond to demands with specific outputs. Each agency will have unique demands on their system and counterterrorism strategies may not be the objective of other agencies.

Identified in the assumptions, the selected department genuinely wants to find gaps in their ability to proactively counter terrorist threats. Individual interviews could bring bias toward personal objectives not related to organizational success. The

interviews were used collectively to counter this limitation and analyzed as an organization. Any individual objectives were not used in the data analysis. Additional bias includes the personal views of leadership on counter terror objectives and the strategies used to obtain them. Leaders often agree on objectives related to counterterrorism, but can disagree on how to accomplish the objectives. This is closely tied to how police leaders process information within their system to produce an outcome, but personal disagreements were not be used in the data analysis.

Significance

Identifying how police leadership analyzes information within their police system to produce counterterrorism strategies may provide insight into any gaps left for terrorists to exploit. The selected department can focus on filling the gaps or developing new policies aimed toward counterterrorism efforts. Filling gaps in our police operations and leadership is a key to successful counterterrorism strategy. Currently police forces are more involved in terrorism response activities rather than prevention (Randol, 2013). Yet research suggests local law enforcement have a significant role in finding terrorists embedded in their community by routine policing (Hewitt, 2014; Dahl, 2011). This study will advance the knowledge and literature in the field of police leadership and the counterterrorism policy that extends from their decisions regarding police operations.

The systems theory could also be advanced into a specific police systems theory and applied more to organizations. Little research is available on police organizational behavior regarding a system. Linking all the interconnecting parts of the police organization to create a system will increase collaboration, networking, and outcomes

specific to counterterrorism efforts. Historically the systems theory has applied to engineering or science fields to analyze complexity, but recently it has been applied to social sciences and organizations as an open system with an input-transformation-output model (Kast & Rosenzweig, 1972). This study is significant in filling this literature gap by analyzing how a police department transforms their inputs into outputs.

The social change that could emerge from this study includes a safer community, better partnerships within the police system, and enhanced leadership capability within police leadership. Analyzing how the selected department's leadership creates a counterterrorism strategy from their web of decisions will identify opportunities to enhance their operations. A recent study regarding impediments to information and knowledge sharing within police organizations, contributes 42% impediments to the organizational culture which includes individual unwillingness, organizational unwillingness, and leadership (Abrahamson & Goodman-Delagunty, 2014). This study analyzed the decisions made by leadership within the selected department regarding counterterrorism strategies, and if gaps are identified could address the unwillingness related to proactive policing strategies.

Summary

The purpose of this study was to examine how the selected department leadership transforms their system inputs into counterterrorism outputs. A qualitative case study will be used as the paradigm and design to govern the research. This study uses the systems theory understand what type of inputs go into a police organization related to terrorism and how the leadership transforms the inputs into counterterrorism outputs. Interviews,

document review, and observations will be used to collect data to answer the research

questions.

Chapter 2: Literature Review

Introduction

This literature review section provides an exhaustive discussion on what is known about the research questions. Organized around the systems theory, the literature review includes a discussion of the inputs, throughput, and output regarding counterterrorism from a local law enforcement organization. Other components of the systems theory are included such as the feedback loop in the system, system equilibrium, and group dynamics on the system. The literature review begins with a review of the systems theory in social sciences, public policy, and law enforcement. I then move on the components of the systems theory as it relates to the research questions.

Literature Search Strategy

The literature search strategy included an exhaustive review of research studies and peer-reviewed journals. Specific to systems theory, social science, public policy, and local law enforcement, the search dealt with how police organizations use their system inputs to create counterterrorism outputs. Walden University Library databases were the primary source of research collection; however, government websites and books were also used.

Databases used to find relevant literature included SAGE Journals, ProQuest, EBSCO, Political Science Complete, International Security and Counter Terrorism Reference Center, Military and Government Collection, Homeland Security Digital Library, and ProQuest. I also used Google Scholar to find possible literature. The keywords used during the literature search included, but were not limited to, terrorism,

counterterrorism, police, local law enforcement, police leadership, police decision making, policing terrorism, community policing, intelligence-led policing, neighborhood policing, problem-oriented policing, counterterrorism policy, systems theory, and police system.

Theoretical Construct

Systems theory originated from the works of Georg Wilhelm Friedrich Hegel as a logical explanation to dynamic processes. Creating a system of dialectics, known as thesis-antithesis-synthesis, Hegel developed his thought of systems thinking (Khorshidi & Soltanolkottabi, 2010). This philosophy follows a triad thought that is consistent throughout Hegelism and the development of systems theory today. Logic, philosophy of nature, and philosophy of spirit are the original terms for systems thinking (Khorshidi & Soltanolkottabi, 2010). Individuals have logic, which is subjective and objective, but the logic is founded from human thinking. Their logic is influenced by the philosophy of nature or external things, but reverts to original logic through the philosophy of spirit.

The triad process used in Hegel's philosophy can be found in all components. However, logic for systems thinking was most relevant to this study. Hegel expanded on this dialectic method by describing logic as being, or thesis, and supposing that the opposite interpretation will emerge, known as the antithesis or nonbeing. Finally, this contradiction produces a synthesis or becoming of logic (Khorshidi & Soltanolkottabi, 2010). The logic is formed from wisdom of individuals to examine their situation and find alternative solutions or explanations to their status. The three components also relate

to one another in that the logic, philosophy of nature, and philosophy of spirit are the thesis, antithesis, and synthesis, respectively.

Hegel's triad is the foundation for more detailed and enhanced systems thinking. An original thought or logic is passed to nature or external influences, and nature produces the spirit or outcome (Khorshidi & Soltanolkottabi, 2010). Hegel gave credit to the scientific method in interpretations to his early work (Hegel & Giovanni, 2010). The concept of science is not a fact with an absolute beginning, but there is a dependence upon external concepts, and it is interconnected holistically with other materials (Hegel & Giovanni, 2010). Science reaches its final results through an ambiguous process of not knowing in advance what the output will be, due to additional inputs that feed into the process and shape the ultimate outcome. This scientific concept led to Hegelian theory of systems thinking to emerge in the biological, mathematics, and physical science fields.

A separate theoretical piece of work aligns the government process with an emerging systems theory of this time. Although Hegelian theory is not mentioned in the work, Bentley's (1908) search for systematic theory for the government process closely resembles the work of Hegel and the systems theory used in this study. Focused on feelings and ideas, people administer actions in the nation in which they operate through policy (Bentley, 1908). The transformation process of feelings and ideas is complex, and action is based on conditions of life present at the time of decision making (Bentley, 1908). This concept aligns with idea of logic and systems thinking of Hegel and the complexity of outputs in the social science process.

General systems theory from Ludwig von Bertalanffy stemmed from the Hegelian theory. The general systems theory is a logico-mathematical formal previously used in fields such as economy or biology to predict probability in a systemic manner. Originally used to understand the phenomenon of life from a living organism, biologist von Bertalanffy also included sociology in the roots of general systems theory (Cadenas & Arnold, 2015). Using the term *open systems*, Bertalanffy compared an organization to a living organism that can maintain itself in a steady state by reducing complexity, breaking down components, and increasing order or organization (Valentinov, 2012). Further, open systems are dependent upon their environment for sustainability, yet require a certain degree of autonomy. Bertalanffy posited that the system itself is more complex than the environment in which it operates and that human failure within the system is the root cause of any sustainability problem for the system to thrive (Valentinov, 2012). Although a biologist, Bertalanffy found the value in applying this theory to social systems as well.

Sociologist Talcott Parsons also valued systems theory as a social science theory. He defined an organization as a system and more clearly defined the inputs a system must allocate into outputs to achieve the organizational goal. Named the mobilization of fluid resources, inputs are primarily labor and capital from an economic perspective (Parsons, 1956). The fluid resources are also influenced by external factors in which the organization operates, and the internal allocation is influenced by the human element and the decision-making body (Parsons, 1956). This concept helped shape the systems theory

into how it is viewed today and explores deeper the transformation process that occurs from within the system to produce the desired output.

Parsons (1956) focused on the human agents within a system. Policy decisions are determined at different levels with any organization, but Parsons distinguished between organizational hierarchy and level of decision making. The decisions made at higher levels within an organization concern long-term visions, whereas the lower level decisions concern the day-to-day operations (Parsons, 1956). This authoritative structure reduces the ability of certain agents to make policy decisions and the accountability falls upon those at the higher levels. However, there are factors outside the control of the decision maker that will result in success or failure of the organizations output.

An additional factor of interest to this study is the compatibility of an organization to operate in cooperation with similar organizations and society (Parsons, 1956). Each organization has a set of procedures or norms, and if similar organizations have procedures or norms that conflict, it creates ambiguity on a collaborative output for society (Parsons, 1956). Specific to this study, the selected agency resides in a city that is adjacent to many other local law enforcement agencies. Partnerships with neighboring departments should involve a common set of procedures on how to respond to counterterrorism efforts. If each agency prioritizes their values in different order, it could impact the cooperation for the society output the local law enforcement community hopes to provide. Simultaneously, individuals have their priorities of values and Parsons (1956) also contributes these individual values to the complexity of an organization and decision making from leadership.

The social systems theory emerged from Niklas Luhmann. There are theoretical similarities between Bertalanffy and Luhmann as it relates to the foundation of systems theory. Both argue the system is dependent upon the environment in which it operates yet maintain a level of autonomy. Like Bertalanffy, Luhmann views complexity as a problem within the system which leads to the system ignoring the complexity of the environment in which the system cannot understand (Valentinov, 2012). Luhmann also agrees the system has no built-in mechanism to stop the increased complexity or overload and the system will become unsustainable (Valentinov, 2012).

Easton applied the systems theory to political science and public policy with a five-fold scheme: input, conversion, output, feedback, and environment. The original thought for a systems theory began with a need to organize social sciences in a systematic way (Easton, 1953). Research has also linked Easton's systems theory to the scientific method to describe the relationship between facts in social sciences (Gunnell, 2013). The need was created to order facts in a manner that linked connections in which generalizations could be produced (Gunnell, 2013). This ordering created a system that could be used within any level of relationships. The inputs into the system could be scientifically ordered and conversed into social change oriented outputs.

A key component in the systems theory development, and determining factor for its selection in this study, is the output of social change. Research conducted in the field of social science and public policy show an intimate connection between the output created and the policy process (Easton, 1953). Coined "authoritative allocation of values" (p. 129), Easton (1953) defined how leadership establish and execute public policy. The

systems theory examines the whole society and all data within the system. It also examines how leadership within the system authoritatively allocate services based on their values, feelings, and motivations. The theory examines objective and subjective elements of the system (Easton, 1953) rather than just the complex parts of the system.

Complexity theory is like the systems theory, and often used interchangeable. Much research is available on complexity theory, which found its roots from systems theory. The origins of the complexity theory evolved from biology, chemistry, physics, and information sciences (Morcol, 2012); not coincidently, biologist Ludwig von Bertalanffy is noted as the founder of the general systems theory used today within social sciences and public policy. The complexity theory is a form of systems theory and explains public policy as a complex system (Morcol, 2012). More specific to this study, police organizations are defined as public agencies that provide complex services where a linear or simplified theory cannot apply (Morcol, 2012). A complex systems theory is nonlinear and dynamic which makes it applicable in this study, but a review of this concept is needed to further understand the inputs and outputs of systems theory.

Public policy is complex. It is ambiguous and involves various actors with incomplete ideas. Human nature aims to simplify elements outside of their individual control. Attempting to simplify public policy and make the process linear breaks the system into dependent parts that can be examined individually. A system consists of interdependent parts and the complexity theory seeks to examine a system rather than a collection of parts (Morcol, 2012). Simplifying a system could close the mindset to many external or internal factors that need to be examined in a social setting. In public policy,

there are multiple policy areas, multiple actors, interacting components, and dynamism (Morcol, 2012). All elements have influence on the system of police organizations. The complexity theory is useful in this study to examine the inputs that go into the police system to be analyzed by leadership, but it does not contain the detailed parts of a holistic society as Easton's (1953) systems theory.

The systems theory was selected for this study because of the broad context for interdisciplinary fields. Little research is available on police organizations as a system and this study will expand the systems theory further into social science, public policy, and law enforcement. The changing tactics of terrorist organizations introduce complexity and ambiguity to counterterrorism efforts. The systems theory examines a system holistically and components that influence it. This study is focused on the outputs created by police leadership specific to counterterrorism efforts within the community, and the complexity theory is not focused on output.

The systems theory has been used for a wide variety of research topics in public policy, political science, or social sciences. A recent study used the systems theory to analyze new public governance in liberal democracies (Torfing & Triantafillou, 2013) and Schimdt (2012) analyzed the quality of the governance in the system throughput of the European Union between political input and the policy output using Easton's (1965) systems theory. Additionally, it is argued systems theory could emerge into a global sociology theory based on recent developments in mass media and globalization of the public (Heinze, 2013). Easton's (1953) systems theory is most aligned with the globalization paradigm shift to incorporate flexibility for various inputs into the system.

Literature Review Related to Key Variables and/or Concepts

Police Inputs

Through the emerging stages of the systems theory, the importance of inputs is recognized at each stage. Coined raw materials, the ideas and feelings of an individual are a direct reflection of the social activity and values the individual will seek (Bentley, 1908). The individual will remain logically grounded and promote consistent activity aligned with their ideas and feelings (Bentley, 1908). The raw material in this early interpretation of input is the physical environment; the objective component that influences the ideas and feelings (Bentley, 1908). This is also important for the transformation of data within the system, but the physical environment will create ideas and feelings within an individual, and then they determine what type of actions will be taken by the organization in which they lead.

Along the same lines as physical environment, inputs are emerging through the systems theory development. Inputs are later defined as events external to the system that change or affect the system operations (Easton, 1965). Broken into demands and support, inputs can be specific and cause a major stress on the system, which would make it a demand; or the input is a disturbance from new technologies, ideas, culture, business leadership, or other changes in the environment which is coined support inputs (Easton, 1965). Bentley (1908) and Easton (1965) classify inputs objectively and subjectively, but Bentley (1908) focuses more on the subjective nature of the individual whereas Easton (1965) defines the system inputs more objectively. This study explores demand and support inputs as well as subjective and objective inputs.

Police organizations depend upon information to make decisions about counterterrorism efforts. Terrorism is very different from criminal activity, and thus requires a different type of policing. Criminal activity often results in a personal gain for the perpetuator, and it is more spontaneous and opportunity driven. Terrorism is not for personal gain, but rather supports a larger vision on how the actors view right from wrong. It is long-term, planned, and deliberate which makes policing terrorism nontraditional and exceptional. For police to prepare for this type of threat they must use a wide variety of information from all sources within their police system.

Fusion centers were created after the September 11, 2001 attacks based on recommendations from the 9/11 Commission. The purpose of fusion centers is to provide an all-hazards approach to information sharing across jurisdictions, which will provide local law enforcement with information on possible terrorist coordination and plotting. However, even after the creation of fusion centers, the Boston Marathon attack was still successful because of a gap in the information sharing between the federal and local government (Regan & Monahan, 2015). There are limitations of fusion centers which cause local law enforcement leadership to prioritize issues directly affecting their area of responsibility rather than strategically creating a national picture of terrorism (Tromblay, 2015). These findings indicate fusion centers have now become an extra resource for police organizations to use for local criminal activity rather than a value-added hub of information on counterterrorism initiatives. However, currently fusion centers remain a key component in the police system to provide inputs to local leadership on terrorist activity.

Fusion centers provide a mechanism for information sharing between agencies. Police leadership make decision based off this input into their system. However, the fusion centers provide information based on what is given to them, or the fusion centers output only contains what is inputted into their system. Information is very limited and based on facts collected by only a few sources (Taylor & Russell, 2012). Since fusion centers cannot collect intelligence, they can only analyze the information given to them; which creates a feedback loop focused on local priorities, such as narcotics trafficking and human smuggling (Tromblay, 2015). Fusion centers are also viewed as tactical not strategic and focus on crime rather than terrorism (Taylor & Russell, 2012). The inputs provided to police organizations from fusion centers does not create the macro-level counterterrorism strategy needed for police commanders to make decisions. Therefore, effective outputs can only be created if the inputs are of high quality.

High quality inputs from fusion centers is beyond the scope of this study, but the inputs police received from fusion centers is a major factor in counterterrorism outputs. A recent study found local law enforcement agencies do not routinely receive information from fusion centers needed to protect the homeland (Chermak, Carter, J., Carter, D., McGarrell, & Drew, 2013). Additionally, the information received is not timely and the information sharing process is not effective (Chermak et al., 2013). Fusion centers are also a collection of individual systems and their outputs are based on inputs, some from local sources. The alignment of policy and practice should reflect the counterterrorism mission of fusion centers and local law enforcement agencies.

A macro-level strategy for counterterrorism starts with organizational policy. A mission statement is a form of policy and serves as a guide for all components of the system. Forty percent of fusion centers do not mention terrorism in their mission statements (Tromblay, 2015). However, the structure or model for fusion centers is very diverse and dependent upon the environmental characteristics in which each center resides, therefore the flexibility model allows for complexity in policy and outputs to local police agencies (Carter, 2015). This creates some ambiguity within fusion centers that do not mention terrorism in the mission statement and have the flexibility to tailor their outputs as needed. The quality of counterterrorism related inputs into a policy system is affected by the ambiguous output of fusion centers.

In addition to fusion centers, local law enforcement agencies can receive inputs from an online electronic database. The Federal Bureau of Investigations (FBI) Law Enforcement Enterprise Portal (LEEP) emerged as a centralized portal for resources and services to strengthen case development and enhance information sharing (Federal Bureau of Investigations, 2015). Specific resources and services related to terrorism include special interest group, active shooter, intelink, and the regional information sharing systems network (RISSNET) (Federal Bureau of Investigations, 2015). Little research is available on the participate usage of the database or information obtained for counterterrorism outputs for police organizations.

Routine patrol has contributed to criminal investigations focused on apprehending terrorists after an attack. Traditional policing strategies focus on investigative or reactive activities. However, routine policing by local agencies contributed to a significant factor

of 70% in identifying and apprehending terrorists within organized groups (Hewitt, 2014). Organized terrorist groups tend to contain more members therefore would result in a higher number of arrests, but unaffiliated terrorists include a single sniper or lone wolf and may be harder to detect. Only 40% of terrorists unaffiliated with a group have been identified or apprehended from routine policing in the same study (Hewitt, 2014). Local police play a significant role in catching terrorists after an attack as occurred.

Information gathered during the investigation are likely to provide police with a more strategic picture into motive or responsible organization. After the Boston Marathon bombing police utilized surveillance equipment to capture those responsible and the Dallas Police Department neutralized their active shooter threat within hours using a combination of factors. Police agencies are prepared to effectively respond to terrorist events, but preventive activities are not compatible with traditional policing functions (Randol, 2013). Even after the Homeland Security Department creation and recommendations after the September 11, 2001 attacks, police agencies have made little progression in implementing terrorism preventive techniques (Randol, 2013). The traditional methods are effective in investigating attacks and those best practices should be maintained, but policing terrorism with preventive methods requires a different paradigm.

The focus of this study is on proactive inputs police leadership can analyze to prevent attacks from reaching fruition. Foiling the terrorist plot through routine policing only contributed to 3% of detections in Hewitt's (2014) study. In a similar study, only 7% of foiled terrorist attacks were from routine police activity (Dahl, 2011). This research

suggests there is an opportunity in routine patrolling of police to gather information regarding potential terrorist attacks taking place within their community. Routine policing can provide detailed reports to decision making regarding activity deep in a community not known by federal agencies.

Community policing and problem-oriented policing are two emerging tactics employed by police to counter terrorism in the community. Police receive inputs from the community and problem-oriented initiatives by establishing relationships with citizens and business leaders. Community policing and problem-oriented policing are best practices that will lead to more effective counterterrorism strategies (LaFree, 2012). Through relationship with the community, community policing aims to improve the quality of daily life, solve community problems, and shift from reactive response to community-oriented policing (Yero, Othman, Samah, D'Silva, & Sulaiman, 2014). Leadership within the police organization must transform the information they receive from the community to create an output that is a solution to their problem. It relies on the police members to understand how to add value to the community beyond their scope of their traditional duties.

Partnering with the communities will provide police agencies with information they may not attain through official channels. When trust is created with the public, the police are viewed as allies rather than adversaries, and the safety of the community falls within the partnership (Schaible & Sheffield, 2012). It involves assigning officers geographical areas for extended periods of time which will allow them to build relationships with the residents within that community (Bullock, 2013). Strategies to

implement community police are wide, but can include citizen education, neighborhood watch, and foot patrols (Yero, Othman, Samah, D'Silva, & Sulaiman, 2014). This information must also be analyzed and transformed into output (McGarrell, Freilich, & Chermak, 2007). The inputs into the system by attaining information from citizens is used by police leadership to allocate resources within the police organization. This is purpose of community policing and creates a circle of information flow, trust, and action.

Recent uprisings against the police effects the inputs police will receive from the community. Lessons learned from counterinsurgency operations in Afghanistan and Iraq produced a strategy to establish legitimacy with the local population by treating the local Iraqis with respect (Traina, 2015). If the military treats the local population with disrespect, it does not create the relationship needed to gain legitimacy, likewise, local law enforcement within the United States need to be viewed with legitimacy to gain or maintain trusting relationships with the community (Traina, 2015). Inputs from the community are important for police to analyze information, and recent events could have impact on the amount or type of information that comes from the community.

Community interaction can also be achieved through social media. Social media has been used more recently by police organizations to obtain and disseminate information. Police organizations can use social media to get information to the public by pushing it through social media, they use it to ask for opinions or pull information out of citizens, and it is used to network by creating a highly interactive commentary between police and citizens. This typology is commonly coined push, pull, and networking strategy (Mossberger, Wu, & Crawford (2013) & Meijer & Thaens (2013)). The goal of

this strategy is to increase the community involvement between local law enforcement agencies and the citizens within their communities. By using social media police organizations utilize non-traditional methods and reach younger generations that depend on social media as their communication tool.

Little research is available on social media within police organizations, or the specific use of social media for counterterrorism operations. Recent literature found 89% of their population police departments use social media and enable the interaction capability of those tools (Brainard & Edlins, 2015). Between the three forms of social media analyzed, Facebook, Twitter, and YouTube, Facebook appeared to be the most promising for police organizations to create a dialogue between the police and residents (Brainard & Edlins, 2015). Interaction is the goal of community policing and limitations with Twitter and YouTube restrict interaction needed for engagement. However, using social media as inputs into the police system to counter terrorism would require a more enhanced intelligence collection process with information technology professionals. Police organizations may have a gap in their system regarding intelligence collection via social media.

Terrorist organizations, however, have used social media to their advantage. The focus of this study is on the police system rather than the terrorist organization system, but the emerging cyberwarfare threat and technological innovations of terrorist organizations should briefly be discussed as police need to find inputs related to cyberwarfare. Terrorist organizations have used social media and technology to develop far-reaching online propaganda, move drug products by drones and narco-submarines,

and Somali pirates have used radar and online shipping data to identify key targets in their water (Gartenstein-Ross & Barr, 2016). Non-state actors of terrorism are using these non-conventional methods to outperform the state in which they operate (Gartenstein-Ross & Barr, 2016). Police organizations in the United States will be influenced by an enemy using global technology to launch attacks. Terrorist organizations will continue searching for gaps in law enforcement systems and this gap could be exploited if not filled.

Problem-oriented policing is a philosophy that can provide inputs and outputs into the police system. The original conceptualization emerged many decades ago and continues to provide police with an operational umbrella (Goldstein, 1979). The approach takes inputs from the community in the form of a problem, and the police are expected to solve this problem (Goldstein, 1979). For POP to be effective, the problems should be sizable and a collection of many similar incidents within the jurisdiction (Goldstein, 1979). Finally, it was also intended for street-level officers to gather information while on patrol to proactively address the problems (Goldstein, 1979). Under the POP model, inputs can come from community sources or police officers. As inputs are received into the police system, they are stored for a future in-depth study of a specific problem.

Police organizations that implement problem-oriented policing gather information through an in-depth study on a specific problem in their community (Chainey & Chapman, 2012). The approach used in their study analyzed demographic data on a problem location, gang activity, affiliation to terrorism organizations, classification of weapons used, arrests, and prison releases (Chainey & Chapman, 2012). These inputs

gave the police leadership a strategic picture of their defined problem. Police organizations that implement a problem-oriented policing approach could gather additional inputs to their counterterrorism efforts.

Micro-level political influences include demands from city council, citizens, business leaders, and stakeholders which often dictate police functions. Police strive to be proactive, but the local community can bring the police back into a reactive state by placing demands for their interests. This input will place demands on police operations for funding or resources.

Macro-level political influence includes presidential decisions and Supreme Court appointees. The police organization must respond to the decisions rendered by the Court regarding constitutional law. Justice appointees tend to vote along the ideological lines of their nominating president; democratic presidents tend to be more ideologically liberal supporting the defendant whereas republican presidents tend to be more ideologically conservative supporting the government or police (Donner, 2013). A recent study examined 253 Supreme Court Fourth Amendment decisions found six of ten presidents succeeded with their appointed Supreme Court justices (Donner, 2013). This study found an indirect influence presidents have on the police policy (Donner, 2013). Additionally, the Supreme Court appointments play into the feedback loop of the police system since justices have a lifetime appointment and can affect decisions long after their president has left office.

In addition to Supreme Court decisions, the President can also influence demands in the police system by their decisions. After initial riots in Ferguson, Missouri President

Obama ban some kinds of military equipment to local law enforcement agencies (Korte, 2015). Military-like equipment gives the local community an occupying force feeling rather than partners in the community (Korte, 2015). The type of equipment banned by President Obama is considered necessary for the battlefield, but in counterterrorism operations that equipment could be needed. This policy decision is an input on the police system that causes change in local police operations. While this is viewed as positive social change for one social condition, it could be viewed as negative social change for policing terrorism.

The President's Task Force on 21st Century Policing is another executive influence that creates inputs into the policing system. President Barack Obama created the task force December 18, 2014 by issuing Executive Order 13684 (COPS Office, 2016). The task force conducted a study within the United States on police reform and organized six pillars for future action (COPS Office, 2016). These six pillars include building trust and legitimacy, policy and oversight, technology and social media, community policing and crime reduction, training and education, and officer wellness and safety (COPS Office, 2016). This Executive Order strongly resembles community policing efforts and can affect inputs into the policing system based on how each agency decides to respond. Implementing recommendations from The President's Task Force on 21st Century Policing will require resources to be consumed on initiatives or programs, which could take resources away from other department initiatives or counterterrorism related functions.

Some initiatives, programs, or projects have been highlighted by other departments in response to The President's Task Force on 21ˢᵗ Century Policing. Federal organizations have developed strategies to provide local law enforcement agencies with training materials, technical assistance, and education opportunities (COPS Office, 2016). The Police Executive Research Forum (PERF) conducted a case study and developed a guide, *Guiding Principles on Use of Force*, and most of the training is focused on fair and impartial policing, de-escalation tactics, bias recognition, community relations and professionalism (COPS Office, 2016). These initiatives, programs, and projects are intended to reform police operations within the United States in response to recent uprisings, and the social change that results from The President's Task Force on 21ˢᵗ Century Policing recommendations could influence counterterrorism operations, specifically intelligence collection, USA Patriot Act contradictions, and use of force procedures.

Transforming Information

The central research question in this study involves the transformation of system inputs into counterterrorism oriented outputs. Originating back to the roots of systems theory for public organizations, the conversion process transforms information through the system from the point of entry to exit, otherwise known as input, throughput, and output (Easton, 1965). Various demands enter the system from the environment and are processed by system leadership into decisions or associated actions (Easton, 1965). Transforming inputs into outputs is divided in theory by two means: 1) determining *who* transforms the information through a political process, and 2) cultural norms decide *what*

can be transformed into output (Easton, 1965). Both means are present in current policing

organizations in the United States. The traditional hierarchy of police organizations create

the *who* is authorized to transform by selecting leaders to make those decisions; and

macro and micro cultural norms create the *what* by allowing the members of society to

freely voice their needs.

The public policy system is complex, dynamic, and nonlinear. Through a

complexity theory lens, the public policy process involves interpretations of societal

processes and the self-interests of the actors within the system (Morcol, 2012). This

mirrors the *what* and *who* in the transformation process. Public policy systems are open

and have a capability to exchange information with their internal and external

environments (Ozer & Seker, 2013). Leaders within the police organization are actors

within the system and must interact with their environments to create outputs from their

system. Transforming information within an organization that is highly complex,

dynamic, and nonlinear requires the human and technology acting collaboratively.

Knowledge Management (KM) within police operations is a critical component to

transforming inputs to outputs. Information technology has become more complex and

police organizations can use these advances to help counterterrorism operations.

However, the qualities required to utilize advanced information technology can lead to

wasted resources on technology (Gottschalk, 2006). Using the stages of growth model,

police officers advance through four stages of knowledge management to knowledge-

based systems intended to help the human solve a problem (Gottschalk, 2006). Earlier

stages of knowledge management include inputs only, but later stages allow officers to

use the technology to help police organizations transform knowledge into timely and effective solutions to their problems. Using technology to transform information can help officers find hidden data and reduce overload.

Police overload is advantageous to the terrorist organizations planning attacks. A tactic used by terrorist organizations in Britain involves deception; suggesting fake attacks could occur, floods the law enforcement with intelligence and overwhelms its defenses (Dahl, 2011). Counterterrorism is a challenge requiring the analysis of complex and dynamic information often exceeding capabilities of the human (Middleton, 2011). A method of transforming overwhelming amounts of data is the use of information avatars (Middleton, 2011). Avatars can be used to discover enemies hidden in piles of information such as chat rooms, e-mails, blogs, and social media (Middleton, 2011). However, the analytical tools can overlook the required human judgement needed to make informed decisions. The human transformation process must still be in place, but these advances in technology could help with human cognition.

Information overload in police leadership can exceed the human processing capability. The inputs into a police system are in abundance, but if quality analysis and transformation cannot take place with the information, threats continue. A key finding of the 9/11 Commission was the inability of the intelligence community to connect the dots (The 9/11 Commission report, 2004). Over a decade later, the Boston Marathon bombers had been interviewed by the Federal Bureau of Investigations in 2011 about ties to Islamic extremists (Wyler, 2013). The information was in the system for both events, but

the dots were not connected. When the police system is overloaded, information can get overlooked because it exceeds the human resources within the system.

Overload can occur at the individual, group, or organizational level. Within the complexity theory, it is human nature to simplify complex environments (Morcol, 2012). Humans try to find a linear, ordered, or simple explanation to problems (Morcol, 2012). At the individual level, leaders make decisions and often ignore the complexity involved within a resource abundant environment (Soltwisch, 2015). In times of resource abundance, leaders become complacent in their decision-making process and ignore information that does not fit in the strategy (Soltwisch, 2015). In police organizations, the leadership can set a strategy for processing information, but as the political situation and external environment change they also need to adapt their system of processing information. To avoid individual level complacency, groups can be formed to achieve a more complex and systems oriented level of thinking.

Group level thinking can help organizations overcome complacency in decision making. However, if the group is comprised of like-minded individuals rather than a diverse population, it may cause the group to jump to conclusions without equally evaluating possible alternatives (Soltwisch, 2015). Rooted in the systems theory, actions of a group are closely related to the social composition of the groups' members (Easton, 1953). When transforming information in a group, it is important the group consist of a diverse population. Specific to counterterrorism outputs, it would be necessary for police to involve individuals that understand the ideology of their threat in their jurisdiction.

Terrorist groups also behave like other social groups in society. Group thinking can help prevent complacency and can be used to analyze or predict the next move by an opposing group. Understanding group interactions can help police leadership transform group inputs into their next counterterrorism action or output. Described as pressure between groups, the group phenomenon indicates a push and resistance between opposite points of view (Bentley, 1908). A group exerting pressure, an output for this group, will become the input for another group (Bentley, 1908). Terrorist groups do this with their attacks. Their attacks apply pressure to the police and force a response or even a reform from the local organization. Police leadership can use terrorist trends from national or international databases to analyze the different types of pressure terrorist organizations put on police organizations.

In a police organization, it is also easy to become complacent, especially if criminal activity is low, resources are plentiful, and citizens are satisfied with the service. Self-sustaining organizations are even more at risk for complacency. The resource dependence theory postulates relationships with other actors in the system are critical to success because of partner development and collaboration (Soltwisch, 2015). Organizations become dependent upon these relationships and are hesitate to expand outside their current vendor group, which leads to missed information and overlooking of new sources (Soltwisch, 2015). A police organization collects system inputs from various sources, but perhaps other sources are missed that could lead to valuable counterterrorism oriented outputs. The individual, group, and organization levels transform information to create outputs; therefore, complacency must be eliminated at all levels.

Police organizations have many policies they are required to follow. The policy is the input and police leadership must understand the policy to create a strategy within the guidelines. If leadership does not agree with the policy, for political or self-interest reasons, they could transform the input into an output not fully intended to be the outcome of the policy. Counterterrorism policies for police organizations are ambiguous and leave specifics to police leadership (Carter, Phillips, & Gayadeen, 2014). Police organizations are traditional and often resist complete transformations that disrupt their routine, therefore they tend to tweak their operations slightly, appearing to adhere to a policy, more than undergoing a transformation or culture change intended by the policy creation (Carter, Phillips, & Gayadeen, 2014). The police leadership finds a way to maintain their operations with little disruption while staying within the policies intended to create change. Rather than changing their operations to holistically embrace the desired culture, they make minor changes in the form of a program or initiative to superficially adhere to the policy.

This transformation process of using programs or initiatives can be seen in the recent progress report from The President's Task Force on 21st Century Policing. The International Association of Chiefs of Police (IACP) has agreed to transform the task force recommendations into a blueprint for local agencies to follow while implementing reform efforts (COPS Office, 2016). But the remaining best practices highlighted in the update report are training initiatives centered around bias recognition, impartial policing, community relationships, and professionalism (COPS Office, 2016). Programs and initiatives are short-term solutions that satisfy policy makers and the public. Programs

and initiatives help start the movement, but for long-term sustainable police reform it requires effective leadership serving their citizens, learning from social change, and leading their officers.

Recent events involving police use of force is bringing attention to the transformation process of police leadership. The President's Task Force on 21st Century Policing is recommending a reform of police organizations (COPS Office, 2016) and body-worn cameras are being socially demanded because of recent events involving police shootings (Smykla, Crow, Crichlow, & Snyder, 2016). This recent literature found the use of body-worn cameras would positively impact evidence collection and guilty pleas, but negatively impact the officers' decision making when using necessary force (Smykla, Crow, Crichlow, & Snyder, 2016). This input from social and media pressure to implement the use of body-worn cameras could create positive social change for building trust between police officers and citizens, which is needed for community policing, but could affect the transformation of inputs related to counterterrorism within the United States. Counterterrorism is a key area that may require the use of force, SWAT teams, military-style weapons, and intelligence collection; but these activities are being strongly examined with recent social events, or inputs in the system.

Leadership styles of police leaders plays a critical role on how inputs are interpreted and transformed into counterterrorism actions. Effective police leadership is necessary to meet organizational and community goals (Sarver & Miller, 2013). Transformation, transactional, and passive/avoidant did not have a strong correlation of dominance within leadership of police chiefs (Sarver & Miller, 2013). However,

transformational leadership style does show a strong difference in personality than transaction or passive/avoidant (Sarver & Miller, 2013). The characteristics associated with transformational police leadership include confidence, dynamic, energetic, positive, optimistic, and outgoing; additionally, openness and conscientiousness in a transformational leader includes personality traits such as open-minded, dependable, considerate of feelings, non-judgmental, and meticulous of police chiefs (Sarver & Miller, 2013). Little research is available that links the leadership style of police leadership to the effectiveness of the organization outcomes. However, based on this study police chief personalities are linked to transformational leadership, which is then linked to achieving higher goals, effective communication, and emotional intelligence. These are traits that can influence the leaders' ability to transform their inputs into counterterrorism outputs.

The systems theory is used in this study, but other theoretical concepts helped create some of the components of early interpretations. Making decisions with information, or transforming inputs, involves a distinction between facts and values. The properties of a value judgment stem from causal and moral theories, and in the systems theory, can influence the transformation of inputs in social sciences (Easton, 1953). Facts are used to make decisions and can be tested by reference or refer to part of reality; however, values can be reduced to emotional responses conditioned by the individual's total life-experiences (Easton, 1953). The leadership in a police organization consists of individuals with heterogeneous values, and values in the systems theory have power of the allocation of resources and actions. Police officers are not appointed in a democracy

by the people, which would support the systems theory that leaders are elected for their values; instead they come from within the population and apply to be servant leaders. Their leadership traits must fit within the society in which they serve and their role within the organization.

Different layers of leadership can also exhibit varying traits. Executive police leadership would require a different type of leadership style verses front-line supervisors. This relationship within the police system also contributes to the successful transformation of inputs into counter terrorism oriented outputs. A recent focus group found police sergeants received inconsistent guidance and strategic direction from their district commanders or executive level police leadership (Willis, 2013). Additionally, a common theme emerged that the type of guidance the front-line supervisors received was based on the management style of their higher level of leadership (Willis, 2013). These internal relationships in the police organization are critical as the system operates and transforms the information flowing into the system.

Organizational structure in police organizations is typically hierarchal or vertical. This structure plays a part in setting culture and informal norms as well as leaderships' ability to transform information. Traditional vertical structures are popular in police organizations, but those agencies that support community policing have gained interest in the theory of shared leadership (Masal, 2015). Shared leadership creates a horizontal structure and encourages decentralization of power, self-leadership, and group goals (Masal, 2015). The results of shared leadership support the goals of policing terrorism within the communities by empowering officers to share information with other team

members and engage in team learning (Masal, 2015). Transforming data in a traditional

hierarchy has been challenging for police leadership, but empowering officers through

shared leadership will spread more decision making focused on a strategic

counterterrorism plan. A decentralized structure can help police leadership transform

more information into a shared vision output.

Transforming data from community policing and problem-oriented policing

philosophies is important to creating strategic and tactical outputs aimed toward

counterterrorism. Extracting information from the community and interpreting the

information correctly will allow police leadership to direct police resources and prioritize

problems (Bullock, 2013). The priorities of the police organization also shape the

outputs, and as police leadership analyze the information they receive from the

community, their outputs are aligned with their internal priorities (Bullock, 2013).

Finally, transforming inputs from community policing has been difficult in the past due to

credibility of sources, which could lead to complacency or information being overlooked.

Community policing requires an analytical skill level within police leadership. As

information flows into the police system from the community, police leadership must

develop policy and then convert policy into practice. The ability to transform data

correctly will give strategic direction to a police department's largest resource, the patrol

officers (Willis, 2013). Due to the traditional policing mindset of hierarchical structure

and reactive response, community policing does not give a strategic level overview of a

situation and limits the patrol officer decision making (Willis, 2013). The front-line

supervisors should be the transformer for translating policy into practice, but their daily

reactive method and operational tempo, limits time spent on providing strategic guidance from community inputs (Willis, 2013). It appears from this study community policing can provide valuable inputs for police organizations, but the meaning gets lost in the transformation to outputs.

On a macro-level, community policing at the local level can provide valuable information to the international counterterrorism strategy. In the United Kingdom, the National Intelligence Model (NIM) was created as a business excellence model following the systems theory of inputs, processes, and outputs. The system contains three levels of information flow mirroring the international, federal, and local levels respectively in the United States structure. Recent research argues the lowest level policing should provide information to the highest level of counterterrorism strategy (Thomas, 2016). Terrorists live and plan their operations locally, and are part of the international terrorist threat (Thomas, 2016). Therefore, it is recommended from the NIM model that local law enforcement agencies form a decentralized structure to help uproot terrorists hidden in the community; whereas state and federal agencies should maintain a centralized structure to promote collaboration and information sharing (Thomas, 2016). Community policing requires local agencies to act locally while thinking globally. Expanding their vision beyond their jurisdiction will create a strategic picture of a macro-level counterterrorism plan.

Problem-oriented policing requires an analytical skillset like community policing. Inputs intended for a POP case must be transformed into a solution to a specific problem. Police officers and leadership are required to analyze problems and evaluate strategies for

dealing with them (Goldstein, 2003). The original development of POP recommended a professional policing model with more humanitarian responses to problems and improved community relationships (Goldstein, 1977). This approach requires understanding, sensitivity, and commitment as well as best-staffed agencies (Goldstein, 1977). The foundation of POP identified three decades ago the need to transform data from problems within the community and use a non-traditional policing model.

Fusion centers provide inputs to police systems. The local fusion centers receive information from their jurisdiction and produce an output to the local law enforcement agencies. This information is often centered around that specific jurisdiction and is tailored to the needs of the local police organization (Taylor & Russell, 2012). Additionally, the mission and framework of the fusion center contradicts that of the police organizations (Taylor & Russell, 2012). The fusion centers collect intelligence and share it after careful analysis; police are concerned with protecting the public while maintain civil liberties. Intelligence collection while maintaining civil liberties is a common concern and has added to the complication with transforming the inputs from fusion centers into counterterrorism related outputs.

Transforming system inputs requires police leadership to examine social change. Specific to counterterrorism, police leadership need to examine terrorist ideology and terrorist organizational survival. Understanding the motivations behind terrorism will help police leadership create policy to either disrupt organizations or reform individuals inspired to become a lone-wolf supporting an ideology. Additionally, terrorist organizations evolve in the same manner as a business or public organization.

Understanding terrorist organization sustainability can help police agencies counter the growth of terrorist organizations.

Organizational survival is dependent of several factors. Terrorist organizations are no different and survival can be broken into external and internal factors. Police intervention and use of the Internet are two significant external variables on the survival rate of a terrorist group (Suttmoeller, Chermak, & Freilich, 2016). The Internet enables groups to raise funds, recruit new talent, and share information; and groups that utilized the Internet have a higher survival rate (Suttmoeller, Chermak, & Freilich, 2016). Through federal partnerships and fusion centers, the use of Internet by terrorist groups can be transformed into actionable outputs by police leadership.

Another external factor to organization survival is police intervention. Some controversy surrounds this topic since some research (Dahl, 2011) indicates police intervention can lead to disruption in terrorist operations, where as other research (Suttmoeller, Chermak, & Freilich, 2016) suggests police intervention extends the life of the organization. Terrorist organizations seek media attention for recruitment purposes and publicity. If police intervention occurs, there has usually been an attack which is being investigated by police organizations; therefore, police intervention can extend the life of a group because the group had a successful mission requiring police intervention (Suttmoeller, Chermak, & Freilich, 2016). Additionally, this study is specific to far-right ideology which includes antigovernment and antipolice sentiments. Police intervention would only support and fuel this cause (Suttmoeller, Chermak, & Freilich, 2016). Transforming this external factor of organizational survival into a counterterrorism

related output requires an in-depth understanding of a local criminals, suspects, and activities that fit within a terrorist mindset.

Internal factors also contribute to the success or failure of an organization. Group ideology is a significant factor that contributed to organizational failure (Suttmoeller, Chermak, & Freilich, 2016). Religious or politically affiliated groups have a higher survival rate because their ideology is founded on core values that tend to go unchanged overtime, but groups associated with youth cultural group ideology can change or be short lived (Suttmoeller, Chermak, & Freilich, 2016). Analyzing terrorism in the local districts, police leadership can use this research to understand timeframes for terrorist attacks, group size, lethality, and strength. Leadership can use this data to create a counterterrorism policy specific to each type of organization instead of grouping all terrorist organizations into the same category. They will all behave differently based on their internal and external factors.

Counterterrorism Outputs

The creation of systems theory in the social science field includes the type of data that must be analyzed and transformed into an output. Outputs can be objective or subjective and stem in theory from situational or behavioral data respectively (Easton, 1953). Situational data can create objective outputs within the organizational structure or physical environment; but early views of situational outputs only create a formal policy or short-lived program confined to the government (Easton, 1953). The situational outputs from data should move beyond the government structure into society for social

change to occur. Objective outputs are needed in public policy, but in the complex world of policing terrorism it requires a more subjective approach.

The subjective outputs are created in systems theory and needed for counterterrorism strategy. The facts from the situation are presented, but seldom will two individuals interpret them in the same manner. The behavioral data includes how a person is predisposed to interpret situational data, attitudes toward the situation, response to demands, and an "endless catalogue of motivations, feelings, and attitudes of the individual" (Easton, 1953, p. 207). This can result in situational data being ignored or inflated dependent upon the individual actor. In police operations, the behavioral data can influence the allocation of resources and create outputs based on individual interpretations of the current situation. These subjective outputs can degrade counterterrorism strategies or enhance it based on the individual leadership of the department.

Community policing is a model used and involves the community in which the local law enforcement agency resides. General properties of outputs include transactions or exchanges between the system and the environment in which it operates (Easton, 1965). Community policing is a perfect fit within this context. Police organizations interact with their community environment to exchange information and produce outcomes or goals to keep the community safe. Various methods of community policing can create outcomes.

Counterterrorism can be difficult to combine with community policing. In some cases, the community policing model is the output to a counterterrorism initiative. This

output involves relationship building with community members to find local solutions to local problems (Spalek, 2014). The partnerships between the police and community members are critical to the success of the community policing model, but the relationships must be with the right individuals (Spalek, 2014). Police need to build relationships with key individuals who are positioned at the intersections of terrorism (Spalek, 2014). These connecting relationships are more valuable because the individuals share similarities with an attractive recruit for a terrorist organization, and they can build connections with a wider social network. These connectors within the community are dynamic, provide a consistent transaction between the police and the community, and create the output needed for counterterrorism.

Resilience can also be an output produced from enhancing community partnerships. Police organizations strive to provide safety and security within their communities, and use the inputs to meet that objective. Community resilience is an output from their efforts. Resilience is the ability of an individual, family, group, organization, or society to recover from adversity (Weine, 2013). In the White House's *Strategic Implementation Plan for Empowering Local Partners to Prevent Violent Extremism in the United States* (SIP), President Obama outlined the best defense against terrorist ideology is a strong and resilient community (Strategic Implementation Plan, 2011). Resilience is a defense against terrorism because it allows communities and individuals to minimize the destruction caused by the terrorist act. Terrorists often seek mass fatalities and economic hardship; but those objectives are not achieved when the

victims are resilient. Police organizations can help build community resilience as an output from their system of counterterrorism efforts.

Community policing can produce undesirable or unintended outputs for policing terrorism. The intent for using community policing for counterterrorism operations is to build trusting relationships with the local population. However, this strategy is viewed as a counterinsurgency tactic used by the military and when used on American citizens violates civil liberties (Aziz, 2014). It is also viewed as dividing certain communities between "good Muslims willing to cooperate with law enforcement, and bad Muslims who demand a meaningful quid quo pro that ensures protection of Muslim communities' civil rights and liberties" (Aziz, 2014, p. 148). These unintended outputs could aggravate communities into the opposite action in which community policing was built to create.

Police respond to terrorist attacks in their area, and participate in the investigations after an attack. This reactive duty is not a preventative tactic for countering terrorism. The ideology of terrorism expands internationally, but all terrorist attacks are local and in the heart of local law enforcement agencies. Their counterterrorism outputs in the form of policy have changed by focusing more on 'high policing', or focused on macro-level crimes (Milosevska, 2014, pg. 67). For continued improvement, research suggests police organizations structured at a high level within their government will more likely produce counterterrorism outputs with ease (Milosevska, 2014). If police counterterrorism strategies viewed terrorism as a permanent risk they could develop outputs permanent to their organizations (Milosevska, 2014). The counterterrorism outputs of police organizations need to be focused on the macro-level strategy and

accepted as a constant and emerging threat. Initiatives or programs are short-term outputs and fade over a period.

While short-term outputs should be examined, long-term plans can also become stale. Terrorism and counterterrorism is viewed as the new Darwinism, evolving always (Schmitt & Shanker, 2012). To stay ahead of terrorist tactics, the local law enforcement agencies must produce strategies that evolve with the ideology of terrorism (Schmitt & Shanker, 2012). Outputs aimed to prevent terrorism need to consider the evolving ideology, not just the evolving tactics. Understanding the motivations will help law enforcement find terrorists planning attacks. Domestic terrorism is not only Islamic or religious based; other perceived injustices spark the motive to join a group and climb the staircase to terrorism.

Counterterrorism outputs from police organizations need to be preventative in nature. Terrorism is difficult to predict, and terrorist organizations are systems that evolve with their operational environments. Most predictions about terrorist attacks included "terrorism will continue to exist" and "terrorism is not static" (Bakker, 2012, pg. 75). Additionally, six out of seven government reports indicate the future modus operandi of terrorism includes weapons of mass destruction, CBRN weapons, cyber terrorism, and more simultaneous or coordinated attacks (Bakker, 2012). The literature on counterterrorism publications does not provide systematic tools or expand beyond vague conditions related to current threats (Bakker, 2012). This research is concerning and indicates terrorism will continue with advanced weapons, yet government officials are not prepared to counter future threats.

Problem-oriented policing (POP) should produce outputs in a police organization. Problem-oriented policing requires police to dive deep into the underlying issues that affect the safety of their community (Ratcliffe, 2016). Examining the outcome of 753 POP cases in Colorado Springs, the major issues identified by police were categorized as numerous calls for service, noise disturbance, drug activity, and traffic violations (Maguire, Uchida, & Hassell, 2015). Another important factor noted in the research, 90% of the POP cases were focused on a single individual, one neighborhood, which is the intent behind the POP reform (Maguire, Uchida, & Hassell, 2015). This narrow focus shows the correct implementation of POP and addresses the single issues demanding police resources. The police leadership can produce an output that addresses a very specific problem in their district.

The focus of this study is on counterterrorism outputs. While some criminal activity can be viewed as a terrorist tactic, the POP cases do not mention terrorism or concerns of terrorism. Additionally, the POP cases were nominated for selection based 70% on police data compared to 16% from community sources (Maguire, Uchida, & Hassell, 2015). This represents a strong internal police program rather than a paradigm shift led by the community. Finally, the outputs from these problems included solutions such as education, increased patrol, increased enforcement, and increased use of signs (Maguire, Uchida, & Hassell, 2015). For POP to produce counterterrorism outputs community involved is needed. The outputs created by these cases focus on the problems viewed primarily from the police organization itself rather than the community.

The original concept for problem-oriented policing was focused on a micro-level problem, but would result in macro-level improvements for society. The strategy developed from analyzing a problem would produce a preventative response not dependent upon the use of the criminal justice system (Goldstein, 2003). On a larger scale, the outputs created from POP cases could benefit other police organizations and contribute to the professionalization of police organizations (Goldstein, 2003). The outputs from these POP cases should be used to benefit the policing society; and specific to counterterrorism, outputs should be fed back into system inputs for the federal or international counterterrorism system.

Additional analysis can be used to transform the POP cases into actionable counterterrorism outputs. Research regarding counterterrorism outputs or policies directly from the police system and POP cases is minimal. This study is aimed toward the police system and the counterterrorism outputs it creates, not at the macro-level national or international output level. The outputs created by local law enforcement agencies often enters the feedback loop back into the system, or the outputs create inputs to another system.

A police counterterrorism output in the form of policy is rare, but programs or initiatives aimed at counterterrorism can be expanded upon. Additionally, some programs or methods of policing often create a link between the criminal activity and counterterrorism efforts. The Houston Police Department initiative a problem-oriented approach to the number of interactions they encounter with individuals diagnosed with serious and persistent mental illnesses (Center for Problem-Oriented Policing, 2010).

Their case study collaborated with local mental health institutions to develop a proactive

strategy for intervention; thus, reducing the manpower required of the police department

to respond to individuals with mental illnesses (Center for Problem-Oriented Policing,

2010). While this specific output is aimed to reduce law enforcement interaction with

individuals with mental illnesses, it can also be linked to counterterrorism efforts since

terrorist organizations sometimes recruit this population for suicide bombers.

Feedback Loop

Feedback loops are present in many forms within the law enforcement

community. Specific to policing terrorism there are national and international information

exchange processes designed to feed back into the law enforcement system (Morrison,

2014). Information can result in positive and negative feedback loops which either

encourage similar behavior or interrupt the systemic loop (Morrison, 2014). Policing

terrorism is complex and the complexity drastically affects the feedback loop in several

ways: 1) data is presented into the system, but complexity prevents understanding of the

data, 2) complexity prevents law enforcement from seeing clearly how the feedback

loops tie into the overall system, and 3) biases are created that confirm original thought,

lack of learning from the data, and the feedback loop continues (Morrison, 2014).

Positive or negative feedback loops help stabilize the system and allow decision makers

to modify operations. However, if the same information is fed back into the system as an

input, the circle will continue until an adjustment is made.

Stabilizers help regulate the inputs and outputs in a system, which should limit the

feedback loop process as well. The complexity of policing terrorism coupled with the fear

of another terrorist attack has limited the counterterrorism stabilizers for federal, state, and local law enforcement (Morrison, 2014). Two main areas of perceived concern are the provisions of the USA PATRIOT Act and the FISA court proceedings (Morrison, 2014). The threat to individual rights is an area beyond the scope of this study, but the stabilizers in a system can promote a positive feedback loop and continued activity. The police system requires constant monitoring by leadership as well as adjustments to operations. If stabilizers are not in place or ineffective, it will only feed the same inputs in to the system.

Traditional methods of stabilizers in police organizations include internal affairs or internal investigations. The paradigm shift needed for successful counterterrorism includes going from a reactive policing agency to a proactive mindset; and this includes all components of operations. Internal investigations wait for something to happen, then investigate. A more proactive approach to stabilizing the internal parts of the police system can be found in the roots of the SARA model as a framework for continued reform (Porter, 2013). Recent events in the United States have created a distrust between police and the community, but using a problem-oriented approach to police oversight with the SARA model creates a collaboration solution for public confidence in police organizations (Porter, 2013). The feedback obtained from a continuous improvement through SARA can be used in a similar manner POP case studies are used; to provide feedback into the system for targeted outcomes.

Diversity in the system can also be viewed as a stabilizer. Literature reviewed in a recent study revealed the authors and researchers were comprised of mostly older,

Western, male experts who work day-to-day in counterterrorism operations (Bakker, 2012). It is suggested this group may lack the innovative and different ways of thinking needed to develop counterterrorism strategies for future threats (Bakker, 2012). Bringing younger generations with diverse backgrounds into the counterterrorism focus groups will help feed innovation into the system and consider factors outside of the norm, which is needed for counterterrorism (Bakker, 2012). Diversity in the feedback loop is critical to prevent a counterproductive circle of similar, like-minded inputs from entering back into the system.

For changes to occur in a social system, a critical moment in time or event is generally associated with rapid change. System changes can be planned for a short-term policy solution, but other external factors may affect the system resulting in a long-term policy shift (Hunt, Timoshkina, Baudains, & Bishop, 2012). Individuals in the system also affect the change process and speed by adjusting their reaction to the inputs, throughputs, and outputs (Hunt et al, 2012). In dynamic and complex social environments, the systems thinking approach can scientifically provide decision makers with correct inputs and speed required for change to occur effectively (Hunt et al, 2012). Processing information, responding to external factors, and changing the system in police organizations should be planned, but terrorist attacks often create the event needed for change to occur rapidly. A proactive method of policing terrorism would be more advantageous to the members of the system and the society in which is supports.

Society and current events can quickly feed inputs or demands into the police system. In counterterrorism, the terrorist actor can also influence the feedback loop. The

foundations of system theory contribute the starting place for inputs as the individual acting to influence policy (Easton, 1953). The system, by theory, will resist this change, which may either deflect the activity of the individual actor, or encourage the actor to change the system expectations (Easton, 1953). In counterterrorism, the lone-wolf or ideologically driven actor is attempting to change political, ideological, or religious social conditions and influence this feedback loop based on their actions. The terrorist is directing the inputs in a police system by attempting to change society and disrupt society equilibrium.

System Mechanisms or Equilibrium

Since the systems theory originated from biology, reaching equilibrium or stability is the goal of an organism, or a system. Mechanisms must be in place in an organism to help it achieve a steady state, but in organizational systems the mechanisms must be created by the actors. In public policy, a variety of elements are interacting on the system and attempting to influence social policy (Easton, 1953). In the complex society of public organizations, systems contain interacting parts and actors attempt to maintain themselves against any force trying to change the equilibrium status (Easton, 1953). Organizations by nature attempt to achieve equilibrium and resist the factors that threaten to disrupt their steady state. The danger of equilibrium in a police organization is complacency. Terrorist organizations are always looking for gaps and complacent systems to exploit. The mechanisms in a police organization are created by leadership and must consider the dynamic and evolving threat of the terrorist mindset.

Little research is available on system mechanisms in police organizations. System mechanisms would prevent complacency or the need for leadership to create an equilibrium status, which could create gaps in the police system for terrorists to exploit. A recent study examined the emotional strategies police use to prevent burnout and the consequences of burnout (Schaible & Six, 2016). Labeled depersonalization, officers develop strategies to eliminate the emotional connection to tragic circumstances they encounter in a variety of situations (Schaible & Six, 2016). This strategy allows the officers to distance themselves from the human tragedy to meet their organizational objectives, but consistent depersonalization can counter the goals of community policing (Schaible & Six, 2016). Community policing involves an exchange between officers and citizens with a degree of customer service. Officers consistently must switch between the depersonalized emotions and the customer-oriented emotions which exacerbates tension and stress. This individual mechanism is both positive in self-control of emotions, yet negative in community disconnect and could lead to complacent behaviors.

Police organizations seek consistency and smooth operations, but terrorist organizations or the lone-wolf will thrive on this type of organizational complacency. Gaps in law enforcement systems have been exploited in the past, and the root to these gaps is democracy. A democracy creates freedom and respects the rights of the people which allows terrorists to move around undetected; and during times of war, as declared the 'war on terror' after the 9/11 attacks, the government must maintain a balance between uprooting terrorism within the communities and civil liberties (The 9/11 Commission Report, 2004). The freedom created in a democracy is a challenge for local

law enforcement regarding counterterrorism. Understanding the holistic police system will allow leadership to find innovative ways to counter the terrorism threat.

The holistic police system includes macro and micro level demands entering the system in the form of inputs. The inputs come in various forms, and qualitative input outlined by the 9/11 Commission Report and recent literature (Ash, 2016) extract data from the terrorist themselves. Terrorist organizations or the lone-wolf are seeking a political change, and the micro-level activity of domestic terrorism is viewed as a form of political violence (Ash, 2016). In a representative democracy people have the right to voice their concerns and demand their elected officials act to resolve their issues (Ash, 2016). While democratic societies are more prone to terrorism because of the freedoms, they also have the advantage to listen to the lone-wolf and attempt social change before violent action is taken (Ash, 2016). This macro-level system mechanism is democracy, and creating programs that enhance the lives of citizens will give outlets to those seeking change.

Individual and Group Influences

Social change begins with the individual, and it is no different in terrorism. Popular movements such as One Million Voices Against FARC and Arab Spring, started with an individual acting against the perceived force threatening their individual equilibrium. The foundation of systems theory highlights the individual as the "heart of the research problem in the social sciences" (Easton, 1953, p. 192). Without the individual acting, there is no problem forcing public policy to create a solution. Police organizations have individuals within their communities who attempt to influence their

system, and some of these individuals transform into the lone-wolf terrorist if they are ignored.

The creation of a terrorist mindset is well documented in the psychology field. A predominate model needing brief discussion as it can represent society influences on police inputs, is the staircase to terrorism developed by Fathali Moghaddam (Bongar, 2007). The staircase begins wide at the bottom with many options, but as options are limited the staircase becomes narrower leaving the only choice at the top to be the terrorist act (Bongar, 2007). The psychological interpretation of a condition is perceived as an injustice to the individual, and when legitimate options are exhausted the individual resorts to the final method, violence (Bongar, 2007). Citizen complaints are the early forms of a perceived injustice. Although not all upset citizens have the potential to develop a terrorist mindset or group, their complaints, particularly those about political decisions, are a method of voicing a perceived injustice.

The individual complaint or action is the beginning of social change. Group creation evolves as the individual gains support and motivates followers. Rooted in the systems theory, individuals act on situations and have a desire to unite in groups that represent the interests of the individual (Easton, 1953). The third floor in the staircase to terrorism is where the individual seeks a group, thus creating a terrorist organization (Bongar, 2007). Groups are created in society around this same theory, and police leadership must consider the motivations behind the actions of each group as a form of input into their system. Specific to counterterrorism, the police system is a dynamic

fluctuation of activity among social groups that seek to change policy and disrupt equilibrium.

The systems theory includes inputs, transformation of data, outputs, and a feedback loop. Groups are all linked in the macro-level society system. In public policy, the outputs or actions of one group will attempt to influence the inputs of another group. Group interaction are numerical in strength, have an intense feeling behind them, and have persuading techniques on public officials (Easton, 1953). At some point, the groups agenda must be examined and this could influence policing decisions.

Web of Decisions

The intended outcome of transforming system inputs is to reach a decision regarding what output needs to be produced. In social sciences and public policy this decision involves an allocation of values or resources to society. Policy makers have the authority to allocate values and resources which results in certain things being denied to a group of people and made accessible to another group (Easton, 1953). The decision by policy makers is not the policy, but it is the formal phase of policy establishment (Easton, 1953). The interrelated parts of public policy make up a system that can enhance or degrade other working parts. If a policy is created in one part of the system, it must be aligned with other parts of the system. Police operations involve making arrests. If policy authorizes an arrest for certain criminal activity, the criminal justice system must be able to prosecute for the policy to be sustainable.

The criminal justice system is not the focus of this study, but the police system does depend upon and interact deeply with this system. A breakdown in the criminal

justice system will create or detract a support input into the police system, thus effecting

the output. The criminal justice system includes the prosecutor, the courts, and

corrections; and when those systems are not functioning fairly and efficiently, the police

system is distorted (Goldstein, 1977). Police will adjust their policies and norms to deal

with the ineffective criminal justice system (Goldstein, 1977). Regarding

counterterrorism outputs, the criminal justice system in not designed to handle charges

dealing with enemy combatants as seen in the Guantanamo Bay, Cuba closing, and the

prosecution of those suspected of terrorism in a free society. These two systems must

work simultaneously to support the domestic counterterrorism efforts.

Other systems have influence on the police system. Police policies may result in a

series of actions or narrower decisions by subsystems of the police; and macro-systems

result in policy creation for police organizations. This concept is termed "web of

decisions" (Easton, 1953, p. 130). The decisions made to influence social change for one

part of the system will also influence change in another part of the system. Police

leadership are allocating resources toward their department objectives. Dedicating

resources to a certain objective means other initiatives are neglected resources. The

purpose of this study is to determine how police leadership transforms their inputs into

counterterrorism oriented outputs within this web of decisions.

Summary

This literature review is an exhausted review of police inputs, throughput, and

outputs related to counterterrorism at the local law enforcement level. The studies

outlined in this review contribute to literature related to separate sections of the systems

theory, and the significance of current policing strategies to counter terrorism at the local level. However, the holistic concept of the systems theory is not applied in the literature discussed and this study will help fill the gap in literature available on counterterrorism outputs from a police organization. On a broader level, this study may extend the literature on the systems theory into the social sciences, public policy, and local law enforcement fields.

To address the research questions, the systems theory is used to examine how police leadership transforms the inputs in their system into counterterrorism outputs. I use a qualitative case study and the following chapter dives into the methodology, data collection, and data analysis methods.

Chapter 3: Research Method

Introduction

The purpose of this study was to examine the transformation process of police organizational inputs into counterterrorism-oriented outputs. I also examined the local police system to determine if systems theory (Easton, 1953) can be extended into public policy within a police organization. Much of the current research in domestic counterterrorism is focused on how police organizations responded after an event rather than on proactive strategies aimed at prevention.

Research Design and Rationale

In this study, I specifically examined the selected department's leadership and their ability to transform their police system inputs into counterterrorism-related outputs. The central research question for this study was, How does the local law enforcement's department leadership process information within their system to produce counterterrorism outputs? Subquestions that I sought to answer included

R1: Which inputs provide the greatest source of counterterrorism planning for the department leadership?

R2: What community partnerships in the system increase effective counterterrorism planning?

R3: How can the systems theory expand public policy and extend into a police organization?

Qualitative research was selected for the paradigm in this study. The complexity of public policy, political characteristics of a police organization, and the social injustice

of terrorism I believe requires an approach, strategy, and method aligned with qualitative

research. Qualitative research provides an in-depth result about a broad array of topics

(Yin, 2016). The central research question examined how leadership transforms

information. Qualitative research allows participants to speak about their values,

preconceptions, and experiences used to make decisions (Yin, 2016). The systems theory

used in this study includes a broad array of inputs and outputs that need to be transformed

by human participants to understand how counterterrorism outputs are created within a

police organization.

Qualitative research is the best method for this study because of the complexity of

police systems. Qualitative research in the field of social sciences is about studying

people's lives in real-world roles, representing the participants' views and perspectives,

accounting for real-world conditions, explaining social behavior and thinking, and using

multiple sources of evidence (Yin, 2016). Qualitative work is used to evaluate complex

situations with richness, vividness, and accuracy (Rubin & Rubin, 2012). I examined

police leadership in their day-to-day setting to interpret their views on conditions in their

complex system. Their views could help to explain behavior or thinking related to

counterterrorism police initiatives. In conducting this study, I sought an explanation on

how police leadership produce counterterrorism policies or actions.

The human factor is the final element that made qualitative research the best

method for this study. Laboratory settings or pre-established questionnaires do not

provide in-depth or personal meaning to understand the thought process of decision

making. In a system, the human can influence the environmental, social, or contextual

conditions (Yin, 2016). Experiments in artificial settings are designed to limit or control these conditions (Yin, 2016). However, to answer the research questions, these conditions needed to be present because they could influence the human decision-making process in a system.

A case study design was used and best answered the research questions in this study. The systems theory can be expanded from this study into a police systems theory or to fill the gap in public policy systems theory. Case studies provide generalizations to theoretical propositions and expand theories (Yin, 2014). Analytical generalizations in a case study can either be built into the initial design or emerge from the completion of a case study (Yin, 2014). Systems theory is built into the case study design, and this study can advance the systems theory into public policy and social sciences.

I used a common embedded single-case study design in this study which examined police leadership and their ability to use their system inputs to create counterterrorism-oriented outputs. A common case study captures conditions in an everyday situation (Yin, 2014). Also, this study may extend the systems theory into police organizations; a case study can provide lessons about everyday situations that relate to the theoretical interest (Yin, 2014). The police system involves macro and micro level inputs; therefore, an embedded design is used because it incorporates subunits of analyses to extend analysis enhancing the insights into the case (Yin, 2014). Police organizations are influenced by macro change in federal police policy or micro level changes in individual decision making. An embedded design allowed for complexity in the study.

Role of the Researcher

As the researcher in this case study, I was the observer and research instrument for triangulation of data. There were no professional or personal relationships between me and the selected department leadership or any members of the department. E-mail invitations were sent to members of the department so participants did not feel influenced by those in positions of authority over them to participate in this volunteer study.

Methodology

The focus of the research questions in this study was on the leadership of the selected department. By design, leadership personnel within the department were selected as participants. Purposive sampling involves the deliberate selection of those participants who will produce the most relevant and plentiful data for the topic of study (Yin, 2016). The nested management structure includes the broader level and the narrower level of data collection (Yin, 2016). The broad level or field setting was the selected department, and the embedded narrower level included multiple participants within the leadership of the department.

Only one broader level instance was selected for this single case study. At the narrower level, multiple participants will be included. The complexity of the study and the depth of data collection needed from each participant determines the total number of participants (Yin, 2016). Complex topics should be covered by a smaller number of participants examined intensely (Yin, 2016). Additionally, it is best to conclude data collection when little new information is coming from the participants (Yin, 2016). This point of redundancy will determine data saturation and while this study examines the

leadership within the selected department, it may include some officers reporting to the

leadership to reach the point of data saturation.

Instrumentation

The three methods of data collection for this qualitative case study include

observations, document review, and interviews. Data triangulation is recommended to

increase the quality of the study and develops converging lines of inquiry from multiple

sources of evidence (Yin, 2014). Each source of data will follow a protocol to allow for

unscripted interaction with the participants (Yin, 2016). The research questions for this

study examine an organization, but individuals within that organization have influence on

the organizational outcomes based on their decisions; therefore, using multiple sources of

data will allow themes to align based on unscripted discussion. Protocols used will follow

a model or mental framework.

The logic model, responsive interviewing model, and note taking will be used to

align the systems theory with data collected. The logic model can help organize data from

document reviews. More specific, an organizational-level logic model can be used to

trace an input or document, and understand the output (Yin, 2014). (Knowlton & Phillips,

2012)

A responsive interviewing model will be used to develop an interview protocol.

This study is topical and a responsive interviewing model will encourage depth and

detailed responses to provide rich thematic data (Rubin & Rubin, 2012). The stages of a

responsive interview model include introduction, comfort questions, main questions,

destressing questions, and closing (Rubin & Rubin, 2012). Follow-up and probe

questions may also be necessary to get the depth, detail, richness, vividness, and nuance needed to answer the research questions (Rubin & Rubin, 2012). The interview questions will be about the organizational outputs related to counterterrorism, but individual leadership questions will be included because the transformation of inputs is dependent upon leadership qualities.

Note taking will be used as a protocol for observations. Direct observations will record actions in a real-world setting for the case study (Yin, 2014). In an organizational setting, observations add a deeper level of understanding to the context and theory being studied (Yin, 2014). This study observed the officers of the selected department to understand their actions toward a counterterrorism mission, neighborhood influences, socioeconomics of the community, and citizen behavior toward the police.

Three sources of data are needed to answer the research questions. The complexity of public policy and counterterrorism requires an in-depth study with multiple sources of converging data. The logic model for document review will create an understanding of counterterrorism inputs in the form of policies, procedures, and directives. The responsive interview model provided rich answers from leadership within the selected department on how inputs are transformed to counterterrorism outputs. Finally, observations will record community involvement and actions of the intended outputs.

Researcher-developed Instruments

The systems theory used in this study will drive the research instruments used to collect data. The researcher is the main research instrument in qualitative studies and the

research lens can influence how data is categorized or the selectivity of recording some data and not others (Yin, 2016). Using the systems theory as a research instrument will create a template for recording data and focusing on the research questions. Specifically, using the logic model, a responsive interview model, and note taking during observations will provide thick descriptions of qualitative data.

To aid in researcher reflections, a personal journal will be used in conjunction with field notes. Personal journals help capture feelings and reflections on the research process and can provide insights into unwanted biases (Yin, 2016). The journal will serve as a source of information for final reporting, but will not be used as the main source of data collection or instrumentation.

Procedures for Recruitment, Participation, and Data Collection

Recruitment of participants will be completed through a gatekeeper. A gatekeeper provides access to the institution through an official network (Yin, 2016). However, gatekeepers can show an interest in the study and possibly affect the data collection (Yin, 2016). The gatekeeper will be used to gain access into the organization, but individual invitations will be sent to participants to avoid gatekeeper influence.

Interview data was collected from all levels of leadership within the selected department. The best method for collecting interview data in a case study is to cater to the interviewees' schedule and availability (Yin, 2014). A detailed plan for interview data collection includes access, resources for fieldwork, clear scheduling, and flexibility (Yin, 2014). The geographic location of the selected department will allow for flexibility of scheduling and follow-up plans. The interviews will include leadership and officers

within the department until the research questions have been answer and data saturation has been achieved.

Data from observations will be collected through daily officer fieldwork. The gatekeeper will be utilized to arrange observations in the officer day-to-day setting and routine.

Document review data will primarily be accomplished through Internet searches on policies, directives, or written reports related to the research questions. Other sources of documents could emerge through the interview data collection process that may help answer the research questions. If organizational leadership can share unclassified documents related to internal policies on counterterrorism or planning, those documents will be included, but public documents are the primary source and will be collected through public channels.

Data Analysis Plan

Data will be managed using Computer Assisted Qualitative Data Analysis (CAQDAS). Specifically, NVivo will be used to store the data. The software will assist in compiling the data in a more formal manner (Yin, 2016). However, the software is only intended for the compiling phase of data analysis and other coding and analysis strategies will be used to reach conclusions (Yin, 2016). Using the software will add credibility to the study and enable more detailed note taking, database filing, analytical memos, and terminology descriptions for coding.

A schematic diagram will be used to code the data to be consistent with the systems theory. A schematic diagram is much like an upside-down tree with level 1

concrete concepts representing thin branches and the trunk representing level 2 abstract concepts (Yin, 2016). As the branches of the tree merge into the trunk, so do the concepts. Higher level abstract levels will be theoretical statements (Yin, 2016). The systems theory is a similar process where multiple inputs can merge into a concept where analysis is need. The output should represent multiple inputs that are analyzed into a central concept for policy.

The data analysis strategy will follow the theoretical construct. The original design for this study and literature review strategy was based on the systems theory of transforming inputs into outputs. Relying on theoretical propositions will help organize the data collection plan and may yield analytic priorities as the data is collected and analyzed (Yin, 2014). As data is collected, concepts or insights can be entered on flowcharts, creating a data display (Yin, 2014). In the systems theory, a systematic flowchart can be used to show inputs, throughput, output, and feedback loop data. This analytical strategy will create a logical flow of data consistent with the theory and research questions.

Creating a systematic flow chart for data analysis that aligns with the systems theory will pull from the logic model. The logic model is used when studying theories and operationalizes complex events that are staged in a cause-effect-cause-effect pattern (Yin, 2014). Yin (2014) contributes Wholey (1979) to be the founder in developing logic models as an analytical technique. Public policy is complex and often contains poorly defined inputs that create unacceptable outputs (Wholey, 1979). Although the research analyzes a program, the resource inputs into the program need to be used for clearly

defined mission outputs (Wholey, 1979). The logical models display information consistent with a systems theory and contain inputs, throughput, outputs, and feedback loop. This study will generate a logic model that contains police system data.

Issues of Trustworthiness

To address issues of trustworthiness, this study will follow detailed methodology and content related to data collection, analysis, and conclusions. The research aims to demonstrate authenticity through prolonged engagement in field work, which will establish trust in the study (Yin, 2016). The explicitly and methodically reporting of research decisions will also add to the trustworthiness of the data and finding (Yin, 2016). The methods described in this chapter will help create trustworthiness, and lead to credibility of the study, transferability, dependability, and confirmability.

Credibility has been considered throughout the design of the study. The goal of a credible study is one that accurately reflects in the findings the world that was studied (Yin, 2016). More specific to a case study, credibility in social sciences can be achieved by testing the quality of the research design (Yin, 2014). Triangulation of multiple sources of data and establishing a chain of evidence are two methods to test construct validity (Yin, 2014). In this study, interviews, document reviews, and observations will be triangulated into the data collection and the logic model will be used to create the chain of evidence. saturation, reflexivity

Transferability of this study can be achieved from the systems theory in the field of social sciences, public policy, or police organizations. This case study does have some uniqueness to the selected department and the complex environment effecting their inputs

and outputs, but the analytic generalizations can apply at a conceptual level higher in other studies (Yin, 2016). The thick descriptions that will be provided in the data collection will give details on selectivity and categorization of findings which can provide transferability of the study (Yin, 2016). Specific to case study analytic generalizations, grounding the research in theory will provide external validity (Yin, 2014). This case study was specific to the selected department, but the method used to collect data and produce findings can be transferred to similar cases.

Dependability of this study will be achieved through a case study protocol. The objective of reliability is to reduce the errors and biases in the study (Yin, 2014). This is accomplished by detailed documentation of the method used to record and analyze the data (Yin, 2014). The logic model, responsive interview model, and thick description note taking will be used as a protocol to develop dependability of this study.

Confirmability is this study will be achieved by different methods. Data will be collected through three methods, thus triangulating the results, but reflexivity may arise through the interview process or observations (Yin, 2016). Objectivity will be the aim through a detailed note taking process and researcher journal. Unobtrusive measures are actions by humans that have not been influenced by another individual (Yin, 2016). If unobtrusive measures are observed throughout the data collection process it will be incorporated into the study to help address confirmability issues.

Intra and intercoder reliability were achieved through defined coding and layering the data. The level 1 codes and level 2 codes will create a schematic diagram for sorting data (Yin, 2016). Using the systematic approach to coding will avoid the impression that

data has been selectively analyzed and eliminate unwanted biases of individual values

(Yin, 2016). Reliability will be created by using a systematic and defined approach to

coding the data.

Ethical Procedures

The research proposed will collect data using interviews and observations from

participants. Protecting these participants is necessary to ensure an ethical study is

conducted. Protecting participants in social or behavioral research will reduce any risk to

participating in research (Yin, 2016). Several steps will be taken to ensure participants

are protected and correct study protocols are in place.

Institution Review Boards (IRB) are used to conduct research reviews for

proposed studies. The IRB is a formally constituted review panel that reviews the main

features of the study in relation to protecting the participants (Yin, 2016). The IRB at

Walden University conducts review on research to ensure compliance with ethical

standards and U.S. federal regulations (Walden University, n.d.). This study involves

collecting new data and Walden University provides a detailed outline of ethical

consideration for new data (Walden University, n.d.).

The research questions in this study could be considered sensitive regarding

leadership behaviors of the selected department. This topic could disclose a behavior or

decision that could potentially get someone fired or passed over for promotion (Walden

University, n.d.). The IRB at Walden University will ensure data is collected within

certain ethical parameters (Walden University, n.d.). The data is needed on leadership

decisions to answer the research questions.

Participation in this study is voluntary and participants may withdraw during any phase of the process. A voluntary informed consent will explain the purpose and nature of the study as well as their role in data collection (Yin, 2016). Participants were recruited through the gatekeeper by a formal written letter sent to all leadership within the selected department. In addition, officers will be selected at random and based off availability to participate in the research until data saturation is achieved.

Data will be kept in a locked safe upon completion of the study. Walden University requires data to be stored for five years (Walden University, n.d.). The selected department will also be provided a copy of the data and debriefed after the data collection to ensure no sensitive or classified information is included in the study.

Summary

This chapter discussed the design justification for this qualitative case study. The primary research question involves the transformation of police inputs into counterterrorism outputs. The systems theory is used in the context of social sciences to examine the selected department's leadership in their ability to make decisions with input data. The methodology for data collected was discussed and a detailed plan on data analysis was outlined. Finally, ethical issues and bias mitigation were discussed, namely how to ensure the study is credible, transferable, dependable, and confirmable.

The following chapters will present the data collected and analysis of data. Conclusions of the findings will be presented, positive or negative social change implications will be discussed, and future research recommendations will be outlined.

Chapter 4: Results

Introduction

The purpose of this study was to analyze the leadership within a local law enforcement agency in Texas. I analyzed their ability to lead proactive policing strategies specific to counterterrorism tactics by using information available in their police system. Systems theory, which was developed by Easton (1953), was used to examine this complex program that requires all individual components within the system to recognize their contribution to the solution (Stroh, 2015). In analyzing data, I determined how leaders of the local law enforcement I studied used their system to produce proactive counterterrorism outputs.

The central research question for this study was, How does the department's leadership process information within their system to produce counterterrorism outputs? Subquestions included the following

RQ1. Which inputs provide the greatest source of counterterrorism planning for the department leadership?

RQ2. What community partnerships in the system increase effective counterterrorism planning?

RQ3. How can the systems theory expand public policy and extend into a police organization?

Setting

The setting for executive leadership interviews took place in an office or interview room. Front-line supervisor interviews and all officer ride-alongs took place in their natural settings. The natural settings included situations that a police officer would encounter in his or her normal day-to-day activities, including arrests, traffic stops, minor traffic accidents, and officer assist. These activities, while normal, were conditions that limited the focus of the interviewees because the officers thought process was interrupted by doing their duties. The officers would begin talking about a topic and need to respond to a call and it was difficult to regain their focus after the interruption. An additional factor that influenced the interpretation of the findings was the presence of me as a rider. The security of a rider in a police car limits the activities of the officers. Some officers stated, "I can't take that call with you in here" or "generally, I would get out of my car more, but I can't leave you alone." Part of the study was community relationships and building partnerships with local businesses so the limits of the officers to perform these duties should be noted.

Demographics

The sample for the interviews included one chief of police, one assistant chief of police, three deputy chiefs of police, three police lieutenants, four police sergeants, and one specialty officer attached to the FBI's Joint Terrorism Task Force (JTTF). The JTTF interview was grouped into the executive leadership classification. To maintain confidentiality, executive members interviewed were identified with the letter E, lieutenant members interviewed were identified with the letter L, and sergeant members

interviewed were identified with the letter S. These letters stood for executive, lieutenant, and sergeant, respectively. A corresponding number followed each letter designation (i.e., E1, E2, L1, L1, S1, S2, etc.). Additionally, the executive leadership is named accordingly, but the role of lieutenant is equivalent to middle management, and the role of sergeant is that of a front-line supervisor. Finally, the sample for the observations included 20 officers whom I have designated with the letter O and corresponding number (i.e., O1, O2, etc.).

The average age of the officers observed was 36. The average age of executive leadership was 48, and the average age of middle management was 37. The front-line supervisor average age was 37. Eighty-seven percent of the participants are male and 13% are female. The education level included four levels of master, bachelor, associate, and no degree. Of the participants, 13% have a master's degree, 37% have a bachelor's degree, 3% have an associate degree, and 47% do not have a degree. The ethnicity of the participants includes 72% White, 10% African American, 6% Hispanic, 9% Asian, and 3% Native American. All demographic details are included in Appendix A.

Data Collection

I conducted the research over the course of approximately 16 weeks. Participants were contacted via e-mail and invited to participate in the study. Those who responded scheduled an interview with me. The observations were approved by the chief of police, and I arrived at the department before the scheduled shift. An officer volunteered to be observed during the preshift meeting on each of these occasions.

Interviews

Thirteen interviews were conducted with the Department's leadership team. The levels are broken into executive leadership, middle management, and front-line supervisor. Executive leadership includes one Chief of Police, one Assistant Chief of Police, three Deputy Chiefs, and one specialty officer assigned to JTTF. Middle management includes three police Lieutenants and the front-line supervisors included four police Sergeants.

Interviews for the executive leadership and middle management occurred at the police station in either the participants office, in a designated interview room, or the police conference room. The interviews with the front-line supervisors occurred in their vehicles while they performed their daily activities. Each participant was only interviewed once, and the duration included 1-hour for the executive leadership and middle management, and 4 hours for the front-line supervisors. Front-line supervisors were interviewed in conjunction with the observation portion of data collection.

The researcher took notes during the interviews and did not use a recorder. Within 24 hours, the researcher transcribed the notes and sent them to the participant for accuracy review. The researcher also wrote reflections in the researcher journal immediately after each interview.

Observations

Twenty officer ride-alongs were conducted for observations. Four of the 20 ride-alongs were Sergeants, and one was a Lieutenant. The Sergeants and Lieutenant were

also interviewed during the observational ride-along. The remaining 15 were officers

assigned to patrol in the Department.

All observations were conducted in the officer's police vehicle. Officers were on

patrol in their assigned beat, and the researcher had representation of all beats within the

City. There were 7 ride-alongs conducted on dayshift, and 13 were conducted on night

shift. Each officer being observed was only observed once, and for a duration of 4 hours.

The researcher recorded observations on the Systematic Social Observation Sheet.

Within 24 hours the researcher transcribed the notes from the ride-along and recorded

reflections in the researcher journal.

There were no unusual circumstances encountered that would be considered out-

of-norm for police work. Arrests, traffic stops, traffic accidents, vehicle maintenance, and

report writing are considered part of police operations, but during times of high volume

activity that took the officer outside of the patrol vehicle, the researcher was unable to

observe.

Document Review

Unclassified and public documents were reviewed. Publications on the city

website includes the police department's mission statement, on-going initiatives or

programs, and seasonal or targeted communications.

Documents from the Federal Emergency Management Agency (FEMA), the FBI

Academy, the Senior Management Institute for Police, IACP's Leadership in Police

Organizations (LPO), and the Law Enforcement Management Institute of Texas'

Leadership Command College were reviewed. The executive leadership and officers

attended these courses and the learnings from each program description are important to the research questions.

Social media are included in the document review. The agency uses twitter and Facebook to publish information to the public and engages through tweets and Facebook comments.

Data Analysis

The overall analytical strategy for data analysis began in the initial design of the study and continued into the data analysis stage. The initial design of the study aligned a theoretical proposition, the systems theory, with an analytical technique, the logic model and schematic diagram. Additionally, during fieldwork, a researcher journal recorded links in data to the research questions and identified preliminary interpretations. These preliminary findings helped create the initial codes while analyzing the data.

Public policy, specifically counterterrorism policy, is the main output of the schematic diagram shown in Figure 4. The Level 2 abstract concepts were coded into six themes. The Level 1 concrete concepts were inputs that merged into the six abstract conceptual themes. The six themes are *proactive, communication, learning, policy, processing*, and *leading*. Data also aligned with the feedback loop on the systems theory, and certain data were coded with *feedback loop*.

Counterterrorism
Policy

Partnerships/*Relationships,*
technology, behaviors, and
mission statement

Proactive

Transparency and
allocation of resources

Leadership

Communication

Sharing information, internal
practices, and community
information flow.

Learning

Policy

Meetings, face-to-face,
interaction, and training

Micro-Level and Macro-Level

Processing

Resources, collaboration, and
credibility

Figure 1. Schematic diagram including themes.

Proactive

The level 1 concrete concepts that emerged into a *proactive* abstract theme

include partnerships/relationships, technology, behaviors, and mission statement. One

limitation to the *proactive* theme is staffing.

Partnerships

Partnerships and relationships include micro and macro level. Micro level

partnerships are internal to the organization, with the community, within the city

departments, or adjacent cities in the metroplex. Macro level partnerships include federal resources. E1 and E2 noted a heavy partnership on micro level resources including other city departments, the fire department, and local businesses or venues. E4 also stated referring to a micro level partnership, "we depend upon the streets department within public works to barricade streets during events that could be potential targets, our traffic engineers help control light timing for traffic flow upon exit; and the waste management department provides environmental services for events, and those key individuals have access and are our eyes throughout all areas of the venue". E1 noted the most proactive counterterrorism partnership is with the fire department because they have shared resources, they conduct joint trainings, and coordinate events together.

Other local partnerships include local businesses, faith-based organizations, and venues. E3 and E5 credited local shopping mall directors as a valuable partnership, and E5 elaborated indicating that local mall directors are tied to national or global properties and have a larger picture of security and terrorist activity they bring to the local law enforcement. Another expanded picture, E5 discussed the importance of training maintenance staff or custodial in apartments or businesses on how "to look for key indicators of activity such as supplies being delivered or sitting around". Similarly, E4 discussed ways to educate certain retail companies "to notify the police if someone is buying excessive amounts of a certain material". All executives interviewed stated "faith-based" organizations as their best learning opportunities to international terrorism. S1 specifically mentioned partnerships with code enforcement, churches, health department,

and businesses. O8 was observed going inside the local mosque to talk to the staff to build the relationship with the leadership.

Relationship building in the community was observed from the officers during their assigned shifts. Officers showed a proactive presence in neighborhoods by driving through the neighborhoods with their windows rolled down, waving to the citizens, interacting with the citizens and children, and finding ways to engage with the citizens. O10 spoke to the children in their native language and their response included an increased level of communication between the officer and the children. They also asked the officer for stickers, which indicates the officer usually has stickers that he would give to the children. O1, O3, O4, O5, O6, O11, O12, O14, O16, O18, O19, and O20 also drive through the neighborhoods with their windows down for the purpose in interacting with citizens.

Macro level partnerships include ATF and FBI. The ATF partnership was not discussed in detail, but mentioned as a valuable source of information flowing into their police system. The FBI partnership was mentioned by all executives interviewed. E6 stated, "the best source of information comes from the community" and the "relationships within the officer's beat are very important because it opens channels of communication to behavior". L2 relies on the local Council of Governments. He indicated they provide the best source of information for counterterrorism planning for the SWAT team.

Technology

E2 discussed how they partner with local businesses on camera placement, lighting, and building design. E4 and E2 described a system output, the Security

Assessment Project, which was a joint effort from their services department, SWAT

Commander, investigations department, and JTTF to predict ways to attack their city.

The team developed security assessments on ways to increase the security of potential

targets using video surveillance and vetting of employees.

Technology could also be a threat rather than an opportunity for the police. E4

introduced a proactive concept of how popular trends in technology could be used to

control a population. E4 described the game of Pokémon, a popular kids game using their

phone application to collect virtual Pokémon's by physically going to a location. E4

described how terrorists could use this type of technology to send a group to a location

already staged with explosive devices. Other virtual games and technology will be

introduced in our competitive market, and police will need this type of leadership to stay

ahead of threats and terrorist behaviors.

The officers observed on the ride-alongs used different forms of technology. Only

O2 encountered equipment that was not functioning properly. Some officers had an

automatic license plate reader on their vehicle, but it was not observed ever being used,

which indicates the officers do not find value in the equipment or it does not work

properly. One officer explained to the researcher, "the ALPR only checks for expired

registration and not for arrest warrants or registered sex offenders" so the officers prefer

to type in the license plate to find opportunities from more detailed information.

Drones could be an opportunity and a threat to local law enforcement agencies.

E5 discussed the potential way to use a drone to attack a target. The executives

interviewed see the proactive advantages of drones including traffic control, aerial

footage, security at venues through show of force, and video surveillance; however, there

is some bureaucracy involved with implementing a drone program and funding would

need to be dedicated to the equipment and training. S2 specifically mentioned a section of

the city that contains section 8 apartments where drones would be advantageous. L3

indicated the department strives to be the leading agency in law enforcement but does not

currently use drones for security. He stated, "we are behind the city and other agencies

who are already using them".

Behaviors

All executives interviewed referenced behaviors in two themes, behaviors of

police organizations and behaviors of individuals. Police organizations need stay ahead of

terrorist behaviors and social movements. E2, E3, and E5 discussed ways police

organizations need to "stay attuned to what is going on in social movements" and they

must "change tactics based on recent events" and we must "evolve and change the way

we do things and adapt to change". E1 also referenced the officer level of the

organization stating, "we teach our officers about changes in social events and how they

can avoid putting themselves in specific situations". E4 described the proactive stance of

the department to "watch social media and look for trends or indications in social

movements" and they "teach their officers what types of behaviors to look for".

Individual terrorist behavior was also mentioned by all executives interviewed.

The department has an output in the form of initiative called, SEE Something SAY

Something. This encourages "citizens to report out-of-the-norm behavior or activity"

described E1. E2 indicated the department "monitors early stages of social movement

behavior that crosses the line". E4 focuses on behaviors at the venue events, focusing on exit path after the event and "relies on actions or behaviors for clues". E5 also noted, "we look for people swimming upstream and behaviors of people that just don't look right". E5 concluded "humans are predictable, but can individualize their activities and change in a moment's notice". S3 discussed the proactive behaviors of individuals the front-line officers look for. He stated, "when we stop someone we ask proactive questions to look for stuff, such as counterfeit money, drug activity, or fake IDs which as all been used by terrorists".

One front-line supervisor anticipated terrorist behavior and made recommendations for the city or the police executives. S2 expressed "we need clear trash bags with wire holders instead of the black trash bags with solid cans" as she talked about large public events.

Mission Statement

The department mission statement is an output of the system aimed toward the *proactive* concept. Leading is part of the three core values in the mission statement. It is themed as proactive based on the definitions from executives, middle management, and front-line supervisors. S2 grouped service, learning, and leading into her definition of the mission statement by stating "we serve the community based on what we learn from the community and it results and us leading the community".

Staffing

Staffing is an opportunity in the department that is preventing the proactive policing needed for a full counterterrorism policy. S2 stated, "a bike patrol is a great

thing to build community relationships, but we are always short staffed and operating a minimum capacity". S4 stated, "manpower is a continuous issue; we really need 20 more officers". S4 also recommended "restructuring the beats to correlate with certain areas" to help with short staffing. E4 stated, "another 20 officers would be ideal for more proactive policing" and "we manage our workload, but would like more officers to perform proactive activities".

The recruiting strategy was described by L3. A strategy is designed "based on feedback from the community, special interest groups, and executive leadership". L3 also discussed the city growth and how the department plans to catch up by changing culture. He stated, "the current Chief is changing the culture on how fiscal responsibility is viewed". He further explained the previous Chief would reduce staff as method of demonstrating fiscal responsibility, whereas this Chief has been slowly increasing the officers in the department over the last three years. Finally, the definition of fully staffed is based on traditional policing or calls-for-service. The city officials view tangible outputs or officer count as staffing, but do not include intangibles such as community policing, events, or venue support in the staffing.

Communication

The *communication* abstract concept emerged from sharing information, internal practices, and community information flow.

Sharing Information

During the executive interviews, information sharing emerged as a trend in communication. It includes sharing information between local agencies, federal

partnerships, internal departments, and the community. E1 discussed the importance of freely sharing information internally and externally, and has many standing meetings dedicated to sharing information. E2 and E4 emphasized the importance of sharing information between local agencies, and E4 indicated it is the information received from adjacent agencies "that really perks our interest".

Information is also shared with federal agencies, mainly the FBI and ATF. ICE was mentioned by one executive, but it was more for criminal than terrorist activity. The primary method of information sharing mentioned by all executives was between the FBI and the agency through their officer assigned to the JTTF. However, S2 is concerned it is "high level stuff that doesn't make sense to the officer level". S1 also stated, "they share information that we have already seen on the news". L2 stated, "it is stale by the time it gets to us". L3 also stated "the information is not location specific and there is a communication gap because it does not make it throughout the entire department".

Internal Practices

Communication internal to the department included disseminating e-mails, sending alerts, and consistent meetings. E1 and E2 specifically mentioned "management by walking around" as their communication tool for regular interaction with the officers and department. E3, E4, and E5 all mentioned the reliance on e-mail to communicate information to the officers, daily briefings, and specific alerts for urgent situations. S2 uses e-mail, but for information that requires explanation she prefers to "conduct car-to-car discussions with the officer".

Consistent meetings include daily briefings, weekly leadership meetings, and monthly COMPSTAT meetings. E1 discussed the need for these face-to-face meetings as an opportunity to engage with the team and it is beneficial for officers to interact in a small group setting.

Community Information Flow

Consistent with the method described in chapter 2 regarding push, pull, and networking; the strategy to encourage community information flow by the department involved pushing information out via social media, pulling information from the community through proactive programs, and networking with the citizens. E1 understands the citizens "know the norm" within a neighborhood and they provide valuable information to the police. E3 specifically mentioned Homeowners Associations as a method for pushing information out to the public, and E5 stated, "we push out information to the vendors at upcoming events" as he discussed recommendations for screening people at large venues. S1 indicated the best input for counterterrorism planning comes from "businesses that have good loss prevention programs which provide great information to law enforcement". S1 also stated businesses "will send us information from cameras and cars".

Social media are major forms of community information flow for the department. Analyzing twitter followers is beyond on the scope of this study; but comparing the number of twitter followers to the total city population, the agency in this study is among the highest percentage (see Table 1). Agency 2 listed in Table 1 shows 31% of Twitter

followers based on total population of 164,000 for the studied agency. They are more engaged and interactive than the adjacent agencies.

Table 1

Twitter Population for Studied Agency and Surrounding Agencies

Agency	Population	Followers	Percentage
1	172,000	2,000	1%
2	164,000	51,000	31%
3	286,000	22,000	8%
4	99,000	3,000	3%
5	1,318,000	331,000	25%
6	393,000	120,000	31%
7	238,000	23,000	10%
8	43,000		0%
9	113,000	2,000	2%
10	105,000		0%

Learning

Learning emerged as an abstract concept from meetings, face-to-face interaction, or training.

Meetings

The department has more formal, regularly scheduled meetings that are held each month as it relates to counterterrorism. E1 gains an understanding through different levels through standing meetings with surrounding agencies' police Chiefs and the local FBI special agent in charge. E1 also meets with the City Manager, the Police Chief Association, and

S3 described E2's regular meetings with culture groups to "give us an indication of what is drawing attention from their ideology". E5 described the culture groups

meetings as "a conduit of information going back and forth in each community". One drawback to this initiative is time; "it has been in place less than a year and it will take more time to see a return on the investment" E5 further stated.

L2 described learning from Philadelphia NFL draft day in 2016. The draft day could move to their city in the future, so they planned to attend the draft day with Philadelphia Police to learn from their security set-up.

Face-to-Face Interaction

Face-to-face interaction are more informal methods of learning from the community. These include activities, programs, conversations, and impromptu engagements. Many of the departments programs are aimed to learn from the community. The SRO program indirectly allows officers to learn about the community from the interaction with the kids in the local schools. E2 and E3 discussed the benefit of interacting with kids to learn what is happening in the community they would not otherwise know. E1 and E2 expect their officers to be "very active in the community and their beat" and E5 looks for opportunities to "educate stores, such as Home Depot or Lowes, on what to look for when it comes to terrorist supplies". S1 recommended to executives a program to enhance the partnership by having officers eat lunch at schools with the kids, but participation was low.

Citizens on patrol is a program that "helps educate the public on policing" as described by S4.

Training

The department is required by state law to provide officers with 24 hours of training annually. E1 and E2 discussed the 60-70 hours of training the department provides to their officer to include de-escalation of force, joint training with the fire department, in-hour supervisor training, diversity, and Crime Prevention through Environmental Design (CPTED). E4 values joint training with the local fire department as a counterterrorism strategy against an active shooter, and E5 values CPTED to allow the department to partner with local businesses on the design on their buildings, camera placement, and landscaping.

Crime Prevention through Environmental Design (CPTED) training has been completed by several members of the leadership team.

Internal to the department, front-line supervisors noted the training they provide to their officers. S2 uses calls-for-service to teach younger officers patience when responding to situations. She stated, "it is possible to create a bad relationship with citizens by responding too quickly".

L2 stated, "at my current rank, I have received training that I didn't have before, which gives me a 30 thousand foot level rather than a 200 foot level of understanding" and L2 elaborated on training as part of the mission statement of the department, "our role as an officer is always changing, new laws, case law, and interaction with the public".

Outside training was described by S3 as "the most valuable to counter terrorism". Citing Dave Grossman, Kevin Gilmartin, Jonathan Spencer, and Sean Spicer, S3 values

education "on what is going on in the world" so the officers can understand the movements ideology.

The agency has completed FEMA training as directed by federal mandates. The National Incident Management System (NIMS) became a requirement in 2007 as a condition of receiving federal preparedness funding and has been dynamic training throughout homeland security changes. All officers, middle management, and executive leadership have completed the NIMS training.

Executive leadership within the agency attended the Senior Management Institute for Police (SMIP), Leadership in Police Organizations (LPO), and the Leadership Command College. These three courses are aimed toward leading police organizations in our changing environment. The courses include instruction from public and business best practices in leadership, scholars from top universities, and long-term police executives in the field. The learnings from these courses are value-added to police executives and can be applied to countering terrorism within their jurisdiction.

Policy

Concrete concepts that emerged into the *policy* abstract concept include micro-level policies and macro-level policies.

Micro-level Policy

The executive team creates a strategic approach specific their agency. They use internal policies to direct the department toward their counterterrorism goal. There is a policy in place that requires each officer to have five contacts in their phone. E2, E3, and E5 discussed the Community Contacts Program that sets this requirement and intends to

create a diverse contact list of citizens that police can call if needed. E5 stated, "it will assign a contact in different cultures to be liaisons." However, S2 noted the program "wasn't really explained well in the beginning so officers really don't know about it". Additionally, the mission statement of the department is consistent with this message as it states, "in building partnerships with the community, the [department] shall engage quality of life issues, in the pursuit of making the [City] a great place to live, work, play, and grow". S1 promotes the executive leaderships vision. He stated his officers cannot drive around with their windows rolled up or sit in parking lots all the time; it is an "expectation that his officers get to know a business per week".

The department has a SEE Something, SAY Something initiative which is part of a larger Your Community, Your Commitment (YC^2) campaign. E1 described the campaign to encourage citizens to speak out about owning their community. E2 and E4 discussed the specifics of the SEE Something, SAY Something initiative and its intent to pull information from the community in a proactive and preventative form. E4 gave a specific example of the Timothy McVeigh bombing and his vocal proclamation of his attack to his friends. E4 stated, "the intent of this program is to build a culture that will give the police that type of information, so we can intervene."

A micro-level policy that is inconsistent among the leadership team is the *no chase* policy. S2 believes a *no chase* policy is a "great policy to have in place" while S1 believes it "prevents collaboration with adjacent agencies and sends a message to criminals". S1 is also concerned the policy "prevents collaboration with adjacent agencies because we deny requests to support them".

Macro-level Policy

The mission statement of the department is aimed toward protecting life, property, and preserving peace; and it discusses the policing "manner consistent with the freedoms secured by the U.S. Constitution and the Texas Constitution". The Constitution is a macro-level policy that all local law enforcement agencies must follow, and it ensures freedom for all citizens. Terrorists embedded within the community can use the Constitution to plan their operations and remain undetected by local law enforcement agencies. E2 stated "our free society places limitations on police and their ability to police certain activities" and E3 emphasized the change in mission statements "more toward counterterrorism and prevention rather than reaction".

E5 specifically mentioned the court system applies "legal constraints that do not help law enforcement in a preventative manner". The criminal justice system was also mentioned by S3 stating, "it is a society problem, not a police problem" and "since there is no punishment for crime, we have legalized drugs, and lawyers can get anyone out of anything, it is demotivating and frustrating for officers".

The regional fusion center does not have an ongoing relationship aimed toward counterterrorism. Two regional fusion centers are merging and there is a new Sheriff that could bring different policy to the fusion center. E1 is hopeful the "new Sheriff will revamp the information coming from the fusion center" and E2, E3, E4, and E5 did not list the fusion center as a valued counterterrorism resource. E6 described the fusion center as "a data dump that pushes information out that was already reported".

Processing

The central research question in this study was focused on processing information. The *processing* abstract concept developed into concrete concepts of resources, collaboration, and credibility.

Resources

The responsive interview model specifically asked each participant about processing information. The resources theme emerged from several participants. When making decisions, executives focused on how, where, when, and what resources should be spent. This allocation of resources is also linked to the *learning* code. E2 took a course on ethics and fiscal accountably and E1 stated the facilitation resources was one of his main objectives. E3 was specifically asked about POP as an effective method for countering terrorism, and he discussed "spending resources on things that work".

L2 described equipment used by SWAT to be plentiful, but also described their activities as "mostly reactive and only respond if something is going on". Resources needed by SWAT would be "more training and experienced people on the team".

The resources of each target within the city are considered when leadership processes threats. S3 looks at "shopping venues, schools, churches, and event venues to examine the steps each have taken to harden their own establishment". But he fears a coordinated attack similar to Beslan would be devastating because of the lack of collective resources.

Front-line supervisors process more micro-level information to pass to their officers. S2 summarizes the information the officers need to know and communicates it in summary format.

Collaboration

The main theme that emerged from the *processing* concept was how the department works collaboratively with the citizens, businesses, local and federal agencies, and internally. All information received is reviewed by multiple parties. E1 elaborated on processing information by stating "we have a team of people working collaboratively toward a common goal" and "processing information is not the responsibility of one person; we have multiple people looking at the data, so it is not one set of eyes". Under E3s responsibility, there is an analyst on staff that "transforms information into intelligence" and he values the face-to-face communication and the brainstorming that goes on when all the officers are gathered in-person.

E4 discussed how they look at trends federal data and transforms it into specifics for their local organization. E5 gave a detailed description of internal collaboration at the macro-level,

> Officers are not thinking global enough. They are not connecting the dots to all groups involved. It is a chain reaction of movement around the departments. All departments within the agency must gain information from every position to share information.

Further, S3 expressed "each officer should collaborate with other agencies, but there are silos within departments, ie. SWAT, where they only interact with each other; any officer

should be able to lead the scene but that's not the case". S4 also indicated there is "no training between agencies".

Credibility

The credibility of the source was the final theme on *processing* information. E3, E4, and E5 talked about where information comes from and the originating source. They must consider the credibility of the source when they process information or allocate resources toward a lead. The information they receive comes from different avenues and E3 emphasized the importance of "using all information and not ignoring anything; you never know where something will lead".

Leading

Transparency emerged as a theme among the executive leadership. E1 discussed the open communication and stated, "there is no hoarding of information in the department" and E3 explains to his team the "why behind decisions made by leadership and organizational changes" within the department. E2 stated "transparency is an important leadership quality" as he described his leadership philosophy.

Leadership determines where resources are consumed within the organization; therefore, the values of the leaders in the organization can have influence on the allocation of their department resources. This theme emerged during the interviews with executive leadership. Within the department E3 stated "there is no fighting on where resources should go" S1 also acknowledged funding is dependent upon "personal values of the Chief".

The front-line supervisors speak highly of 80% of the executive leadership. Micro-management was listed by S1, S2, and S4 who indicated micro-management by executive leadership breaks trust within the ranks. The values of S1 were described in detail and he labeled his leadership style as a reflection of empowerment, growth, and trust. S1 and S4 indicated "hoarding of information" and "authoritative" as undesirable leadership qualities.

The mission of the department is to be one of the leading agencies in law enforcement. E5 explained this to mean "we shouldn't have to borrow resources, we want to have leading edge technology and innovation, and our officers should be leading at every scene no matter the location".

Feedback Loop

There are specific outputs coded as *feedback loop* aligned with the systems theory. The *feedback loop* are outputs of the system that feed back into the system in the form of inputs. These can be threats or opportunities for local law enforcement agencies. Those items coded as *feedback loop* include: *criminal justice system, school resource officers,* and *crime prevention through environmental design (CPTED).*

Criminal Justice System

Part of the reactive nature of local law enforcement is to make arrests. Ranging from small unpaid traffic violations to criminal felonies, police make arrests to remove the individual from society until their crime has been resolved. The output from the police system is the arrest, which then feeds into an input for the criminal justice system. The criminal justice system must process their inputs and create an output. If the output

created from the criminal justice system is to release a criminal or offer probation, many times these individuals feed back into the police system by getting arrested again. This feedback loop continues and will consume police resources.

School Resource Officers

The School Resource Officer (SRO) program is a positive feedback cycle. The department studied commits to having SRO's in all middle schools, junior high schools, and high schools in the city. The officers specifically spoke to the engagement at the middle school level. They are influencing the children at a young age to create a positive image of local law enforcement. The children work with their SROs through their school years and upon graduation they understand the role of police in the community and become advocates for crime prevention. This feeds back into the law enforcement system by producing an output of a generation of police supporters embedded in the community.

CPTED

The CPTED training potentially feeds back into the community and into the law enforcement system. If CPTED is used in the initial design phase of a building, criminal activity can be engineered out of certain areas. This will result in safer communities, and less resource consumption for local law enforcement agencies thus providing more resources to proactive activities.

Evidence of Trustworthiness

Credibility

The internal validity in this study was considered during the design phase, but the analytical phase of the study brought out additional considerations. Pattern matching and

logic models are tactics used to establish the quality of this empirical social science research (Yin, 2016). During the research, patterns from the responsive interview model in leadership and officer observations emerged and were linked to the literature. These matchings are described in the data analysis section and validate the findings.

The logic model was created and aligned with the systems theory. Coupled with pattern matching, the logic model consisted of matching empirically observed events to theoretically predicted outcomes (Yin, 2016). Logic models have been useful in prior research to show a logical structure of a criminal justice program (Wholey, 1979). This study used the pattern matching tactic to create the inputs into the logic model for evaluation of outputs.

Transferability

External validity in this study comes from the theoretical foundation of the systems theory. The data collected were specific to the selected department, but analytical generalizations were made that could potentially enhance transferability of the findings to other police agencies and social settings.

The details provided for data collection methodology, data analysis, and interpretation of findings can provide a strategy for future researchers to conduct this study in similar settings.

Dependability

Defined and detailed protocols were followed that enhanced the reliability of the study. The responsive interview model was followed during each interview that consistently asked each participant the same questions. The detailed note taking was used

during the observations, and the logic model was used for reviewing documents. Transparency in the process and researcher journal enhance the dependability of this study as well as defined changes discovered in the data collection phase.

Confirmability

Objectivity in this study was achieved by documenting the research from start to finish. The findings emerged from the data collected, but the detailed protocols create objectivity in the data analysis process. The researcher journal was also used to develop an audit trail during data collection. However, observing participants can have a one-way reflexive effect on the study (Yin, 2016). In this study, those officers being observed modified their behavior because of the researcher presence. They were reluctant to deviate from traditional police duties and were not observed going inside local businesses to engage in community policing or relationship building. The participants indicated they usually engage in these activities but did not while being observed.

<div align="center">

Results

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The results of the findings were concluded after all interviews, observations, and document reviews were finalized. The findings emerged from the triangulation of data sources. The focus was on identifying common themes from interviews, observations, and document reviews.

Central Research Question: How does the department's leadership process information within their system to produce counterterrorism outputs?

During the interviews, participates were asked specifically about processing information to counter terrorist activity. The observational ride-alongs were different, but

the researcher was looking for ways in which the officers processed information and turned information into practice. The document reviews were more objective regarding their purpose and what they produced for the department.

Themes: processing information, proactive, leadership

The outputs from the police system were not specific to counterterrorism, but the proactive nature of the outputs will help the police counter terrorism. The leadership processes information by gathering data from different sources that are credible, linking the information to federal data, and transforming the information into usable action items for the officers. The leadership believes in a proactive approach to policing, although the traditional law enforcement model is reactive. The proactive theme emerged to answer this central research question through the data collection. Leadership creates partnerships with locals specific to certain groups such as faith-based organizations, the Hispanic community, and African Americans to proactively understand what is currently in those cultures. The intent behind these partnerships is to build relationships and support a community policing model. The police officers practice this as well by engaging with the citizens in their assigned beat and building relationships.

The leadership collects information from various sources within their city. The cultural meetings, school resource program, and routine policing all provide raw data that must be processed. The resources dedicated to programs or initiatives for the department can be directly related to the values of executive leadership. Therefore, the processing of information is dependent upon the values of leadership. Resources for the department are

there to support programs that are found to add value, such as the cultural meetings and school resource officers.

The leadership processes multiple sources of information to create a strategic picture. They think beyond the traditional role of law enforcement in a predictive manner to stay ahead of terrorist tactics and procedures. Their engagement with the community and citizens allows information to flow into their system.

Sub-research Question 1: Which inputs provide the greatest source of counterterrorism planning for the department leadership?

The interview participants were specifically asked what type of information is most valuable for them to plan for terrorist activity. The executive leadership discussed their JTTF assigned officers and other federal agencies as the greatest source for counterterrorism planning; however, the officer within the beats indicated the community is their best source.

Themes: communication, learning, feedback loop

The activities of the JTTF Officer could not be analyzed in this study because of classification, but leadership indicated the partnership between the agency and the FBI through the JTTF Officer leads to many inputs for counter terrorism planning. Executive leadership discussed other methods of gaining information about terrorism activity through face-to-face meetings with other agencies and the local community. A recent foiled terrorist attack found in the document review revealed the JTTF partnership and relationships with adjacent agencies is responsible for the arrest of Al XXXXX prior to his planned attack on the local shopping mall within this city.

While executive leadership is meeting with the local community, officers in the beats are visual and engaged. Within the communication theme, community information flow is one of the key strengths of the department.

Their use of social media is at a higher percentage than surrounding agencies and the engagement from social media achieves results. The agency uses Twitter to interact and citizens retweet their messages regularly, and comment on leads the department is requesting.

The feedback loop coded data also revealed how the School Resource Officers create a pipeline of police supporters in the community. Executive leadership, middle management, and front-line supervisors all agree this is the most critical and important role in their department and have a vetting process for officers assigned the SRO role. They are responsible for setting a positive image of police with the youth and the children also talk to the officers which brings more information into the police system. The children also take their positive police engagement home which reaches the parents and extended families within their community.

Sub-research Question 2: What community partnerships in the system increase effective counterterrorism planning?

The interview participants were specifically asked about local or federal partnerships. The executive leadership indicated internal partnerships within the micro system are excellent community partnerships for counterterrorism planning.

Themes: communication, learning, policy

Information obtained through community resources are achieved through all levels of the organization. Officers and front-line supervisors are engaged with the local population and businesses in their beat, middle management and executive leadership engages with the community through meetings, and policy set by executive leadership requires community contacts for each officer.

The partnership with the fire department was noted by several executives as critical to counter terrorism planning. Joint training, flawless communication, and breaking through silos is important for this agency to increase planning and coordination in their city. Other city partnerships, such as public works and code enforcement, are critical to prevention.

Business partnerships have the potential to harden the targets within the city. Terrorism can be prevented through multiple facets, and hardening the target is one key area. Through CPTED, businesses can find engineering designs to deter terrorist activity from their operations. The agency studied does not have a solid CPTED program, but leadership does find value in CPTED. It is ultimately dependent upon the businesses to reach out to police prior to building design or reconstruction.

Sub-research Question 3: How can the systems theory expand public policy and extend into a police organization?

Theme: feedback loop

The research participants were not asked specifically about the theory, but the researcher concluded police operations is a system. A system has inputs, throughput,

output, and a feedback loop. The inputs in a police system are subjective and objective. Funding, staffing, and equipment are objective inputs that police organizations use to achieve their output. The subjective inputs include community demands, criminal activity, and political changes that are also present in a police organization. All inputs vary from different agencies, but each police organization has some form of input feeding their operations.

The processing of information is also different across the agencies. It is also dependent upon the personal beliefs and values of the leadership. Many police structures have similarities, which would designate certain processing tasks to specific departments, but the outputs or objectives are set by leadership.

Outputs in the police organization are generally reflected in their mission statement, initiatives, and programs. Outputs can be similar across the policing community; generally aimed to protect their citizens and make their jurisdiction safe. Depending on the resource input, some outputs may have more funding, and depending on the leaderships values and beliefs, more attention may be given to certain outputs.

The feedback loop is present in policing organizations. The outputs in this study were aimed at community policing initiatives. This feeds back into the police agency by creating a more engaged community and increased interaction between the police and their citizens.

The public policy field can be expanded in the systems theory. Executive leadership in police organizations is more of a public policy role. The leadership must meet the demands of their citizens, city council, stakeholders, and local businesses, non-

profits, and organizations. Police organizations make policy that affect the public and those decisions must often be approved by their constituents.

Summary

The purpose of this study was to understand how police leadership processing information within their system to prevent terrorism. Also, the purpose was to understand which inputs in the system provide the most valuable planning to prevent terrorist attacks; and to understand which community partnerships are valuable for counterterrorism planning. The systems theory was used as a theoretical foundation and attempted to expand the systems theory into police operations.

This study found the leadership in this agency uses a comprehensive and complex approach to their policing system. They use information from all sources and are heavily engaged within the community. The leadership understands terrorism cannot be simplified or linear and leads their department to apply a strategic level understanding of the complexity of prevention. The six themes identified in this study can set a foundation for a local law enforcement terrorism prevention strategy including six pillars of policy, communication, leading, learning, proactive, and processing (see Figure 5).
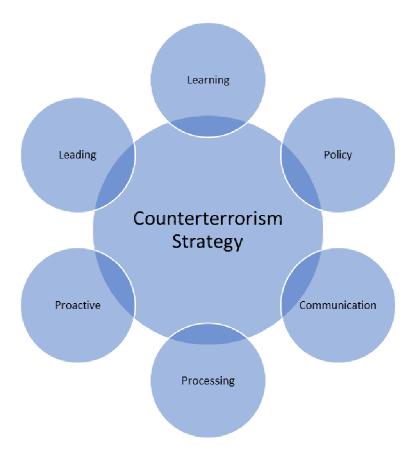
Figure 2. A potential counterterrorism strategy involving six pillars.

The six pillars identified in this study are all part of a comprehensive counterterrorism strategy. The agency in this study incorporates each theme into their counterterrorism planning and the activities identified in each theme are touching the counterterrorism strategy at all times.

Specific inputs that are more valuable to contributing to counterterrorism planning include an assigned JTTF officer, city cooperation with the fire department and other departments, and interagency collaboration. The combined resources and information are shared consistently and without a hidden agenda. The leadership within the police department leads this effort to ensure maximum information flow into their system.

The community policing displayed in this department is very engaged, focused, and intentional. The attention and resources of the SRO program is valuable to understand our youth and make a positive police impression. The feedback loop identified in the SRO program creates a steady and consistent flow of police supporters within the community. The mission and planning of the leadership includes the SRO program and other engagement activities including social media resources. Without dedicated resources to a program and determined leadership, these programs would not exist. The leadership in this department dedicates the resources and commitment to engaging with citizens and youth.

The systems theory was expanded into police operations through this study. Many inputs identified in the literature review were found processed by the leadership in this department. Outputs were created by leadership from the processed information and some areas fed back into the system through the feedback loop. The systems theory can also be expanded into public policy or a macro-level police system where the outputs from police produce the inputs for the criminal justice system. Or the outputs from the criminal justice system feed back into the police system. Another observation from the study is the positive feedback loop created from the SRO program. As the students graduate high school and have a positive image of police, it could create more law abiding citizens in the community and reduce the resources spent of traditional and reactive policing.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this study was to examine the leadership within a local law

enforcement agency to determine how leaders process information within their police

system to produce a counterterrorism output. I also examined what types of system inputs

and community involvement helped the local law enforcement leadership plan for

countering terrorism. The key findings revealed that a proactive policing strategy is used

by the agency to build partnerships and analyze behaviors during events. Open

communication, using resources to process information from credible sources, learning

from external and internal system influences, interpreting micro and macro level policies,

and transparent and ethical leadership are all findings from the study that reveal how

leadership processed information in their system.

Interpretation of the Findings

System

In chapter 2, earlier explanation of systems theory included the historical

interpretation of the theory, advancement of the theory through time, and review of

similar theories that relate to social sciences, public policy, and police organizations. The

findings from this study confirm and extend the knowledge of systems theory that was

introduced in the literature review in Chapter 2.

Holistically, the complexity of social sciences, public policy, policing, and

terrorism were confirmed in the literature review. The literature review supports the

nonlinear and dynamic system of society and these fields. Although systems theory

appears to have a linear explanation of inputs, throughput, and output, the literature and findings show a nonlinear interpretation of the systems theory. The schematic diagram of the findings shows six interrelated themes including proactive, policy, leadership, learning, communication, and processing. The complexity of these themes mirrors the complexity of the systems theory and can create a foundation for a complex counterterrorism policy.

Inputs

Based on others' approaches, I defined the inputs into the system in the literature review using two categories: demands and support. The findings from the study also show different demands and support on the police system. Coined as an opportunity in the data analysis section, short staffing of the police agency due to rapid city growth is a demand placed on the police agency from society. I also found a technology opportunity for the agency; however, drones will be an added support for the agency once a policy is implemented.

Inputs follow complexity theory as they come from a variety of sources. The findings confirm those in the literature review about police inputs and explain how the police leadership's desire for autonomy is grounded in systems thinking. Systems theory emerged from biology and transformed into organizations. An organism, or organization, seeks to survive in a steady state, and responses to any external influence on its system that threatens equilibrium. The police leadership in this study mentioned their desire to be the leading police agency in North Central Texas. This means they want to sustain their

own operations, not borrow resources from other agencies, and be the agency that others look to for best practices.

In the literature review, I listed fusion centers as an input for police agencies, though I also revealed that fusion centers are not really a value-add for counterterrorism strategy. This study confirmed that the inputs received from fusion centers are dated and not valuable for counterterrorism planning.

Investigations are reactive in nature but provide valuable inputs for police. The literature review showed how effective police investigations were in the Boston Marathon bombing. Surveillance equipment was used to create a timeline of the attack, and the suspects' photo was obtained from this investigative work. The agency in this study also uses business surveillance equipment to create timelines of events and apprehend suspects. The studied agency also uses social media to send this surveillance footage to the community to help expedite identification. This similar method was used early in the Boston Marathon bombing to help identify the suspected bomber.

As noted in the literature review, routine policing has led to the successful exposure of terrorists embedded in the community. This study confirms that patrol officers routinely checked license plates for warrants associated with that vehicle and looked for clues to behaviors during routine traffic stops. While not all terrorists have a criminal record to alert patrol officers objectively, the subjective behaviors of individuals are included in systems-level thinking.

Community policing is defined in more detail in the literature review and includes a variety of components. Community policing supports a counterterrorism policy by

developing relationships with the community which leads to increased communication flow between the police and society. Social media are included in community policing and create an interactive tool for police. This study confirms key findings included in the literature review. This study revealed an agency with an advanced community policing strategy. Programs are aimed toward bridging the gap between cultural groups and the police; social media are utilized to engage with and educate the public on police issues, and patrol officers engage with citizens and local businesses to build relationships. The literature also supports longer assignments in an officer's geographic area to help build relationships. I found use of year-long rather than 6-month long assignments for officers.

Problem-oriented policing was listed as an input in the literature review, but this study disconfirmed problem-oriented policing as an effective input to counterterrorism. The limitations of this study may contribute to this finding. This study was conducted on a smaller agency without heavy criminal activity in the city. Problem-oriented policing relies upon data from criminal activity to locate specific problems. Because criminal activity is low in the city where the study was conducted, that data is not sufficient to identify substantial problems worth consuming resources.

Transforming Information

The central research question in this study regarded how leadership in the police agency processed all the inputs. Easton (1965) determined two means of processing to be *who* and *what*. Systems theory describes the political process to identify *who* will transform the information, and the culture the system resides within will decide *what* will be transformed (Easton, 1965). In this study, city officials selected the chief of police to

be the *who* in the system, and the chief of police made the hiring decisions for additional leadership creating a traditional hierarchy with certain processing authority. The *what* in this study is unique to the culture.

This study was conducted in an affluent area, and the cultural norms heavily decide *what* will be processed by the local law enforcement agency. Additionally, criminal activity is low in this city, so police are expected to respond to the demands on the system, or calls-for-service from the citizens. A call-for-service in one city may require an officer visit, whereas the same call-for-service in another city may require a phone report.

Knowledge Management was found in the literature review to be staged and aligned with officer advancement. The stages of growth model begin with just inputs, but later advance into system processing (Gottschalk, 2006). This concept was also found in the current study. Through leadership interviews and officer ride-alongs, only limited inputs are given to junior officers to process and higher levels of leadership are exposed to more strategic information including links to other systems. This strategy was described as intentional and eliminates overload.

Overload was reviewed in detail in the literature review because it can be exposed by terrorist organizations. Group thinking was identified to avoid complacency. Group level thinking brings different viewpoints from various actors in the system. This prevents overlooking information if only one person was processing that same information. This study found the selected agency relies on group think to analyze

information in their system. Executive leadership described layers of leadership that views information in the system before decisions are made.

Programs and initiatives are outputs but transforming inputs to get those programs and initiatives also require leadership and allocated resources. As identified in the literature review, programs and initiatives are more short-term solutions or a quick fix to demands on the system (COPS Office, 2016). For long term success, the programs and initiatives should be on-going and focus on serving the citizens through continuous engagement. The document review found several areas in which the studied agency continuously engages with the citizens. The agency heavily relies on social media, primarily Facebook and Twitter, to use a push, pull, and networking strategy outlined in the literature review (Mossberger, Wu, & Crawford (2013) & Meijer & Thaens (2013)). This engagement leads the agency to process information specific to the needs of the citizens, builds trust and relationships with the police, and gathers information from the community to feedback into the police system.

Pressure between groups was identified in the literature review; specifically, an output for one group will create an input for another group. A terrorist organization or lone wolf will achieve an output, an attack. That attack feeds into a police organization as a demand input. This study found the leadership within the agency analyzed these inputs from terrorist organizations and modified their operations to meet the demand or threat.

Leadership traits with conflicting values that do not match the society in which the system operates can result in processing information incorrectly. In this study, the leadership traits match that of the society in which they operate. The leadership

interviews revealed how they change policies and policing based off community feedback or concerns. They also initiate programs or continue existing practices if the citizens place a demand. The leadership traits of the executive police include styles like transformational and servant. The businesses and citizens in this area seem to appreciate and value those leadership styles as opposed to transactional.

Organizational structure is hierarchal in police organizations, but in terrorist organizations there is shared leadership and decentralization of power. This agency was found to be hierarchal on paper, but leadership empowers each officer to display leadership and ownership within their beat. Only a small percentage of officers expressed they do not feel empowered to lead.

Community policing according to the NIM should feed information into the national and federal database. However, relating back to organizational structure, lower levels of law enforcement should develop a more decentralized structure to uproot terrorists embedded in the communities.

Predicting terrorist organizational change for survival is critical to stay ahead of emerging threats. This current study found a predictive leadership style to analyze current trends in organizations or society. One trend during this study was the app Pokémon. This app created virtual Pokémon characters in a specific location that children would physically go to to collect the Pokémon. Leadership mentioned how terrorists can exploit this app to gather a large group of children to one location at a designated time to carry out an attack.

Outputs

Defined in the literature review, outputs can be objective or subjective. These are rooted in the systems theory from situational or behavioral data respectively (Easton, 1953). Situational data can be ignored or inflated depending upon the personal beliefs of leadership. This current study examined the outputs identified in the literature review and found the agency aligned with several of the counterterrorism outputs.

Community policing is interpreted by leadership and the officers to be critical in counterterrorism. The officers observed practice relationship building by engaging with the citizens through the opportunities traditional policing creates. The documents reviewed on social media show strong relationship building and utilize a push, pull, and network strategy previously mentioned. The leadership seeks to build relationships with all citizens and have created an output, a program, focused on building relationships with under-represented communities, such as Hispanic, African American, Islamic, and Asian. The community policing output was identified in the literature review as critical to counterterrorism strategy, and this agency has created a community policing model to support the literature.

Resilience was identified as an output in the literature review. A resilient community can minimize the outcome of a terrorist attack. Through the document review, this agency communicates with their citizens daily through social media. Compared to surrounding agencies, this department has a higher percentage of twitter followers per population than nine other agencies within the area.

The macro-level, or federal level, of counterterrorism strategy was identified as 'high policing' in the literature review (Milosevska, 2014, p. 67). The local law enforcement agency studied is more focused on local solutions specific to their community, yet leadership understands the macro-level strategy. Officers within the agency are even more focused locally on their specific beat or a portion of the micro-level system. This macro-level gap is caused by levels of government such as local, state, and federal. Terrorism will strike local, but it is a federal concern. The federal government does not have a good strategy to link all state and local agencies with their federal strategy.

Evolving outputs identified in the literature review include leaderships ability to predict trends in terrorism to move beyond vague interpretations. This agency gave specific predictions on how terrorists can exploit emerging trends. Leadership explained how they predicted the popular Pokémon game could be used to gather a group of players to one location. They also use terrorism trends from recent concert attacks to adjust their local venue security procedures.

Feedback Loop

The feedback loop defined in the literature review is any output from the police system that has been transformed and fed back into the police system. Identified in this study to be specific to counterterrorism is the school resource officer, the criminal justice system, and CPTED.

School shootings are a form of terrorism and continue to challenge policy makers. The agency in this study assigns a school resource officer to every middle school, junior

high school, and high school. The engagement with the students creates a positive cycle that feeds law abiding, police supporting citizens on a long-term and continuous basis.

The criminal justice system receives their inputs from police outputs. An arrest is an output that will be processed as an input in the criminal justice system. After processing, the criminal justice system may release the individual without or with limited consequences. Many times the individual will continue feeding back into the police system only to continue the cycle. These repeat offenders consume police resources and clog the feedback loop.

CPTED can create a positive police input if infrastructure is engineered to reduce criminal activity. While no CPTED projects were confirmed in this study, officers and leadership discussed ways they consult with building codes and business owners on camera placement and landscaping to help reduce criminal activity. The output created by this police engagement lowers the criminal activity in the community allowing more resources to be consumed on proactive activities.

System Mechanisms or Equilibrium

The literature review revealed how equilibrium is achieved in a social system. However, literature also determined complacency to be a dangerous result of system equilibrium in a police organization. Democracy and programs that enhance the lives of citizens will help address social change prior to violent action to a perceived injustice. This study found a culture program aimed to bridge the gap between the police and citizens in all different groups. This program helps maintain open communication and addresses any perceived injustices between groups or individuals and the police.

Individual or Group Influences

The staircase to terrorism was explored in the literature review as the theory for terrorism group formation. Officers in this study explained their method to address situations prior to escalation. Similar to the Broken Windows Theory, the method prevents small issues from going unabated, which would create a much more large-scale problem. At the time of this study, Black Lives Matter had consistent social movements that resembles group formation defined in the staircase to terrorism. The agency studied keeps an open dialog with supporters of Black Lives Matter to help understand the perceived injustice of the group.

Web of Decisions

The literature review defined web of decisions from the original systems theory of political life (Easton, 1953). For the system to be aligned, all the interconnected parts should work together. The allocation of resources can enhance or degrade other parts of the system. During interviews with executive leadership, resource allocation was specifically mentioned. The consequences of taking resources from other parts of the city to fund the police would degrade the city streets, building codes, and public works. These parts also work together during events to direct traffic, provide environmental services, and barricade off areas. Countering terrorism is viewed as a city-wide effort and the all areas involved must have resources. This organization works collaboratively to find the best way to allocate resources to keep the city safe.

The funding input into the police system will be divided by the department objectives. Taking more resources for one objective may take resources away from other

priorities. The leadership must determine which objectives take precedence during times of limited funding. A key objective for this agency is the school resource officer program. Much emphasis is placed on the officer selection process and obtaining funding for the program. The leadership values the positive society feedback loop the officers create in the schools, and it helps deter a terrorist from choosing a school as a target.

Limitations of the Study

The limitations to the methodology and findings were limited in several ways. The research method included triangulating interviews, observations, and document reviews. However, the document reviews were limited to unclassified and public documents related to the research questions. The study revealed limited documents on counterterrorism planning in this form. The nature of counterterrorism strategy and documentation was also found to be outside the participants in this study and more at the macro-level system in federal agencies.

The limitations outlined in Chapter 1 also include the transferability of the study. The city police department does have demands on their system that may not be present in a larger metropolitan police department, however, larger agencies also have more resources dedicated toward various demands on their city. An example, the smaller affluent area this study was conducted does not have a Homeless Response Team or a Homeland Security Chief that would be found in a larger agency. These larger agencies have a demand on their system to have this resource and the smaller agency studied does not currently have a need for those resources. Transferring this study is possible, but some modifications to include those resources would need to be included.

Finally, any biases found between the executive leadership, the officers, or within the department are not included in the study. The vision is to prevent terrorism, but the strategy used does differ from leadership styles. However, the biases do cause distractions within the officers and should be noted. Although these biases and distractions are not listed in the findings, they could have an influence interview answers and observations. Only data that supports the research questions are included in this study and any personal agendas were eliminated.

Recommendations

Further research could include generational changes in the police organization vs. terrorist organizations. As millennials enter the workforce, they are also entering terrorist organizations, and generation X are currently holding executive leadership positions and will be moving out of the system within years. A future study could examine how police systems will be changing to meet the demands of millennials working in the system and fighting against it as well.

An expanded feedback loop could be examined in a future study. The criminal justice system, school resource officers, and CPTED are feedbacks identified in this study. A future study can link how these areas feed back into the police system as a demand or supply input.

The macro-level system is a final recommendation for future research. The outputs from the police system feed into another system, which could include the criminal justice system, federal government, or local community programs.

Understanding how these systems work together from a systems theory prospective could lead to better understanding of gaps and inadequate resource consumption.

Implications

Positive Social Change

This study revealed how one specific agency prepares to counter terrorist threats in their community. Through the study, specifically the literature review and findings, the agency recognized best practices and gaps in their counter terrorism strategy. As this agency enhances their best practices and closes gaps, the individuals, families, organization, and society within their specific community have the potential to be safe and free from terrorism.

While the study was conducted, an actual terrorist event was foiled by this police agency. Through partnerships with local agencies and the JTTF assigned officer, the studied agency was able to learn about the attack and take preventative action to prevent it. The suspect was arrested prior to the attack taking place. This planned attack was on the local shopping mall within the city.

On a broader scale, this study can be replicated in similar agencies or discussed at conferences, police symposiums, or meetings. The intentions of the researcher to discuss this study and the findings will potentially bring positive social change on a macro-level nationwide. However, the limitations may exclude larger metropolitan police agencies or small rural counties.

Theoretical Implications

The study uses the systems theory to examine a police organization. A police organization is found in this study to be a system, and the systems theory can be broadened into a specific police systems theory. The inputs, throughput, outputs, and feedback loop of police organizations are plentiful and create a very complex system interdependent on other systems within criminal justice, public policy, and the community. Small changes in inputs can cause a ripple in the throughput to completely change an intended output. This study only used data applicable to the research questions, but future studies could use a police systems theory to examine officer staffing, leadership decisions, and community influences as inputs. These were major discussion points with the officers in this study as the ride alongs were completed.

Practice

The agency studied is highly engaged with their community through events and social media. The community policing strategy used by this agency was also found in the literature review to be effective in countering terrorism. Their initiatives and programs involve their community partners and develops a pipeline of supportive citizens for long-term sustainability.

<div align="center">

Conclusion

</div>

This study examined leadership within a local law enforcement agency to understand how they process their system inputs to create a counterterrorism-oriented output. The systems theory of political life (Easton, 1953) was used as the theoretical

foundation. The study revealed how the systems theory can be extended into police operations, public policy, and social sciences.

Through interviews, observations, and document reviews, six themes emerged from the data that can be used by other agencies to produce the foundation for a counterterrorism strategy: *learning, leading, communication, proactive, policy*, and *processing*. The complexity of terrorism and policing is not linear and many components are needed from different angles to prevent terrorist attacks. *Learning* from the community and training, *leading* police agencies with advancements and leadership, open *communication* with all partners, *proactive* rather than reactive policing, *policies* aimed toward a counterterrorism strategy, and advanced *processing* of information collide together in counterterrorism planning.

Aligned with the systems theory the feedback loop was a bonus theme. Outputs from the police system can be reverted into inputs. The School Resource Officers were identified as a positive feedback that creates long-term community support for the police organization. Resources are allocated from police leadership to support this feedback and it also creates a community policing agenda. More alert and educated citizens that are willing to communicate with police will prevent terrorist attacks since terrorists are often embedded within the communities.

The findings from this research have strengthened academic knowledge on how police leadership processes information to proactively counter terrorism in their community. In this regard, the recommendations stemming from this study include:

- This study found that local law enforcement agencies that are *proactive* in their partnerships/relationships, use advanced technology, and train officers to study out-of-norm behaviors can help uproot terrorists embedded within their city. Based on this finding, it is recommended that other agencies build relationships and partnerships with adjacent agencies, federal agencies, and the community. This would help local law enforcement collect more information from different sources needed to counter terrorist threats in their jurisdiction.

- This study found leadership within this local law enforcement agency *processes* information in their system collaboratively. Based on this finding it is recommended that multiple departments within the agency should analyze information, and city-wide efforts should be included when necessary. It is also recommended that information sources should be processed for credibility. This will help local law enforcement established collaborative relationships and allow multiple opinions when processing information directly or indirectly related to terrorism.

- This study found that micro and macro level *policies* are aimed toward proactive policing strategies in this agency. This agency uses community policing, programs, and initiatives to support counterterrorism indirectly by extracting intelligence from the community without violating civil liberties. This study also found macro-level policies within fusion centers and county Sheriffs to be strained, but this local law enforcement leadership understands how to turn those opportunities into strengths. Based on these findings it is recommended that local

law enforcement agencies have policies aimed toward proactive policing strategies and find ways to turn ineffective partnerships into strengths.

- In this study, open *communication* between agencies, within the city, and internal to the department was found to be present in the police agency. Based on this finding it is recommended that local law enforcement agencies share information in a similar manner. This will help local law enforcement to connect the dots for a terrorist attack and the increased community information flow will help agencies collect more information and have relationships with the citizens.

- This study found that continuously *learning* from various sources is a key priority of the agency including mandatory FEMA training, local leadership courses, and college. Based on this finding it is recommended other agencies utilize internal and external trainings, ensure FEMA training completion, and face-to-face interactions as sources of learning for leadership and officers. Continuous learning will help law enforcement agencies build a stronger agency and ensure a feedback loop filled with highly trained officers.

- This study found transparent *leadership* created a proactive atmosphere for the department. It is recommended that law enforcement leadership communicate the vision and mission so officers will follow a more strategic and macro-level outcome. This study also found that leadership communicates indirectly the priorities of the department by their allocation of resources. It is recommended that other agency align their priorities with their allocated resources. This can help local law enforcement agencies because defined missions will be communicated

to officers and staff, and it will ensure alignment between resources and operations.

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Appendix A: Demographic Details

	Age	Gender (1: Male, 2: Female)	Race (White: 1, African American: 2, Hispanic: 3, Asian: 4, Native American: 5)	Experience (years)	Education (No Degree: 1, Associate: 2, Bachelor: 3, Master: 4)	Shift (Day: 1, Night: 2)
O1	43	1	1	16	1	1
O2	28	1	2	9	1	1
O3	34	1	1	7	1	1
O4	30	2	5	11	1	1
O5	40	1	3	11	3	1
O6	46	1	1	20	1	1
O7	33	1	1	3	3	2
O8	35	1	1	11	3	2
O9	37	1	1	4	1	2
O10	33	1	1	9	3	2
O11	43	1	1	2	1	2
O12	34	1	4	2	2	2
O13	39	1	1	14	1	2
O14	37	1	4	6	1	2
O15	53	1	3	32	3	1
O16	42	2	1	12	3	2
O17	25	2	1	1	3	2
O18	30	1	4	8	1	2
O19	36	1	1	11	1	2
O20	36	1	2	8	1	2
FLS1	33	1	1	12	3	2
FLS2	42	2	1	12	3	2
FLS3	36	1	1	11	1	2
FLS4	36	1	2	8	1	2
MM1	35	1	1	11	4	
MM2	41	1	1	19	3	
MM3	40	1	1	14	1	
EL1	55	1	1	31	4	
EL2	50	1	1	27	4	
EL3	55	1	1	28	3	
EL4	41	1	1	18	4	
EL5	41	1	1	20	3	

Appendix B: Systemic Social Observation – Police Department

Systematic Social Observation - Police Department

Who:	When:	Where:
Observations:		
Sketch:		
Researcher:		