

2021

Employee Perceptions Related to Specific Work Processes Within the Crime Control Model Known as the Stratified Model

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Employee Perceptions Related to Specific Work Processes Within the Crime
Control Model Known as the Stratified Model

by
Robert W. Steinkraus, Jr.

An Applied Dissertation Submitted to the
Abraham S. Fischler College of Education
and School of Criminal Justice in Partial
Fulfillment of the Requirements for the
Degree of Doctor of Philosophy

Nova Southeastern University
2021

Approval Page

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Statement of Original Work

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Robert W. Steinkraus, Jr.

August 13, 2021

Abstract

Employee Perceptions Related to Specific Work Processes Within the Crime Control Model Known as the Stratified Model, Robert W. Steinkraus, Jr., 2020: Dissertation, Nova Southeastern University, Abraham S. Fischler College of Education and School of Criminal Justice. Descriptors: Stratified Model, crime reduction model, crime reduction, crime control, crime analysis

The purpose of this study was to measure employee perceptions of satisfaction as they relate to specific work processes and products within the Stratified Model. The Stratified Model is a crime-reduction model that was developed and gradually implemented first within the Port St. Lucie Police Department between 2004-2011. The full implementation of this crime-reduction model occurred in 2012. The Port St. Lucie Police department has since achieved greater reductions of the overall crime rate than other cities in Florida consisting of similar populations. In 2019, Port St. Lucie had the 7th largest population in Florida.

Currently, it is unknown how organizational employees of the Port St. Lucie Police Department perceive their individual and combined contributions within the overall approach of the Stratified Model. Employees at all levels of the organization will have an opportunity to rate specific internal mechanisms within this crime reduction model. These perceptions may lead to future opportunities for improving the Stratified Model.

There is a gap in the available literature that addresses how workers of a police organization perceive the crime reduction model's specific internal work processes that influence organizational goals and the accompanying results.

To address this gap in the literature, research questions were developed related to what the average opinions of employees with respect to actions are (i.e., processes) that are involved in producing specific outcomes (i.e., products) of the organizations, what are the average opinions of employees with respect to the quality of outcomes produced by the organization, and what are the average opinions of each type of employee with respect to the processes and products of the organization.

The results suggested that employees were generally satisfied with both the products and processes of internal procedures. However, when results were considered for different types of employees, it was found that ratings for the command staff level of the organization were significantly lower in the areas of communication, dissemination of information, and use of intelligence. Recommendations were made to address these areas of concern.

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Chapter 1 Introduction

Crime control models have become popular tools in law enforcement since the 1980's and during the following decades these have provided many positive results. These crime control models have also led to significant decreases of crime in cities across the country (Disaster Center, 2018). Several of these approaches had limited applications, therefore resulting in limited success (Bullock, 2012; Caudill et al., 2013; Cherney, 2008; Haberman, 2016; Jang et al. 2010; Welsh et al. 2012; Willis and Mastrofski, 2018). Most traditional crime reduction models require only certain sections of an agency to participate crime reduction model duties, while other sections of the same agency continue with different duties away from the crime reduction model. This has shown to be an ineffective approach to the overall crime reduction schema (Santos, 2013).

Problem Statement

The Stratified Model sought to combine the problem-solving process along with an advanced level of crime analysis and organizational accountability. Existing literature indicates that one important issue to overcome involved front-line officers. They were often required to initiate problem solving methods while in the field. The accompanying results was often unsophisticated and likely temporary (Cordner and Bibel, 2005; Goldstein, 2003; Weisburd et al., 2003). A more decisive, systematic approach to crime reduction undertaken at higher levels within the organization was necessary to sustain successful results (Boba and Santos, 2011).

Key and successful aspects were utilized from traditional crime-reduction models such as COP, POP, crime analysis, and COMPSTAT. Existing literature argues that none of these approaches used an entire organizational approach, but rather some

organizational components focused on crime-reduction efforts while other organizational components worked on other things (Cordner and Bibel, 2005; Goldstein, 2003; Weisburd et al., 2003). This key aspect that was missing from other traditional crime-reduction models was implemented into the Stratified Model in the form of accountability meetings throughout each level of the organization (Boba and Santos, 2011). The subject of accountability meetings will be further described later in the paper.

The literature relating to the Stratified Model has been limited to the original authors and a few of their students. This could be likely due to being relatively a new approach in the overall philosophy of crime reduction models. Each type of employee with respect to the processes and products of the organization. There is a gap in the available literature pertaining to how the Stratified Model workers perceive specific internal work processes that influence organizational goals and the accompanying results.

To address this gap in the literature, research questions were developed addressing how the average employee opinions related to the actions (i.e., processes) that are involved in producing specific outcomes (i.e., products) of the organization, how the average employee opinions related to the quality of the outcomes produced by the organization, how each type of employee with respect to the processes and products of the organization. In this study, employees will have the opportunity to rate these specific categories as they relate to work processes within the Stratified Model. The results should provide valuable and rich insight as to how these internal processes combine to support the overall agency approach.

Background and Significance

Prior to the Stratified Model, the Port St. Lucie Police Department utilized several crime-reduction models simultaneously. These crime-reduction models included COP, POP, crime analysis, and a similar program to the New York Police Department's crime-reduction program COMPSTAT (Santos, 2013). Community Oriented Policing and Problem Oriented Policing rely on the front-line police officers for much of the decision-making process (Gill et al., 2014). Crime analysis, when used appropriately can enhance the crime-reduction strategies of an agency (Boba and Santos, 2011). COMPSTAT was not an entirely new strategy of policing but considered to demand a higher level of accountability and forward thinking. These elements were critical, especially at the higher levels of the police organization that subsequently trickled downward to the front-line officers (Bond and Braga, 2015; Dabney, 2010; Firman, 2003; Jang et al. 2010; Magers, 2004; Weisburd et al. 2003).

These previous crime reduction models used by the Port St. Lucie Police Department had limited success as evidenced by the flat crime-reduction rates during the time period prior to the gradual implementation of the Stratified Model (1999-2004). The four different policing districts were not using the same crime-reduction approaches appropriately and this lack of cooperation between districts caused friction. A major reason could be attributed to the vastly different approaches to crime reduction by each of the four different district captains. The captains would apply their own crime-reduction philosophy. Often, a small group of officers would complete the various tasks the different captains' thought were required to address crime reduction (Boba and Santos, 2011; R. Del Toro, Personal Interview, September 12, 2019). It was this friction that perpetuated the communication breakdown organizationally. A lack of agency buy-in

continued to fester primarily due to the ineffectiveness of these crime-reduction philosophies (Santos, 2013).

During the initial implementation period of the Stratified Model, there was considerable push-back from the district commanders (Captain Level) and a lack of communication that existed between different sections of the agency (Boba and Santos, 2011; R. Del Toro, Personal Interview, September 12, 2019). The pushback resulted from a change in crime-reduction approach that now necessitated the entire agency to focus on a common method. This change could be perceived as taking away the individual approaches the commanders had instituted over a period of many years and rededicating those resources towards common organizational goals. A power struggle ensued between the captains and upper administration that involved sworn personnel and crime analysts (Boba and Santos, 2011). The crime analysts at that time were used to further the agenda of their district captain and did not fully focus on true crime analysis (R. Del Toro, Personal Interview, September 12, 2019).

The overall crime rate for the City of Port St. Lucie between 2004-2011 reflected a crime reduction of 3.1%. This was the time period during the initial implementation of the Stratified Model. The State of Florida had a reduction in their overall crime rate of 17.5% between 2004-2011. The overall crime rate in the United States was reduced by 17.2% during that same time period. The other current top-ten populous cities in Florida ranged had crime reductions between 2004-2011 in eight of the cities ranging from Tallahassee (2.8%) to Tampa (59.9%). During that same time period, Fort Lauderdale had an increase in their overall crime rate of 1.2% (FBI, n.d.).

Santos (2013) indicated that Statistical Tracking Accountability and Response through Computer Oriented Mapping (STARCOM) was the Port St. Lucie Police Department's version of COMPSTAT. The goal behind STARCOM was to develop a system of higher accountability throughout the agency. These meetings prior to the gradual implementation of the Stratified Model by the Port St. Lucie Police Department were undertaken in more of a "haphazard" (p. 302) manner. Crime analysts developed crime maps for these early meetings that provided clusters of crimes and then top administrators discussed those clusters. The problems that were addressed during these earlier meetings were more of a short-term temporary fix versus long-term agencywide-crime-reduction solutions (Boba and Santos, 2011; Santos, 2013).

The various Chiefs of Police that were in place during the gradual implementation period were instrumental to the success of the Stratified Model (Boba and Santos, 2011). It was important for them to lead the charge and force change away from the traditional mindset of policing as it was not producing the desired results. The future success of the Stratified Model was dependent upon the leader's ability to embrace this new and untested approach of accountability meetings along with a complete agency buy-in as a recipe of crime reduction. It was also vital for the Chief and Assistant Chiefs to convince and fully support the implementation of the Stratified Model to the balance of the agency. The complete agency buy-in eventually led to greater crime reductions when in comparison to state and federal levels from the same time period (Boba and Santos, 2011; J. Bolduc, Personal Interview, April 12, 2019; R. Del Toro, Personal Interview, September 12, 2019).

The Current Study

The current study will provide an opportunity to explore internal perspectives regarding specific work processes within the Stratified Model. These perspectives should be rich in content and shed some valuable insight regarding internal mechanisms that have been established during the implementation of the Stratified Model. The survey method for this research undertaking will use a seven-point rating scale, ranging from “1” to “7”. The various research questions will be addressed. The participant will be provided bi-polar words to choose as they perceive the specifically addressed work process within the Stratified Model. This type of methodology is an easy-to-use method of obtaining information (Fink, 2006).

Perceptions About the Utilization of Current Technologies

Employees will be able to provide insight regarding how effective current technologies are utilized by the agency. Current technologies would include computer technologies. These computer technologies would include web-based programs such as data bases as well as the agency report writing program OSSI (Open-Source Software Institute) (C. Davis, Personal Interview, August 16, 2019; R. Del Toro, Personal Interview, September 12, 2019).

Perceptions About How Communication is Sent and Received

Employees will be able to provide insight regarding how effective communication is sent/received throughout the agency. Organizational communication that disseminates information occurs primarily through face-to-face interactions during the accountability meetings. Accountability meetings range from daily briefings of Road Patrol Division to the daily administrative meetings held every day at 8:30am to the weekly Collaborative

Operational Analysis and Response (COAR) Meeting and then the monthly STARCOM meeting. The information relating these different meetings will be broken down further later in the paper.

Communication also occurs via police radio, phone, email and using the agency intranet. The agency intranet is called the “portal.” The “portal” is a web-based computer program that allows all employees of the organization access. Road patrol officers are responsible for posting their employee activity as they spend time and conduct police activities within the designation areas. The portal is akin to electronic bulletin boards where workers can actively communicate with other members of the agency by posting threads (messages) (Peak and Glensor, 1996). Road patrol sergeants and lieutenants review the information and calculate the total amount of time and total activity. Crime analysts post to their agency bulletins any information directly related to the designation areas such as field interview cards or arrests that may have occurred (C. Davis, Personal Interview, August 16, 2019; R. Del Toro, Personal Interview, September 12, 2019).

Perceptions About Management Approach

Employees will be able to provide insight regarding the management approach used by the organization. The questions used in the employee survey address the decision-oriented approach to increase the overall understanding of the phenomena. This phenomenon being a process evaluation of the Stratified Model’s implementation with the Port St. Lucie Police Department (Fitzpatrick et al. 2011).

Perceptions About the Use of Intelligence

Employees will be able to provide insight regarding how the use of intelligence is utilized throughout the agency. Intelligence could come in many forms and is usually

disseminated from the crime analysts to the rest of the agency by using the intra-agency portal (C. Davis, Personal Interview, August 16, 2019). Intelligence could come from bulletins that had been prepared by other agencies in the region. Field interviews conducted by other shifts could also provide a source of intelligence that may provide information related to the designation area. The detective assigned to the designation area would also be responsible for following up on any leads provided through intelligence (T. Henkel, Personal Interview, August 28, 2019).

Perceptions About How Well Information is Disseminated

Employees will be able to provide insight regarding how well information is disseminated within the organization. Information could come in many forms and from many different sources. Crime Analysts are the conduit for obtaining information related to crime-reduction activities and producing bulletins containing this information that are easily understood and quickly disseminated to the workers (C. Davis, Personal Interview, August 16, 2019). Information is also disseminated through the intra-agency portal. This is where employees can submit threads that provide a direct link to other workers that may be assigned to a specific designation area. Other forms of communication may include email both to and from internal and external sources. However, this may limit information being disseminated to the workers that may be on other shifts or in other divisions such as detectives. It is vital for the crime analysts to be the primary point of information dissemination (C. Davis, Personal Interview, August 16, 2019).

Perceptions About Organizational Efficiency

Employees will be able to provide insight regarding efficiency within the organization. This area of focus will address how easily internal processes mesh with the

informational needs of the organization. There are stakeholders at all levels of the organization that rely on a high level of efficiency. Efficiency should not fall into the “means over ends syndrome” (Peak and Glensor, 1996, p. 38). Essentially this means that police organizations should remain focused on the data related to crime reduction (long-term solutions) versus number of arrests or how quickly officers respond to calls for service (short-term solutions) (Peak and Glensor, 1996). Long-term solutions such as the Stratified Model concentrates on producing sustained results to bring about consistent crime reductions over an extended period (Boba and Santos, 2011).

Perceptions About Management Availability

Employees will be able to provide insight regarding management availability within the organization. The management level of the organization is responsible for charting the course and leading from the front. This approach allows organizational leaders to hold their employees accountable when addressing outcomes (Boba and Santos, 2011). When incidents can be grouped together to form a designation (spree, hotspot, series), these designations become a focus and concern for the police and public to solve (Trojanowicz et al. 1998). The management is responsible for assigning the responsibilities throughout the agency and then to hold accountability meetings to ensure compliance (Boba and Santos, 2011).

Purpose Statement

During the beginning of the 21st century, there were several different crime reduction models available that frequently produced mixed results for police agencies (Boba and Santos, 2011). The reasons for these mixed results could range from a lack of complete buy-in from the entire agency to the specific crime-reduction model was not

designed to handle the specific clientele needs of a community. There simply cannot be a one size fits all approach. It is incumbent upon police agencies to mirror the communities they serve and constantly change to keep up with societal change. This notion is particularly important as crime rates have reached historical lows. Moreover, agencies cannot rest on their laurels but must adapt and overcome the latest challenges to law enforcement today.

The vital concepts behind the Stratified Model are to use positive characteristics from other traditional-crime-control models such as Community Oriented Policing (COP), Problem Oriented Policing (POP), crime analysis, and COMPare STATistics (COMPSTAT). These proven features of traditional-crime-control models are then combined with an expected higher level of accountability through specific meeting processes at all levels of the organization. It is necessary for a complete agency buy-in to the approach to ensure sustained success (Boba and Santos, 2011).

The purpose of this study will be to discover employee perceptions as they relate to specific work processes within the Stratified Model at the Port St. Lucie Police Department (FL). Each employee within the organization works a specific aspect of the Stratified Model and collectively every employee at all organizational levels participate. All employees within the organization will have the opportunity to rate internal mechanisms within this crime-reduction model. The Stratified Model has enjoyed continued statistical success in crime reduction over and above state and national crime reductions for seven-straight years.

Between 2012-2019 there was a 57.4% reduction in the overall crime rate of Port St. Lucie (FBI, n.d.). This crime reduction has exceeded the Florida (29.1%) and national

level crime reduction (21.1%) during the same period. In 2019, Port St. Lucie was listed as the 7th most populous city in the State of Florida. When compared to the other top ten populous cities, Port St. Lucie has experienced a larger reduction in their overall crime rate during this same period. The other top nine cities in population had overall crime reductions ranging during this same period from 12.5% (Tallahassee) to 43.9% (Tampa) (FBI, n.d.).

In this study, these sought-out perceptions would involve how agency employees of the Port St. Lucie Police Department view their specific work contributions as they relate to seven-different internal organizational categories. These categories involve available technologies, communication, management approach, use of intelligence, dissemination of information, efficiency, and management availability within the Stratified Model. The employees will be able to provide any suggestions to improve the Stratified Model. Lastly, employees will be able to expound further regarding their previously listed answers.

Barriers and Issues

The main issue for this research project brought up by Chief Bolduc during his interview was that it may be difficult to obtain an unbiased, honest opinion by those involved when providing their answers to the open-ended survey questions. This may be due to employees that are greatly influenced by the agency administration and therefore may believe their anonymous survey answers will be somehow traced back to their identity and probably placed into a negative light (J. Bolduc, Personal Interview, April 12, 2019).

Definitions

The definitions used in this study allow for further clarification of terms routinely associated with the internal components of the Stratified Model.

Accountability meetings. A forum at different levels of the organization where information is shared and disseminated among agency employees. These meetings come in the form of daily briefings for road-patrol officers and administration, weekly Collaborative Operational Analysis and Response (COAR) meetings, monthly Statistical Tracking, Accountability, and Response through Computer Oriented Mapping (STARCOM) meetings (Boba and Santos, 2011).

Community Oriented Policing (COP). COP is an approach to policing that provides for a closer relationship with the public in order to provide crime-prevention efforts. This system of policing was in direct contrast to the traditional system of policing where the focus is primarily on order maintenance (Gill et al. 2014).

COMPUTer STATistics (COMPSTAT). This crime-control model was introduced in 1994 by the New York City Police Department's Commissioner, William Bratton, and was advertised as one of the most prominent innovations in policing over the previous several decades (Bond and Braga, 2015; Dabney, 2010; Geoghegan, 2006; O'Connell, 2002; Weisburd et al. 2003).

Crime Analysis. "Crime analysis is the systematic study of crime and disorder problems as well as other police-related issues—including sociodemographic, spatial, and temporal factors—to assist the police in criminal apprehension, crime and disorder reduction, crime prevention, and evaluation." (Santos, 2012, p. 2; Santos, 2014, p. 149)

Detective. In the Port St. Lucie Police Department, a detective is a lateral position from a road-patrol officer that conducts follow-up investigations as they are assigned by their supervisors. This position typically does not respond to dispatched-radio calls.

Problem-oriented Policing (POP). POP is “systematic process for understanding the nature of crime problems and identifying suitable solutions” (Bond and Hajjar, 2013, p. 324). Typically, the POP approach uses the Scanning, Analysis, Response, and Assessment (SARA) as a problem-solving technique.

Road-patrol officers. In the Port St. Lucie Police Department, a road-patrol officer is an entry-level sworn police officer regardless of their tenure or experience that are assigned and trained to perform basic law enforcement duties. Road-patrol officers respond to dispatched calls for service. They also conduct on-scene and limited follow-up to various investigations (Despain, 2008).

Supervisor. In the Port St. Lucie Police Department, a supervisor refers to a designation received via an internal promotional process to levels above road-patrol officers and detective. Examples would include sergeants, lieutenants, commanders, assistant chiefs, and chief.

Chapter 2 Literature Review

The main goal relating to crime reduction models is to lessen the incidence of crime, thus giving rise to a potentially higher quality of living for its constituency. Policing is a generally reactive institution. Simply by its nature, law enforcement in a broad sense, does not know that a crime has been committed until they are notified by victims, witnesses, or sometimes even suspects to respond to particular address regarding the commission of a specific crime or possibly a number of crimes occurring at several address involving many different victims. The Uniform Crime Report is published annually by the Federal Bureau of Investigations and provides a list of crimes that have been reported to the police. Most agencies in the United States share their crime figures for this annual publication (Burnett, 2007; FBI, n.d.).

There are many different crime reduction models that have been introduced over the past few decades and while some of them have had some limited success, others simply have not had much success at all (Boba and Santos, 2011). This idea prompts some potentially very interesting questions; what works here may not work there? The question is why? Could it be the types of crime that an agency is dealing with that simply may not be properly equipped to properly address and overcome? Could the problem be the agency's approach? Do certain facets of a specific crime control model work better than others? If so, why? The premise behind crime reduction models is to properly equip all agencies to address, adapt and overcome the criminal element.

During this literature review chapter, the crime cycle of the United States, Florida, and Port St. Lucie, components of crime analysis, COMPSTAT, Community Oriented Policing and Problem Oriented Policing will be discussed in order to properly develop

how certain components ended up in the Stratified Model. The Stratified Model is not a new approach, but rather a combined approach of certain crime reduction concepts that have been proven successful through evidence-based studies coupled with an extremely high level of accountability. The literature purely attributed to the Stratified Model is limited to the authors that created this specific crime reduction model.

The Stratified Model

The Stratified Model was developed by Boba and Santos and was gradually implemented into the Port St. Lucie Police Department (Florida) between the years of 2004-2011. The full implementation of the Stratified Model occurred at the beginning of 2012 (Boba and Santos, 2011). During this critical seven-year period, the agency and newly minted crime control model revealed significant events throughout this developing process. These events were identified and thoroughly addressed during their original publication (Boba and Santos, 2011). Multiple solutions were developed that led to the continued and sustained success of the Stratified Model. One of the key ideas behind the Stratified Model was to use many of the positive attributes of other crime control models coupled with an expected higher level of accountability within the agency (Boba and Santos, 2011). It was also necessary for a complete agency buy-in to the approach in order to ensure success.

The majority of issues revealed that it was vital that every aspect of the agency actively participate in the Stratified Model, including the command staff, which was where most of the pushback was occurring during phase II (2006-2008) of the gradual implementation period (Santos, 2013). During this era, the approach to crime reduction was directed by the captain's level of the organization and directed downward and was

wholly dependent upon the agency's philosophy. There were also Community Officers that had direct contact with community members. Relationships with the community were developed; however, these relationships did not lead to significant decreases in crime as crime trends were somewhat steady throughout that period (FBI, n.d.). There was no true continuity within the agency until the implementation of the Stratified Model had occurred (Santos, 2013).

Since the complete implementation of the Stratified Model at the beginning of 2012, the crime rate for the City of Port St. Lucie, Florida has been drastically reduced. According to the Uniform Crime Report, the overall crime rate in Port St. Lucie was 2685.11 crimes reported for every 100,000 citizens in the year ending in 2011. The overall crime rate in Port St. Lucie was 1143.41 crimes reported for every 100,000 citizens in the year ending in 2019 (FBI, n.d.). This equates to a 57.4% decrease in the overall crime rate for Port St. Lucie and a year ending population of 2019 of 199,433 (FBI, n.d.). The police officer ratio per 1,000 people during 2016 stood at 1.33 (FDLE, 2016). The police officer ratio list was the most current list provided by the Florida Department of Law Enforcement.

According to the 2019 UCR statistics, Port St. Lucie's population stands as the 7th most populous city in Florida. The other nine Florida cities in the 10 top populous cities are identified along with their corresponding 2019 populations, overall crime rate reduction between 2011-2019 and their officer ratio/1,000 people: Jacksonville (909,142, 20%, 2019 overall crime rate of 3956.92/ 100,000 people, 2.16 officers/1,000 people); Miami (480,505, 37.9%, 2019 overall crime rate of 4260.93/ 100,000 people, 3.08 officers/1,000 people); Tampa (400,501, 45.2%, 2019 overall crime rate of 2033.7/

100,000 people, 2.94 officers/1,000 people); Orlando (292,120, 31.9%, 2019 overall crime rate of 5565.18/ 100,000 people, 2.77 officers/1,000 people); St. Petersburg (267,696, 29.2%, 2019 overall crime rate of 3805.06/ 100,000 people, 2.24 officers/1,000 people); Hialeah (240,688, 38.9%, 2019 overall crime rate of 2241.91/100,000 people, 12.86/1,000 people); Tallahassee (195,104, 22%, 2019 overall crime rate of 4675.46/ 100,000 people, 1.91 officers/1,000 people); Cape Coral (194,183, 54.2%, 2019 overall crime rate of 1236.98/100,000 people, 1.23 officers/1,000 people); and Fort Lauderdale (184,765, 21.4%, 2019 overall crime rate of 5509.7/ 100,000 people, 2.91 officers/1,000 people). During the time period (2011-2019), the national crime rate decreased by 24.8% and the crime rate within the State of Florida decreased by 35.4% (FBI, n.d.; FDLE, 2016).

The Port St. Lucie Police Department has enjoyed continued statistical success since 2011 as the overall crime rate has continued to decline every year since 2011 giving it the distinction of being the “Safest Large City in the State of Florida” for seven years in a row in excess of 100,000 citizens (Port St. Lucie Police Department, 2018).

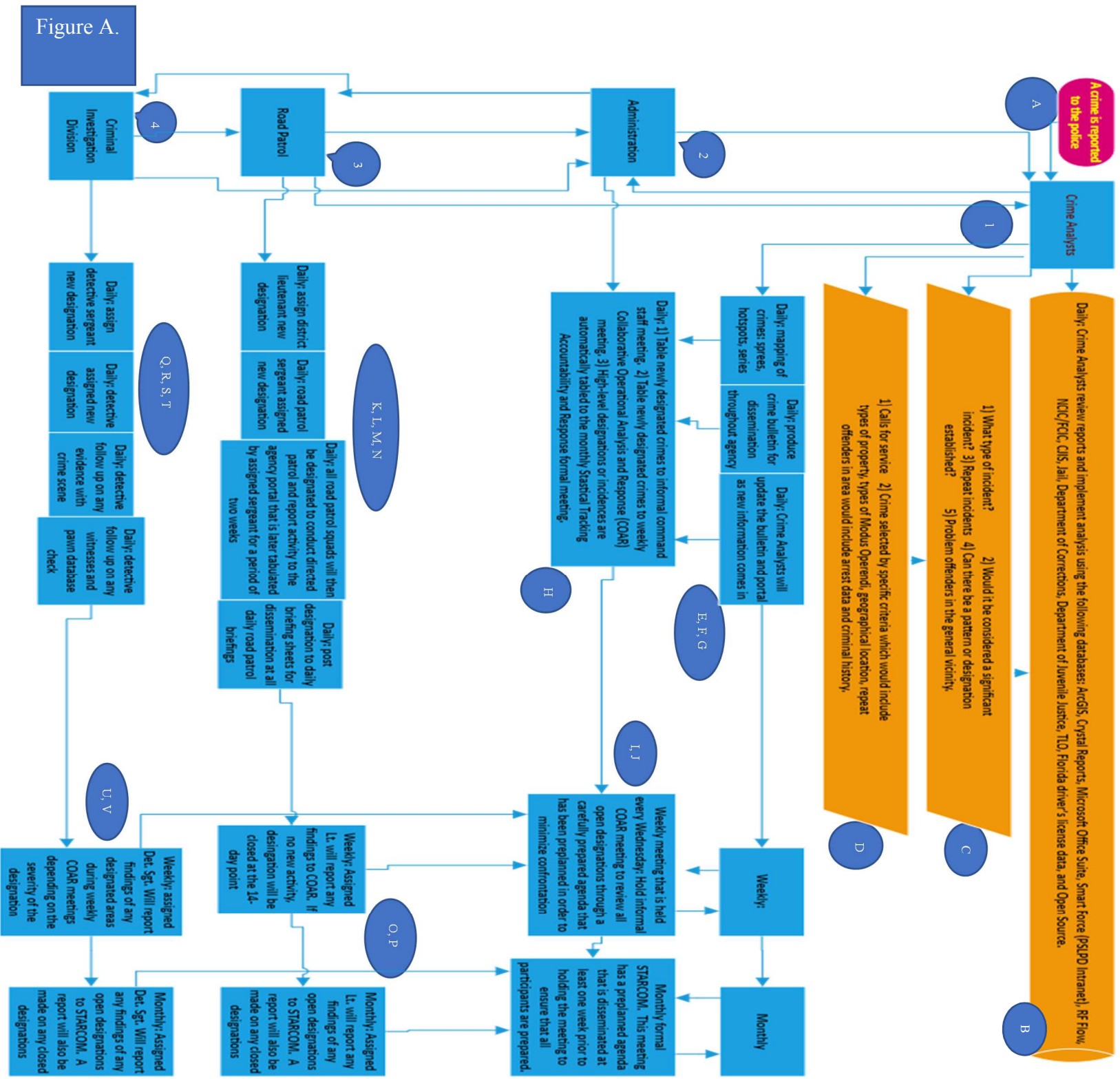
A key component of the Stratified Model would be the implementation of highly capable crime analysts. This group of employees are the key to the success of the Stratified Model as it is, they who generate the pulse of activity that radiates throughout the agency. The primary idea behind the Stratified Model was to present the statistical aspect of crime analysis combined with an intelligence led approach to crime reduction (Santos, 2014). Throughout their initial paper outlining the Stratified Model, Boba and Santos (2011) assigned specific terms to specific events that occur in small areas to widely disbursed areas.

General Guideline 503.2 of the Port St. Lucie Police Department defines the responsibilities of the Stratified Model throughout the organizational structure of the agency (M. Swanchak, Personal Interview, August 22, 2019). These responsibilities support the notion of agency-wide accountability within the Stratified Model. Four types of meetings are conducted on a timely basis in order to further facilitate the accountability structure within the organizational structure (Boba and Santos, 2011).

The Stratified Model is a departure from Community Oriented Policing (COP), while still utilizing many of the successful attributes of other crime reduction models such as Problem Oriented Policing (POP), COMPare STATistics (COMPSTAT), and computerized crime analysis (Boba and Santos, 2011). The Stratified Model is a completely top-down hierarchal approach to policing where the decision-making approaches and strategies are made from the top and middle management levels of the organizational structure and then flows downward through the agency toward the front-line police officers and detectives. In contrast, Community Oriented Policing provides a flattened organizational structure where the decision-making process is conducted from more of a front-line perspective (Gill et al. 2014). This departure undoubtedly placed additional job and role conflict stressors upon the front-line officers and other agency employees that are doing the groundwork of the Stratified Model.

Workflow Explanation and Logic Model of the Stratified Model

Figure A, Stratified Model Workflow Processes



In Figure A above, an example of agency workflow activities will be examined to better explain how a designation flows throughout the agency. This example was published in response to a string of vehicle burglaries that occurred over a period of a week in a single-geographic area.

Point A, when a crime has occurred, such as a vehicle burglary and has been revealed by the complaining party, generally the party would call 9-11 to report the crime. A police officer would respond to the scene to assess the situation and produce a police report describing their activities relating to their criminal investigation. Point 1, every morning, the previous day's reports are thoroughly examined by the crime analysts as well as other sections of the police agency (C. Davis, Personal Interview, August 16, 2019).

Point B, crimes are mapped daily by crime analysts using the agency reporting program Open-Source Software Institute (OSSI), along with several other databases: ArcGIS, Crystal Reports, Microsoft Office Suite, Smart Force (PSLPD Intranet), RF Flow, NCIC/FCIC, CJIS, Jail, Department of Corrections, Department of Juvenile Justice, TLO, Florida driver's license data, and Open Source. The ultimate success of the Stratified Model relies upon the individual crime analysts along with their familiarity and discretion to their specific assigned district (C. Davis, Personal Interview, August 16, 2019). Point C, these consistencies may come in the form of type of incident, type of modus operandi, geographical location, repeat offenders in the geographical location, arrest data, criminal history of known offenders (C. Davis, Personal Interview, August 16, 2019).

Points C & D, the crime analysts compare these reports with previous incidents in that proximity or perhaps, look for key similarities that may lead to a term designation such as: spree, hotspot, or series (Boba and Santos, 2011). Point D, incidents would be categorized by type. UCR Part 1 Offenses would include: forcible rape, robbery, aggravated assault, burglary, larceny, motor vehicle theft, and arson. UCR Part 2 Offenses would include: other assaults, forgery/counterfeiting, fraud, embezzlement, stolen property, vandalism, weapons, prostitution, sex offenses not considered forcible rape, drug abuse violations, gambling, offenses against family and children, driving under the influence, liquor laws, drunkenness, disorderly conduct, vagrancy, all other offenses, suspicion, curfew/loitering laws for juveniles, and runaways (Federal Bureau of Investigation, n.d.). Point E, once the incidents have been separated, the crime analysts scour through the various reports for consistencies that may contribute to a designation being established.

Points 2 and H, once the daily reports have been read, the crime analysts would produce a Hot Sheet for the administrative staff meeting that occurs daily at 8:30am (R. Del Toro, Personal Interview, September 12, 2019). Point F, after reviewing the incoming reports with previous reports, the crime analysts produce bulletins disseminating valuable information to the agency via email and by using the agency portal. Crime bulletins are also sent to other agencies throughout the region and state. Point G, these crime bulletins are constantly updated as new information comes in from road patrol officers and detectives as they submit information to the interagency thread (C. Davis, Personal Interview, August 16, 2019). Point H, it is the information contained on the daily hot sheet that determines if the cases or designations will be later tabled to

the weekly COAR meeting and/or monthly STARCOM meeting (C. Davis, Personal Interview, August 16, 2019; R. Del Toro, Personal Interview, September 12, 2019).

An example included two cases that I had worked where an individual passed several counterfeit \$100.00 bills at two different dollar stores and purchased gift cards. Surveillance video was obtained at one of the locations and both reports were submitted. The video was provided directly to the crime analyst in anticipation of the forthcoming crime bulletin. The crime bulletin was disseminated to local and statewide agencies. Approximately one week later, the Florida Fusion Center reached out based upon the bulletin produced by PSLPD and had indicated several cases involving the same individual who was part of a larger organization. There were also positive matches of the serial numbers from the counterfeit currency. Through the open communication and cooperation of local and state agencies, several members of the counterfeit organization were arrested and convicted of various crimes. The counterfeit organization had originated in the panhandle of Florida and committed several crimes throughout the northern half of the state. Port St. Lucie was the furthest point south of their crime spree.

Points 2, I, and J, administration holds a daily meeting to review any new cases on the hot sheet and to table those cases or perspective designations for the upcoming COAR meeting. The standard components are addressed with other top officials throughout the agency. Administration reviews the tabled designations and high-profile cases during the COAR and STARCOM meetings. Short-term and long-term solutions are addressed during these meetings to ensure that nothing falls through the cracks (R. Del Toro, Personal Interview, September 12, 2019). Point 2, the administration is kept abreast of any updated information from the crime analysts, road patrol lieutenants and detective

sergeants. Accurate record keeping is essential to ensure that administration has the most current information available (R. Del Toro, Personal Interview, September 12, 2019).

Point 3 & K, a district lieutenant in road patrol would be assigned a designation that has occurred within their district. Point L, the district lieutenant would assign a sergeant the task of overseeing the road patrol responsibilities of the assigned designation. Points M & N, the information referring to any designations is disseminated during daily shift rollcall meetings with road patrol. Directed patrols addressing open designations are assigned by district sergeants to the responsible zone car along with other district officers. Briefings last approximately 20 minutes and are usually in the form of a Power Point presentation on a large screen. Included in these daily shift briefings would be any traffic, runaway juveniles, or quality of life concerns that should be addressed during any given shift. Briefings also include bulletins from other agencies regarding incidents or wanted persons that may reside within our jurisdiction. Road patrol officers responsible for working in a designation area are expected to post their activity and time onto the intra-agency portal. Any activities that lead to potential case intelligence will be later disseminated through the crime analyst's updated bulletins (R. Del Toro, Personal Interview, September 12, 2019). Points O & P, the district lieutenant would forward the tabulated information provided from their sergeant to the weekly COAR meeting or monthly STARCOM meeting (R. Del Toro, Personal Interview, September 12, 2019).

Agency policy dictates a 14-day response by road patrol is conducted as directed patrol efforts are increased to identify the suspect or displace the activity. At the conclusion of the 14-day period, and, if there were no additional connected incidences of

crime, the pattern area would be considered resolved (C. Davis, Personal Interview, August 16, 2019). If there were any additional and similar crimes within the designation area during the two-week period, the two-week period would then begin again and the designation would be assigned a letter of “A” (R. Del Toro, Personal Interview, September 12, 2019).

Point 4, the Criminal Investigation Division is made up of several detectives in the following categories: property, persons, white-collar, and special investigations (vice, drugs). For the purpose of this paper, we shall concentrate on the property aspect of CID as we proceed addressing the vehicle burglary investigations. Point Q, once a designation such as a spree or hotspot are opened, the detective lieutenant will assign the designation to the district property detective sergeant. Point R, the district property detective sergeant will then assign the designation to one of their property detectives.

Points S & T, the detective will be responsible for following up with any evidence that had been submitted during the initial investigation, witnesses or conduct an additional neighborhood canvass of the area surrounding the crime scene. They would also follow up with crime analysts as to any repeat offenders in the area. According to policy, a repeat offender would be considered a person that within the previous two years had been arrested for, been on probation for, released from jail/prison for, or was on current Department of Juvenile Justice curfew for a similar crime (C. Davis, Personal Interview, August 16, 2019). Associates of known offenders are also included in this analysis along with any applicable pawn-database checks involving known offenders.

Points U & V, as the cases progress, informational updates will be provided to the detective sergeants, who in turn submit their findings to the weekly COAR and monthly

STARCOM meetings. An agenda is provided by administration addressing the cases and designations up for review well in advance of the meetings (R. Del Toro, Personal Interview, September 12, 2019). The accountability meetings were designed to ensure that all designations are addressed through a redundancy system where nothing is overlooked (R. Del Toro, Personal Interview, September 12, 2019; T. Henkel, Personal Interview, August 28, 2019).

The Stratified Model has several redundancy mechanisms and layers of purposeful activities in place to allow different units within the agency to concentrate on similar points of importance and hopefully resolve the crime designation through arrest of the suspect(s). Problems that arise are often viewed from many different perspectives and because of this philosophy, it is very rare that anything is over-looked (T. Henkel, Personal Interview, August 28, 2019). The communication and accountability aspects have been improved from past crime-control models in order to ensure that information effectively flows throughout the organization (Boba and Santos, 2011).

Figure B- Logic Model of the Stratified Model

In Figure B, a logic model details the philosophy of the Stratified Model from a micro and macro level. Many crime-reduction activities are delegated downwards. The crime-reduction activities are clearly delineated throughout the organization. Each level of the organization is responsible for their own activities, and it is up to the supervisory levels of the organization to ensure that all crime-reduction activities are being completed on a timely basis. These activities are addressed in the daily, weekly, and monthly meetings that bring together supervisors along with administration in order to discuss the on-going progress of any open designations.

Figure B.

Program: Stratified Model Logic Model
 Situation:

Inputs	Processes		Outcomes – Impact over time		
	Activities	Participation	Short	Medium	Long
<p>Road patrol officers: Produce Police reports</p> <p>Daily briefings in the Road Patrol Division in order to disseminate up to date information provided by crime analysts.</p> <p>CID Lt., Administration and road patrol Lt's participate in daily meeting to form future activity such as any designations or activity stemming from active designations.</p>	<p>Daily Process: Crime Analysts review reports and implement analysis and crime mapping using available technologies. Disseminate information by producing an informational bulletin and open a thread on the agency intranet (portal).</p> <p>Daily Process: Communication, use of intelligence, Sgts post designation to daily briefing sheets for dissemination at all daily road patrol briefings to enhance communication throughout the organization. The management approach directs that all road patrol squads will be designated to conduct directed patrol and report activity to the agency portal.</p> <p>Daily Process: The management approach for the Det. Lieutenant would be to assign detective sergeant new designation who would then assign a detective new designation. Communication, efficiency, management availability</p>	<p>Crime Analysts</p> <p>Road patrol</p> <p>Criminal Investigation Division</p> <p>Administration</p>	<p>Daily CA products: Dissemination of information: mapping of crimes, sprees, hotspots, series, produce crime bulletin for dissemination throughout agency. Produce hot sheet for administration daily meeting. Communication, available technologies, use of intelligence, efficiency.</p> <p>Daily RP products: Road patrol officers spend documented time and are encouraged to be proactive within the designated areas. Use of intelligence, efficiency</p> <p>Daily CID products: Detective follow up on any evidence with crime scene. Detective follow up on any witnesses and pawn database check. Efficiency, use of intelligence, communication</p> <p>Daily Admin. products: After receipt of hot sheet from crime analysts: 1) Table newly designated crimes to daily informal command staff meeting. 2) Table newly designated crimes to weekly Collaborative Operational Analysis and Response (COAR) meeting. 3) High-level designations or incidences are automatically tabled to the monthly Statistical Tracking Accountability and Response formal meeting. 4) Assess available technologies, communication, management approach, use of intelligence, dissemination of information, efficiency, and management availability.</p>	<p>Weekly CA products: constantly update information between CID and road patrol via bulletins and emails. Communication, available technologies, use of intelligence, efficiency.</p> <p>Weekly RP products: The time and any proactivity within the designated area is captured by assigned sergeant. Assigned Lt. will report any findings to COAR. If no new activity, designation will be closed at the 14-day point. Use of intelligence, communication, efficiency, management approach</p> <p>Weekly CID products: assigned Det. Sgt. will report findings of any designated areas during weekly COAR meetings depending on the severity of the designation. Management availability, communication, efficiency, use of intelligence, dissemination of information</p> <p>Weekly Admin. product: meeting that is held every Wednesday: Hold informal COAR meeting to review all open designations through a carefully prepared agenda that has been preplanned in order to minimize confrontation. Assess available technologies, communication, management approach, use of intelligence, dissemination of information, efficiency, and management availability.</p>	<p>Monthly CA products: constantly update information between CID and road patrol via bulletins and emails. Communication, available technologies, use of intelligence, efficiency.</p> <p>Monthly RP products: Assigned Lt. will report any findings of any open designations to STARCOM. A report will also be made on any closed designations. Management approach.</p> <p>Monthly CID products: Assigned Det. Sgt. will report any findings of any open designations to STARCOM. A report will also be made on any closed designations. Management approach.</p> <p>Monthly Admin. product: formal STARCOM. This meeting has a preplanned agenda that is disseminated at least one week prior to holding the meeting to ensure that all participants are prepared. Communication, efficiency.</p> <p>Any long-term or chronic problems will be addressed on a monthly basis. An example would be smash and grab vehicle burglaries during the holiday season. Assess available technologies, communication, management approach, use of intelligence, dissemination of information, efficiency, and management availability.</p>

Assumptions-

Every police report is analyzed and appropriately grouped according to several areas of criteria. When multiple incidents require a designation (spree, hotspot, series), the above processes go into effect throughout the agency. There are always exceptions to the rule such as an armed robbery or homicide that would require a different approach. Each level of the organization is responsible for their aspect of the Stratified Model.

External Factors-

The incidences of crime are an uncontrolled external factor as it relates to the overall schema of the Stratified Model. This crime reduction model is a reactive approach that address crime after it has been committed. Several layers of redundancy established that allows for a high clearance rate.

There are certain terms such as directed patrols, hotspots, sprees, and series that are used in COMPSTAT, Hotspot policing, and Problem Oriented Policing (POP). Components to various crimes are carefully analyzed in order to determine a spree, hot-spot, or series. There must be some distinct commonality between crimes for them to be considered connected (C. Davis, Personal Interview, August 16, 2019). When a designation is created within the Port St. Lucie Police Department, there is an all-hands-on deck response from the agency. This is a clear departure from other crime reduction models as most will dedicate limited resources towards a problem while other resources are doing different things away from the problem (Boba and Santos, 2011).

An example encompassing the logic model in figure B will delineate the pattern designation known as a spree. A spree would be more than one similar crime that occurs in a short amount of time, generally, during the same night in a close, proximate area (.2-.4-mile radius) (Boba and Santos, 2011; C. Davis, Personal Interview, August 16, 2019). An example would be multiple vehicle burglaries that had occurred on a street or neighborhood during an overnight period.

A hotspot would be considered like that of a spree; however, the short amount of time extends past the same night and may extend into a second night or week later within the same geographical area. The road patrol and detective responses would be like that of a spree (Boba and Santos, 2011).

A series would encompass similar types of crimes that occur in a similar manner, however, disbursed over a larger geographical area and extended length of time. The crimes involved in a designated series would be perpetrated by the same individual or group of individuals based upon the incoming information (Boba and Santos, 2011).

There are also other designations such as hot prey, hot product, hot place, and hot setting. These designations rely on specificity with types of locations and/or types of targeted property (Boba and Santos, 2011).

The primary input to implement the processes of the Stratified Model requires the responding police officer that investigates any incident to write a police report. The process activity from that point is for the crime analyst (participant) to review the police report and implement their crime analysis procedures. These crime analysis procedures include crime mapping, report comparison which would include similarities with other police reports. The crime analyst then produces an informational bulletin (crime analysis activity) that is disseminated throughout the agency as well as local, regional, and state law enforcement agencies (C. Davis, Personal Interview, August 16, 2019). A crime bulletin is a specifically formatted crime announcement that uses crime mapping databases and other technologies available that outlines the incident(s) as well as the distinct commonalities to those events. Past events consisting of the same distinct commonalities will also be published along with any known offenders within proximity of the designations (C. Davis, Personal Interview, August 16, 2019).

According to Port St. Lucie Police Department policy, a repeat offender would be considered a person that within the previous two years had been arrested for, been on probation for, released from jail/prison for, or was on current Department of Juvenile Justice curfew for a similar crime (C. Davis, Personal Interview, August 16, 2019). Associates of known offenders are also included in this analysis along with any applicable pawn-database checks involving known offenders. Crime analysts would open an electronic thread (crime analysis activity) of the active designation using the agency

intranet or portal. Information posted to the portal would be reviewed daily by the assigned crime analysts and they would be responsible for updating the bulletin with the new information. Information posted to the portal thread could come from road patrol officers or detectives assigned to the case.

Outcomes vary regarding crime analyst's activity in short-, medium- and long-term duration. In the short-term, crime analysts continue to update and disseminate information throughout the agency as additional information relating to designations is realized. Hot sheets (crime analysis activity) are produced for the daily administration meeting. Items relating to new designations are then tabled to the weekly COAR and monthly STARCOM as well as high-profile cases (medium/long-term outcomes) (R. Del Toro, Personal Interview, September 12, 2019). The crime analysts provide the conduit for communication and use of intelligence by utilizing the latest technological advances in computerized crime analysis (C. Davis, Personal Interview, August 16, 2019).

Daily roll-call meetings (inputs) that include the road patrol division (participants) are held at the beginning of each shift. These meetings are held in order to utilize the informational outputs by disseminating new and existing information relating to any patterns (R. Del Toro, Personal Interview, September 12, 2019; M. Swanchak, Personal Interview, August 22, 2019). These daily shift meetings seek to enhance the organizational communications so that information flows both vertically and horizontally throughout the agency (R. Del Toro, Personal Interview, September 12, 2019). These 15-20-minute daily meetings entail going over a prepared Power Point presentation (road patrol activity) outlining specific items of interest that require Road Patrol response. An example would be a designation that requires road patrol officers to conduct directed

patrols to areas (road patrol activity) (R. Del Toro, Personal Interview, September 12, 2019). Road patrol sergeants (participants) would be tasked with assigning daily directed patrols (road patrol activity) within the designated areas via daily briefings that are held at the beginning of each shift. The daily briefing would also include any new and on-going traffic complaints, neighborhood complaints and addresses that have a high volume of calls for service.

When the road patrol sergeant assigns an active designation, agency portal intranet threads (road patrol activity) would be established to handle and potentially uncover the root issues for the complaints or calls for service. It would then be the responsibility of the road patrol officer to post to the intra-agency thread (road patrol activity) in order to keep the district sergeant and district lieutenant informed (R. Del Toro, Personal Interview, September 12, 2019).

The road patrol officers assigned the directed daily patrols would post their time and activity they had undertaken to the portal thread (road patrol activity). The posted intelligence information would be gathered by crime analysts upon their arrival the following morning (crime analysis activity). The updated crime bulletins would be disbursed throughout the agency and region (crime analysis activity). One of the district patrol sergeants would be assigned at the beginning of the designation to accumulate all the time and activity completed by road patrol officers and detectives (road patrol activity). The accumulated time and activity information would be forwarded to the district lieutenant. That district lieutenant would provide the information (road patrol activity) during the weekly COAR and monthly STARCOM meeting to the administration (road patrol medium and long-term outcomes).

Port St. Lucie Police Department policy dictates that a 14-day response by road patrol is conducted as directed patrol efforts are increased to identify the suspect or displace the activity. At the conclusion of the 14-day period, and, if there were no additional connected incidences of crime, the pattern area would be considered resolved (C. Davis, Personal Interview, August 16, 2019). If there were any additional and similar crimes within the designation area during the two-week period, the two-week period would then begin again and the designation would be assigned a letter of "A" (R. Del Toro, Personal Interview, September 12, 2019). If the letter designations proceeded to "C", due to additional similar crimes within the designation area, the District Lieutenant would be required to work (road patrol activity) that shift when the crimes have predominately occurred until the designation had been resolved. An example of this would be overnight car burglaries in a specific geographical area. The District Lieutenant, who usually works daytime hours would then be assigned to overnight hours during this period and until the designation is resolved (R. Del Toro, Personal Interview, September 12, 2019).

The Criminal Investigation Division Lieutenant (participant) would assign one of their sergeants any open designation (CID activity). The detective sergeant would then assign one of their detectives the designation (CID activity). The case assignment would also depend on case solvability factors such as suspect information, witnesses (if any) who would be able to identify any potential suspect, victim, who would be able to identify any potential suspect, and value of any evidence recovered (J. Inigo, Personal Interview, August 26, 2019). The assigned detective would also follow up with any witnesses as well as check pawn databases for any potential matches (CID activity).

Evidence would then be analyzed by the Crime Scene Unit. The detective sergeant in some cases would also be the information liaison between the Crime Scene Unit, property detective and administration present at the COAR meeting, which is held on a weekly basis (CID activity) (T. Henkel, Personal Interview, August 28, 2019). There are other detective sergeants that allow their detectives to closely follow up with Crime Scene regarding the processing of evidence and wait for updates from those detectives (J. Inigo, Personal Interview, August 26, 2019). The detective sergeant would ensure the known offenders of a spree or hotspot are met via a face-to-face visit by the assigned detective.

The pawn histories of the known offenders along with their known associates would also be analyzed in order to potentially establish them as a suspect. Many property cases have similar attributes in common and after several case investigations, routine follow-up designs emerge (T. Henkel, Personal Interview, August 28, 2019). Crime analysts and property detectives review the pawn database which is an archive that is required by the State of Florida for pawn dealers to input any property coming into their business that has been pawned or sold to that dealer (C. Davis, Personal Interview, August 16, 2019). These pawn dealers are required to hold the property for 30 days prior to having the ability to sell that property. When a person sells or pawns an item, they are required to fill out paperwork and indicate that the property that is being sold or pawned is theirs to sell. The person pawning the property also provides a thumbprint that can later be used for comparison in the event the property was in fact, stolen. Violations of Florida State Statute 539.001 would include dealing in stolen property and providing false information to a pawn broker (Florida Senate, 2013).

Detectives (CID) would contact identified repeat offenders (CID activity) that reside within the designation area and follow up with crime scene regarding the processing of evidence (Boba and Santos, 2011). If detectives had difficulty contacting the local repeat offenders of a designation, then zone officers would be tasked with attempting contact as they are in the area throughout the day. If the detectives had any useful information, that information would be posted to the open intranet thread and treated like the information posted by road patrol officers (CID activity). The detective would update their sergeant of any findings obtained from the evidence, witnesses, or pawn checks (CID short outcomes). The detective sergeant would provide this information to the weekly COAR and monthly STARCOM meetings (CID medium, long outcomes).

The burglary rate for the City of Port St. Lucie was 676.1/100,000 citizens in 2011 and was reduced to 132.5/100,000 citizens in 2018, or an 80.4% reduction by using this approach. During that same period, the national burglary rate went from 701.3/100,000 citizens to 430.4/100,000 citizens, a 38.6% reduction. The Florida burglary rate was reduced from 892.9/100,000 citizens to 423.4/100,000 citizens, a 52.6% reduction (FBI, n.d.).

Accountability Meetings

The key difference between the Stratified Model and other crime reduction models would be the Stratified Model necessitates a complete agency-wide buy-in, subsequent focus on the assigned activities and accountability meetings. Every employee within the agency has specific duties that delineate their responsibility towards the overall scheme of the Stratified Model. The Stratified Model was developed to address

criminogenic problems in a pre-planned and highly accountable manner where specific areas of the organization are responsible for specific facets of how the problem is addressed from a micro and macro approach. The supervisory levels of the organization are tasked with ensuring the small details such as pawn checks, case follow-up, evidence follow-up, and follow up with road patrol activity as it relates to any open designation. This constant flow of information is analyzed, maintained, and quickly disseminated through the crime analysts (Boba and Santos, 2011).

The four distinct meeting types represented within the Stratified Model are geared towards agency-wide communication and constant assessment of short- and long-term problems. Daily staff meetings bring together administrators to go over any hot topics that need immediate attention. Prior to the daily staff meeting, the crime analysts create a list of cases from the previous day or days if a Monday. These cases are then addressed during this informal meeting that may take 20-30 minutes. High level cases are immediately placed on the monthly meeting schedule and any anticipated designations are placed upon the weekly COAR calendar (R. Del Toro, Personal Interview, September 12, 2019). An example of a high-level-case would be a robbery, or high-value burglary. These cases would require diligent follow up by a detective and therefore need additional time to work versus a common burglary/theft investigation where the follow-up would be considerably less (R. Del Toro, Personal Interview, September 12, 2019). An important facet of the COAR meeting is the accurate record keeping of the meeting minutes by an employee of the Accreditation Division. If these records are inaccurate, the “wheels fall off the bus” (R. Del Toro, Personal Interview, September 12, 2019). The meaning behind this statement was described in a macro sense primarily due to the importance of every

employee's contribution to the overall application of the Stratified Model. It is these individual contributions that collectively build upon each other and support each other in the overall agency success (R. Del Toro, Personal Interview, September 12, 2019).

The weekly COAR meeting and monthly STARCOM meeting are both evaluative in nature. Everyone participating in any of the meetings is provided an agenda well in advance of the meeting. This approach negates any surprise questions during the meeting. Prior to the institution of the Stratified Model, communication between commanders was limited. This meant that Road Patrol commanders sometimes withheld information relative to the Criminal Investigations Division and vice versa. This informational disparity often created an informational crevice and animosity that was difficult to overcome (R. Del Toro, Personal Interview, September 12, 2019). By creating a top-down accountability design, employees are urged to do their job because the conglomeration of everyone doing their specific job well and to the best of their ability allows the agency to act as one entity (R. Del Toro, Personal Interview, September 12, 2019).

Preparation for the weekly COAR meeting is dependent upon ensuring that all the small details are satisfied. The COAR meeting is held every Wednesday and prior to the meeting the detective sergeants and detectives closely follow-up their cases in order to provide answers at this meeting (T. Henkel, Personal Interview, August 28, 2019; J. Inigo, Personal Interview, August 26, 2019). The Stratified Model has several redundancy mechanisms in place to allow different units within the agency to concentrate on similar points of importance and hopefully resolve the crime designation through arrest of the suspect(s). Problems that arise are often viewed from many different

perspectives and because of this philosophy, it is very rare that anything is over-looked (T. Henkel, Personal Interview, August 28, 2019).

STARCOM occurs on a monthly basis and this formal meeting assesses short-term problems and determines if long-term problems are emerging along with any pertinent strategies (Boba and Santos, 2011; R. Del Toro, Personal Interview, September 12, 2019; M. Swanchak, Personal Interview, August 22, 2019). The subject matter is evaluative in nature. Solutions to on-going short-term problems are addressed to prevent them from becoming long-term or chronic problems (R. Del Toro, Personal Interview, September 12, 2019). There are no surprises or ambushes as was prior to the institution of the Stratified Model. Accountability remains the key component to the Stratified Model as all employees within the agency are required to do their job and collectively accomplish the statistical success that has been realized over the past several years (R. Del Toro, Personal Interview, September 12, 2019)

The Cycle of Crime in the United States, Florida, and Port St. Lucie (FL)

Crime is cyclical in nature and has experienced many ups and downs over the past several decades. The 2018 overall crime rate in the United States was 2,880 crimes/100,000 citizens. This current national rate of crime stands to reason because the 1967 overall crime rate in the United States stood at 2,990 crimes/100,000 citizens. The overall crime rate cycle took approximately 24 years to peak at 5,897 crimes/100,000 citizens in 1991 and an additional 27 years to return to just below the overall crime rate level of 1967 (Disaster Center, 2018; FBI, n.d.). The overall crime rate for 1960 in the United States was 1,887 crimes/100,000 citizens. It will be interesting to observe if the

United States were to achieve this type of reduction in the overall crime rate during the next few years.

The Uniform Crime Report annually publishes its statistics based upon subscribing agencies that submit their crime information. In 2000, the overall national crime rate stood at 4,124 crimes/100,000 citizens. In 2009, that figure decreased to 3,473 crimes/100,000 citizens or a 15.8% decrease in the overall crime rate from 2000-2009 (FBI, n.d.). The Florida overall crime rate was reported to be 5,694 crimes/100,000 people in 2000 and 4,453 crimes/100,000 people in 2009 or a 21.8% decrease in the overall crime rate from 2000-2009 (FBI, n.d.). The City of Port St. Lucie, Florida had an overall crime rate in 2000 of 2,764 crimes/100,000 citizens. The overall crime rate for the City of Port St. Lucie, Florida in 2009 was reported to be 2,586 crimes/100,000 citizens or a 6.4% decrease in the overall crime rate from 2000-2009 (FBI, n.d.).

The period of time between 2000-2009 would be a reasonable period to capture crime statistics using the Uniform Crime Report. These years encompassed 2000-2004, which was four years prior to the gradual implementation of the Stratified Model. 2005-2009 represents the first five years during the gradual implementation period. As it was discovered, the reduction in the overall crime rate in the City of Port St. Lucie, Florida was considerably slower and relatively flat during this period of time than that of the national overall crime rate and even slower than the overall crime rate for the State of Florida for the same period of time.

Crime figures were captured from 2010-2019. This period represents the last two years prior to the full implementation and the first seven years after full implementation of the Stratified Model. The City of Port St. Lucie, Florida experienced a more significant

reduction in the overall crime rate than the State of Florida or the United States for this time period.

In 2010, the overall national crime in the United States rate stood at 3,350 crimes/100,000 citizens. In 2019, that figure decreased to 3,266 crimes/100,000 citizens or an 24.8% decrease in the overall crime rate from 2010-2019 (FBI, n.d.). The Florida overall crime rate was reported to be 4,101 crimes/100,000 people in 2010 and 2,649 crimes/100,000 people in 2019 or a 35.4% decrease in the overall crime rate from 2010-2019 (FBI, n.d.). The City of Port St. Lucie, Florida had an overall crime rate in 2010 of 2,355 crimes/100,000 citizens. The overall crime rate for the City of Port St. Lucie, Florida in 2019 was reported to be 1,143 crimes/100,000 citizens or a 51.5% decrease in the overall crime rate from 2010-2019 (FBI, n.d.).

Breaking Down the Components of the Stratified Model

Crime Analysis

For the purpose of this study, the definition of crime analysis has been provided by Santos (2012, 2014) addressing the significance of crime analysis coupled with a viable strategy to crime reduction:

Crime analysis is the systematic study of crime and disorder problems as well as other police-related issues—including sociodemographic, spatial, and temporal factors—to assist the police in criminal apprehension, crime and disorder reduction, crime prevention, and evaluation. (Santos, 2012, p. 2; Santos, 2014, p. 149)

Historically, there has been a lack of evidence-based research asserting the direct connection from crime analysis to include crime reduction (Santos and Taylor, 2013).

Crime analysis has traditionally been used as a tool for the determination of crime mapping, hot spots, offenders, and short-term crime solutions (Bond and Braga, 2015; Burnett, 2007; Dabney, 2010; Jang et al. 2010; O'Connell, 2002; Ratcliffe, 2004; Santos, 2013; Santos, 2014; Santos and Santos, 2016; Santos and Taylor, 2013; Seigel, 2014; Shane, 2004a; Weisburd et al. 2003). Ratcliffe (2004) suggests that advanced technology and computerization has opened the ability to quickly identify crime patterns and criminal behavior for crime analysts. Siegel (2013) asserts that crime analysis that is inappropriate for a given situation would likely become a detriment to the overall crime solving process.

One of the main components behind the success of the Stratified Model is the legitimacy of competent crime analysis and its appropriate usage (O'Connell, 2002; Santos and Taylor, 2013; Willis, 2011). This legitimacy would constitute the first step in the development of continued and sustained long-term crime reduction provided the information was combined into a sustainable crime reduction model (Boba and Santos, 2011; Santos, 2014). The information gathered by crime analysts must be relevant, accurate, timely, and lastly actionable (Santos and Taylor, 2013). Mazerolle et al. (2013) contend that continued and specialized training of law enforcement personnel has a positive effect on police legitimacy and how the public views the police.

The actionable component of the equation allows the accumulated data to drive agency activities within the Stratified Model (Santos and Taylor, 2013). Bullock (2012) asserts that technology actions should present themselves in the development of objectiveness; however, it was further argued these processes involved with crime analysis are "subjective and interpretive" (p. 140). It is important to understand that prior

to the current advanced state of computer-aided crime analysis, the existing system of crime data analysis results during that early period often fell very short of their potential capabilities (O'Connell, 2002). Weisburd et al. (2011) argue the importance of properly communicating designation activities to the affected public as it has been shown that “intense police activity” (p. 317) within designation areas has been attributed to an increased fear of crime and this can lead to a decrease in police efficacy (public perception) along with a decrease of police legitimacy. Weisburd continues by indicating that increased fear often leads to additional crime and/or violence.

When a crime has occurred, such as a vehicle burglary and that crime has been revealed by the complaining party, generally the party would call 911 to report the crime. A police officer would respond to the scene to assess the situation and produce a police report describing the activities relating to their criminal investigation. The police report once completed is then submitted electronically to the district sergeant, who approves the report. Every morning, the previous day's reports are thoroughly examined by the crime analysts as well as other sections of the police agency. The crime analysts compare these reports with previous incidents in that proximity or perhaps, look for key similarities that may lead to a term designation such as: spree, hotspot, or series (Boba and Santos, 2011).

Once the daily reports have been read, the crime analysts would produce a Hot Sheet for the administrative staff meeting that occurs daily at 8:30am (R. Del Toro, Personal Interview, September 12, 2019). It is the crime analysts who compile and outline these crime similarities that generate the crime reduction activity as explained in the following paragraphs (C. Davis, Personal Interview, August 16, 2019; R. Del Toro, Personal Interview, September 12, 2019). The crime analysts also produce an agency

bulletin that lists a bulletin number, case number, affected area, known offenders that live in that particular area as well any associated case numbers, along with any other similarities that may be specific for that particular designation (C. Davis, Personal Interview, August 16, 2019).

All crimes in the City of Port St. Lucie, Florida are mapped daily and captured using the agency reporting program, Open-Source Software Institute (OSSI), along with several other databases: ArcGIS, Crystal Reports, Microsoft Office Suite, Smart Force (PSLPD Intranet), RF Flow, NCIC/FCIC, CJIS, Jail, Department of Corrections, Department of Juvenile Justice, TLO, Florida driver's license data, and Open Source (C. Davis, Personal Interview, August 16, 2019). This increased technology allows the crime analysts to be able to disseminate large amounts of information effortlessly to the appropriate stakeholders in easy-to-understand formats (Miller, 2008). The success of the Stratified Model relies upon the individual crime analysts along with their familiarity and discretion to their specifically assigned districts. The City of Port St. Lucie is divided into four policing districts of similar size and population base. Crime analysts are assigned one to each of the four policing districts. These assignments are permanent and allow the crime analysts to become very familiar with all the crime activity located within their assigned areas (C. Davis, Personal Interview, August 16, 2019).

It is important for the success of the Stratified Model to identify the target stakeholders within an agency that can best utilize the information and then for mid-managers to properly disseminate the appropriate resources to front-line needs (Boba and Santos, 2011). The Stratified Model uses a top-down approach placing the accountability upon the mid-management level of the organization (Boba and Santos, 2011). Santos and

Taylor (2013) argue that it is the management level and first-line supervisors that best utilize crime analysis data more effectively versus the line officers. This notion was also supported by Dabney (2010), when he suggests the front-line officers simply do not appreciate the complexities of the information being disseminated to them by the upper and middle management.

In the Stratified Model, the line officers are thereby directed into the designation areas by mid-management and then required to report back their activity and time that is later tabulated by those mid-managers responsible for that geographical area. The Port St. Lucie Police Department partakes in an agency-wide intranet in order to communicate activity to and from all sectors of the agency (R. Del Toro, Personal Interview, September 12, 2019). The real-time information is vital for the appropriate dissemination of information reaching the stakeholders that utilize the information to direct further agency activities (Bond and Braga, 2015; Burnett, 2007; Boba and Santos, 2011). Haberman (2016) added that directing additional police resources into hotspots can have positive impact.

COMPSTAT

COMPSTAT was introduced in 1994 by the New York City Police Department's Commissioner, William Bratton, and was advertised as one of the most prominent innovations in policing over the previous several decades (Bond and Braga, 2015; Dabney, 2010; Geoghegan, 2006; O'Connell, 2002; Weisburd et al. 2003). This crime reduction model was the subject of many awards and accolades for the NYPD over the following years. Many law enforcement agencies have created their versions of the

COMPSTAT model including the Port St. Lucie Police Department (Florida) in the late 1990's that relies on daily, weekly and monthly meetings.

The current version used by the Port St. Lucie Police Department is called STARCOM and is an acronym for **S**tatistical **T**racking, **A**ccountability, and **R**esponse through **C**omputer **O**riented **M**apping. This crime data dissemination and accountability process has significantly evolved since its early days when it was conducted in a haphazard and inconsistent manner (Boba and Santos, 2011). This evolving approach can be attributed primarily due to the routinization of many types of investigations. This notion is based upon the past numerous successes involving different approaches or investigative techniques that have become commonplace in the Criminal Investigations Division (R. Del Toro, Personal Interview, September 12, 2019). The Port St. Lucie Police Department holds a daily administrative meeting consisting of any important cases concerning newly designated areas or high-profile cases. An example would include bank robberies, kidnappings, or homicides. These cases are placed onto a hot sheet that is generated by the crime analysts every morning as these dedicated workers arrive early every weekday morning in order to review the previous day's reports. There are also daily briefings held at the shift changes with the road patrol officers. During these meetings, current information is provided, and activity is directed to the road patrol officers regarding any designations such as sprees, hot spots, and series (R. Del Toro, Personal Interview, September 12, 2019).

Weekly meetings called COAR, an acronym for **C**ollaborative **O**perational **A**nalysis and **R**esponse, are held every Wednesday and are informal in nature. This weekly meeting has a specific agenda where the division heads are questioned on active

cases in designated areas. There are no anticipated trick questions or ambushes in this system as all the division heads are provided the agenda a few days in advance of the meeting in order to properly prepare (R. Del Toro, Personal Interview, September 12, 2019).

Formal monthly meetings are also held, and they are primarily based upon the STARCOM model from years past. This monthly meeting is formal in nature and many of the accountability attributes provided by the COMPSTAT model are thereby utilized and further integrated into the Stratified Model (Boba and Santos, 2011; R. Del Toro, Personal Interview, September 12, 2019). These meetings like the COAR meetings also have an agenda that is given well in advance to the division heads throughout the agency. Long-term accountability is the key to the success of the Stratified Model and through these daily, weekly, and monthly meetings, the same sprees and hot spots are brought up along with the related police activity associated with these designations. Nothing is left to chance to fall through the cracks. All cases are considered important especially when they are associated with a designation (Boba and Santos, 2011; R. Del Toro, Personal Interview, September 12, 2019).

Weisburd et al. (2003) suggested there are six key components that attribute to the success of COMPSTAT within the New York Police Department:

- Clarify the agency's mission by focusing on its basic values and embodying them in tangible objectives. (a)
- Give priority to operational objectives over administrative ones (b)
- Simplify managerial accountability for achieving those objectives (c)

- Become more adept at scanning the organization's environment to identify problems early and develop strategies to respond, i.e., data driven. (d)
- Increase organizational flexibility to implement the most promising strategies. (e)
- Learn about what works and what does not by following through with empirical assessment of what happened. (f)

The Port St. Lucie Police Department has instituted these key components into the Stratified Model by clarifying the agency mission as it relates to the day-to-day operation.

- a. The agency in its entirety is needed to buy in to specific goals and means to attain those goals (Boba and Santos, 2011; Dabney, 2010; Jenkins, 2016).
- b. The operational objectives of the Stratified Model build a high level of individual and organizational accountability. Further, the agency relies on specific goals at each level of the organization.
- c. Each level of recognized criminogenic problems is assigned a certain level of priority (accountability) depending on the scope and breadth of that problem. As specific crime problems persist or expand, then a higher level within the organization would then be responsible for solving the problem (Boba and Santos, 2011). The managerial accountability simplification process was designed as an agency-wide focus. Other administrative approaches allowed

separate sections of an agency to utilize differing methods and not collectively work towards a goal and may not lead to continued success (Dabney, 2010; Santos, 2013).

- d. The skillful crime analysts within the Port St. Lucie are vital to the successful implementation of the Stratified Model. It is their responsibility to present the statistical aspect of crime and be fully adept to properly disseminate the information throughout agency specifically targeting the appropriate end users. Appropriate crime analysis coupled with intelligence-led techniques has led to sustained success (Santos, 2014).
- e. Agency-wide flexibility was necessary for the Port St. Lucie Police Department to transition from their old system, which then consisted of a conglomeration of different models and had been implemented agency-wide in more of a haphazard manner, therefore leading to inconsistent results (Boba and Santos, 2011). Moving forward, once the Stratified Model had been fully implemented, the Port St. Lucie Police Department needed continued flexibility in order to adapt to the ebb and flow of crime. During this period 2004-2012, there were four Chiefs of Police that had come and gone, however, the agency's course remained steadfast due to the work of their strong leadership (Boba and Santos, 2011).

- f. Santos and Santos (2016) followed up the full implementation of the Stratified Model in 2012 with a burglary study utilizing the key elements of the Stratified Model along with offender-based focus within hotspot or spree areas. The study concluded that techniques aimed at repeat offenders would not be considered significant in its result, however the study showed promise and an additional need for study.

COMPSTAT is not an entirely new strategy of policing but considered to demand a higher level of accountability and forward thinking. These elements were critical, especially at the higher levels of the police organization that subsequently trickled downward to the front-line officers (Bond and Braga, 2015; Dabney, 2010; Firman, 2003; Jang et al. 2010; Magers, 2004; Weisburd et al. 2003). Many of the old attributes of traditional policing, such as boundless bureaucracy that focused on administrative issues rather than operational issues, and traditional reactive policing, really had no positive effect on crime (Dabney, 2010; Weisburd et al. 2003). This newly labeled approach encompassed some of the established data-driven facets of Problem-Oriented Policing, which, had also been introduced in the early 1990's (Dabney, 2010; Magers, 2004; Weisburd et al. 2003). Willis et al. (2007) argues that COMPSTAT behaves unpredictably and tends to resemble organizational hierarchal structure of traditional policing.

Electronic technology was becoming more useful during this era and allowed the crime analysts to compile large amounts of data and effectively disseminate this data effortlessly (Weisburd et al. 2003). This advancement allowed for crime data that was

once common for being several weeks or months old set a new norm as it could now be updated on a weekly basis (Weisburd et al. 2003). The monthly scheduled meeting allowed the head administrators of the NYPD to choose a precinct and allow the heads of that precinct to demonstrate their ability to conform to the new crime reduction model (Geoghegan, 2006; Weisburd et al. 2003).

Weisburd (2003) argues the success of the COMPSTAT model relies on six very important elements that provide the NYPD its enhanced ability to problem solve:

- Mission clarification (a)
- Internal accountability (b)
- Geographic organization of command (c)
- Organizational flexibility (d)
- Data-driven problem identification and assessment (e)
- Innovative problem solving (f)

The following letters a-f correspond and therefore provide more in-depth comments involving the key terms provided by Weisburd (2003). These comments were developed to better explain the internal components of the Port St. Lucie Police Department in their utilization of various components provided by the COMPSTAT model.

- a. The purpose of this problem-solving process was to create a higher level of sustained accountability for the middle-management level of the NYPD. The Port St. Lucie Police Department has far less sworn personnel than the NYPD and therefore utilize fewer layers as the extra layers are simply unnecessary in a much smaller police agency. The Port St. Lucie

Police Department hierarchy consists of the Chief-of-Police, two Assistant Chiefs, nine Lieutenants, thirty-four Sergeants and 185 non-supervisory police officers/detectives (PSLPD Personnel Allocation Spreadsheet, 2019).

- b. Based upon this current hierarchy, it is imperative to establish which level would be considered mid-management. The COMPSTAT model for the NYPD focuses on their Captains as they are the ones that procure the crime analysis flood of incoming information necessary to answer the questions during the weekly and monthly meetings. During chapter one, this issue was addressed at the Port St. Lucie Police Department and was determined that Detective Sergeants obtained their weekly staff meeting information directly from their subordinate detectives (T. Henkel, Personal Interview, August 28, 2019; J. Inigo, Personal Interview, August 26, 2019). On road patrol, the Lieutenants procure the information based upon road patrol officer posts to the agency intranet threads. Any intelligence coupled with time spent in designation areas are computed on a weekly basis and the information is provided in the weekly staff meeting (R. Del Toro, Personal Interview, September 12, 2019; J. Bolduc, Personal Interview, April 12, 2019). This mid-management/administrative level disparity could create unnecessary role and responsibility conflict. One could further question as to which level would be considered mid-management as both positions, Detective Sergeant and Road-Patrol Lieutenant perform similar duties.

- c. The Port St. Lucie Police Department headquarters is centrally located in the city and all activity revolves around this central location including the housing of all administration, mid-managers, finance, purchasing, road patrol and detectives. Prior to the housing crash of 2008-2010, the Port St. Lucie Police Department wanted to open an additional station in the eastern portion of the city. There was a western station that had opened in 2005, but because of budgetary constraints resulting from the housing and mortgage crash, the station was closed in 2012. The City of Port St. Lucie consists of 112 square miles and the idea behind the opening of these stations was to provide additional and more readily available resources if needed.
- d. Organizational flexibility was necessary in 2004 when the decision was made to begin a gradual transition from the traditional policing model, which included aspects of Community Oriented Policing and Problem Oriented Policing and embrace a new, untested approach known as the Stratified Model. During the growing stages of the new model, there was considerable pushback from the Captain level of the organization (Boba and Santos, 2011). The full implementation of the Stratified Model occurred in 2012 and at that same time a new administration took over the agency and the rank of Captain had been eliminated from the organization.
- e. The strategic-problem-solving aspect of the COMPSTAT model relies on viable and timely information coming into the crime analysts. This information that arrives in the form of completed police reports is then

disseminated to the various stakeholders throughout an agency in order to direct further agency activities (Bond and Braga, 2015; Dabney, 2010; Jang et al. 2010; O'Connell, 2002; Shane, 2004b; Vito et al. 2017).

- f. One issue within this aspect would be the application of the term “innovation.” This variable conceivably allows the front-line officer to easily assess, adapt and overcome new situations rather than succumb to the routinization of the job, such as evidenced in the Community Oriented Policing model (Gill et al. 2014; Magers, 2004). Moore (2003) argues the COMPSTAT model does not allow for the front-line officers to innovate, but rather comply with the top-down mid-managerial effect. This notion has also become evident during the activity portion within designation areas of the Stratified Model as actions are directed to the front-line officers from the mid-managers (Boba and Santos, 2011).

The COMPSTAT model appears to embrace many of the attributes of traditional policing while shunning many of the facets of Community Oriented Policing. This notion is primarily due to the front-line officer empowerment necessary for the police department to connect with the community that was served and subsequently solve problems as used in Community Oriented Policing (Magers, 2004; Moore, 2003). This assessment was in direct contrast of Weisburd (2003), where it was argued that it was up to the middle managers in COMPSTAT to come up with the best solutions, innovate and to avoid doing something because that was always how it was done before. Moore (2003) also found that COMPSTAT encourages itself to an aggressive, preventative type of patrolling that is evident by the directing of resources towards a designation area. Braga

et al. (2012) suggests that directing resources towards a specific area does not necessarily lead to displacement of crime and further, the positive benefits of directed patrols in designation areas may also diffuse into areas surrounding those designation areas.

Willis (2011) suggests that a combination of COMPSTAT and Community Oriented Policing be integrated together in order to enhance the legitimacy of policing. As discussed earlier, each approach is fundamentally different from the other as COMPSTAT is a top-down approach that requires a pyramid-shaped hierarchal organizational structure. Community Oriented Policing requires a flatter, broader organizational structure for the purpose of disseminating information, activity, and front-line officer decision making quickly and decisively (Gill et al. 2014; Magers, 2004). Fundamental differences between the two approaches create a natural friction as both systems are geared towards different aspects of policing and subsequently rely completely different levels within the organizational structures for the decision making. Magers (2004) brings up an interesting point regarding Community Oriented Policing when he suggests that police chiefs tend embrace COP because it is a more politically safe approach to crime reduction than of other bureaucratically inept approaches such as traditional policing. COP has not achieved sustained success in reducing crime over other crime reduction models such as COMPSTAT, therefore, the notion of relying on COP as an effective crime reduction model does not appear sustainable (Magers, 2004).

Community-Oriented Policing (C.O.P)

Community-Oriented Policing (COP) was developed in an effort for the police department to become closer, more transparent, build legitimacy and most importantly, allow the police to become trustworthy to the community that it serves (Bullock, 2012:

McCarthy et al. 2018; Schnebly, 2008; Trojanowicz and Bucqueroux, 1990; Trojanowicz et al. 1998). In doing so, this approach naturally forced police department organizational structures to transform themselves by becoming flatter and broader (Gill et al. 2014).

The idea behind COP was the easier dissemination of information, becoming proactive, high-visibility patrols and a quicker progression for the decision-making process as there were conceivably less organizational layers to create unnecessary bureaucracy.

Community Oriented Policing allows for the community to proactively work alongside law enforcement in order to solve communal problems to include crime reduction (Bullock, 2012; Gill et al. 2014; Hendrix et al. 2019; Hochstetler, 2002).

Ideally, police officers in the Community Oriented Policing model were assigned geographical areas for extended periods of time in order to become intimately familiar with the people, businesses, and community happenings on their beat. It was purported that this extended familiarity with the same police officer would then naturally produce a higher level of mutual trust between the police and public (Trojanowicz and Bucqueroux, 1990; Trojanowicz et al. 1998). Bullock (2012) suggests that police officers that stay in a beat may be somewhat limited due to the conflict of being a crime fighter versus a neighborhood policing officer. Bullock (2012) continued when she suggests that in a broad sense, most police officers prefer rapid responses and in-progress reactive type investigations.

In COP, there is designed empowerment of the front-line officers to make long-term decisions that affected an officer's area of responsibility. Gill et al. (2014) suggests that Community Oriented Policing did increase the citizen satisfaction, perception of disorder and the legitimacy of the police, however, there was little change on the

frequency of crime and the fear of crime. There was also very little standardization to the COP approach, thusly making it difficult to appropriately study and quantify the results as different agencies apply their version of COP to their community (Gill et al. 2014; Tillyer, 2018).

Trojanowicz and Bucqueroux (1990) and Trojanowicz et al (1998) stress ten basic principles associated with COP.

- a. COP is both a policing philosophy and a specific organizational strategy.
The main idea behind COP is for the police agency to become intertwined with the community in order to collectively solve the community's problems.
- b. A new breed of police officer needs to be developed away from the traditional police officer mold that acts as a link to the community and a police officer that becomes more autonomous and empowered to make decisions from the front line.
- c. This communal link is developed by removing the police officer from the patrol vehicle and the demands of the police radio. Trojanowicz and Bucqueroux (1990) and Trojanowicz et al. (1998) considered the patrol vehicle and police radio to be tools of isolation from the community that it was meant to serve.
- d. There must be constant contact with "law-abiding" citizens (1998, p. *xi*) in order to develop creative solutions to crime and disorder.
- e. The developing relationship between the community and the police department needs to ensure mutual trust as well as increased

accountability on both sides in order to work as one entity. This shift would necessitate slower response times for police to non-emergency type calls and therefore shifts the responsibility for non-emergency issues back onto the community to essentially solve their own problems.

- f. The very nature of the COP approach necessitates a significantly higher level of proactivity to fend off the potentiality of crime as well as maintain a quick response to emergency situations.
- g. A primary tenet of COP is to be able to protect and enhance the vulnerable populations such as: juveniles, elderly citizens, disabled and the homeless. Outreach and understanding resources are vital to be able to enhance the lives of this special population.
- h. COP relies on the human aspect of policing rather than advanced levels of technology for the solving of crime. The COP approach relies on the mutual trust developed over time and relies on working together in order to achieve a common element. Sytsma and Piza (2017) assert that dedicated bicycle patrols within certain geographic areas produce a higher level of contacts both law-enforcement and non-law enforcement related. It is these contacts that lead to a higher level of satisfaction towards the police.
- i. The COP approach requires the entire department to essentially buy in and allows the Community Policing Officers (CPO) to lead this charge as specialists and managers of change.

- j. Community Oriented Policing is a decentralized approach that fully recognizes that the police are a community resource and are not required to impose their will upon the community in order to bring about order. COP is an active philosophy that can be modified to suit the specific needs of any police agency (Trojanowicz and Bucqueroux, 1990; Trojanowicz et al. 1998).

The Stratified Model utilizes a centralized top-down approach for the dissemination of information and direction when it concerns designation areas such as: hotspots, sprees, or series (Boba and Santos, 2011; Haberman, 2016). The front-line officer's activities within designated areas are directed from administrators housed at the police station. The individual police officer's time and activities within designation areas are logged using the agency intranet that would include any investigative reports, field interviews and arrests. The reports that were generated by the road-patrol officers would make their way to the Criminal Investigations Division. During this journey through the agency, these reports are thoroughly examined by the crime analysts for further dissemination and direction of future activity. The property detective assigned that particular designation area will then conduct follow-up investigations to determine if a causal link exists between the various and individual cases and potentially develop a suspect (R. Del Toro, Personal Interview, September 12, 2019; T. Henkel, Personal Interview, August 28, 2019; J. Inigo, Personal Interview, August 26, 2019).

While both models are in direct philosophical contrast to each other as evidenced by the pyramid type hierarchal design of the Stratified Model and the flat, much broader organization structure of Community Oriented Policing. This notion would be

particularly evident during the named designation activity portion of relating to the Stratified Model. However, when City of Port St. Lucie police officers have down time from their designated spree or hot-spot duties, they are still encouraged to contact citizens and business owners in order to better understand their assigned beats (R. Del Toro, Personal Interview, September 12, 2019). These activities would clearly delineate a Community Oriented Policing philosophical approach as it would be up to the individual police officers to better know the people as well as identify the potential trouble locations and people.

An example of this approach was recently brought to light during October/November 2019, when there were at least two designated burglary and vehicle theft hot-spot areas (PSLPD 2019-479B, 2019-480) that had resonated in the western portion of the City of Port St. Lucie. The designated hotspots were far enough apart geographically that it was doubtful if any suspect connection between the designations was viable. Some of the incidents involved vehicle burglaries while others involved stolen vehicles. These multiple separate cases were solved through the analysis and positive comparison of one latent fingerprint recovered from one of the singular vehicle burglaries as well as surveillance video that had been available in most of the neighborhoods where the burglaries had occurred that had depicted similar suspects (PSLPD case# 201921607).

Police officers partnered with the community. Collectively, they were successful in this partnership in order to collect the necessary evidence. This evidence led to the development of probable cause that eventually led to the arrest of multiple suspects that had hailed from a city that was at least one hundred miles away. Neighborhood canvasses

in the various crime incident areas produced additional surveillance video evidence that added to the growing volume of evidence. Several different divisions within the Port St. Lucie Police Department; road patrol, uniformed crime scene, finger-print examiners, crime analysts and property detectives worked together in order to attain a common goal. Three arrests resulted from this extended investigation and subsequently closed thirty open cases as well as the three hot-spot designated areas.

Problem-Oriented Policing (POP)

Problem-Oriented Policing provides an active mechanism for solving society's pervasive issues. Goldstein (1990b) wrote in his book *Problem-Oriented Policing* that police are increasingly subjected to external pressures and further are asked to continually reinvent themselves in order to better understand the complex environment that we have come to know as modern society. The various components of POP will be discussed in this section as well as which components are currently utilized in the Stratified Model.

One of the key components of POP model that is actively used by mid-managers within the Port St. Lucie Police Department is the utilization of SARA, Scanning, Analysis, Response, and Assessment (Bond and Hajjar, 2013; Braga et al. 2012; Cherney, 2008; Cochran and Bromley, 2002; Corsaro et al. 2012; Goldstein, 1990b; Kirby and McPherson, 2004; Mazerolle et al. 2013; McGarrell et al. 2007; Sidebottom and Tilley, 2010; Welsh et al. 2012). The SARA portion of Problem Oriented Policing has become very popular as well as effective in the overall scheme of problem solving for police agencies. Sidebottom and Tilley (2010) argue the presence of several shortcomings, primarily due to the fact that POP is too simplistic in its design, and it was not developed to address complex problems.

Goldstein (1990a) contended that policing prior to the 1980's primarily concentrated on cursory subjects such as structure, staffing and equipment. He went on to argue that while police were trying to improve and establish themselves as a profession, they simply did not go far enough. Goldstein's notion addresses an important consideration of traditional policing. This concentration was also addressed in Bond and Hajjar (2013) when they assert that agencies were often preoccupied with the formal organizational components (policies, procedures, and structures) rather than the informal components (values, beliefs, culture, relationships, and communications). Agencies strived to properly measure the formal components rather than attempting to provide a legitimate assessment relating to the conglomeration of both formal and informal components in the grand scheme of achieving organizational goals (Bond and Hajjar, 2013).

In the Traditional Policing Model, police officers are generally given activity directives by mid-management level supervisors in order to better control police discretion and in doing so have also curtailed the problem-solving aspect necessary to effect societal change. This approach has also led to the reactive mode police have endured for many years (Bullock, 2012; Cherney, 2008). The concept of problem solving is counter-intuitive to the Traditional Model of Policing, at least from a front-line level perception. This is primarily due to the pattern examination necessary by line officers to discover potential root issues pervasive to that problem and through that examination process, often solutions will present themselves (Skogan, 2008).

Corsaro et al. (2012) contends that Problem-Oriented Policing is instrumental in the development of a problem-solving approach that provides flexibility in more of a

proactive nature versus the reactive mode of traditional policing. McGarrell et al. (2007) argues the proactive nature of problem-solving moves policing away from the general direction of the traditional approach. This proactive notion is primarily due to the institution and development of processes that address root problems in groups versus just responding to one incident at a time as evidenced by the Traditional Policing Model. Sidebottom and Tilley (2010) contend that responses through the Traditional Policing Model and SARA tend to be more of containment effort versus the development of long-term solutions. Jang et al. (2008) assert a lack of direct positive causal link between numbers of officers when related to the clearance of property crimes. This notion is interesting due to the fact that the Port St. Lucie Police Department has one of the lowest ratios of police officers/1,000 citizens (1.33) versus other municipal police departments (2.5 average) within the State of Florida (Florida Department of Law Enforcement, 2016).

Goldstein (1990b) argues that police reform should be much more ambitious in their reform goals. The idea of POP is not just motivating agencies how to solve problems, but rather develop an organizational approach that is conducive to the conceptualization of long-term solutions (Cherney, 2008). Cherney went on to say that it is also vital for the police to obtain the assistance of interested third parties as an external partnership in order to address the potentiality of crime before it occurs and becomes a problem. Haberman (2016) contends that police reform is a recurrent need because often police administrators demonstrate that their crime-control assumptions cannot be supported by empirical research. Therefore, these errant assumptions may further add to the notion of fostering the necessity for additional police reform. Most agencies in the

pursuit of reform often encounter internal resistance that has the tendency to slow reform (Mazerolle et al. 2013). Internal resistance may be occurring as a result of the persistent, underlying police subculture that may inhibit organizational reform (Goldstein, 1990b).

One of the issues facing traditional policing that continues to emerge is the resistance of police subculture to affect change. The attempted forced change by administrators occurred in relative isolation and therefore did not consider exactly how the police subculture operated, nor the dynamics involved throughout the police subculture (Goldstein, 1990b). Why is the police subculture so resistance to change, even if for a legitimately good reason? Goldstein (1990b) pondered that question in his book and attributed the perseverance of police subculture that has prevailed based upon several different facets to include:

- The constant presence of physical danger.
- Hostility directed specifically at the police primarily due to the controlling nature of the policing job.
- Vulnerability placed upon police officers when allegations of wrongdoing are leveled against them.
- Conflicting role demands within and outside of policing.
- Questions of role authority.
- The public's lack of understanding regarding the role of policing.
- Difficult working conditions.
- The comradery that develops between officers that face physical and mental adversity together every shift.

- How police officers react similarly in situations primarily due to being exposed to the same type of negative and positive stimuli for years (p. 29).

Police administrators must find a way to address these pervasive attributes in such a manner as to perpetuate the administration's agenda into the fabric of their respective agency and to include the police subculture into the decision-making process. Many past attempts to initiate change into the realm policing have been fragmented in nature and therefore unable to sustain long term success (Goldstein, 1990a). Willis & Mastrofski (2018) assert that success in obtaining front-line cooperation is embedded in empirical validity in any change of construct or crime reduction approach. This fragmented approach raises the affirmation that a full agency buy-in is necessary to be successful and effective in lasting change throughout the entire organization.

Boba and Santos (2011) maintain that for full-organizational change to be instituted, it is necessary to "infuse systematic crime-reduction strategies into the existing structure of the agency" (p. 49). This complete change in organizational philosophy can only be accomplished through active participation by every individual member of the agency. Many other crime-reduction models have failed primarily due to fragmented organizational support. While some facets of the agency are working actively within the crime-reduction model, others are off doing work in a different direction, which causes friction and break-down of the crime-reduction model (Boba and Santos, 2011).

Data-driven problem solving is now commonly available using modern technology. Real-time data allows crime analysts to provide updated information to its stakeholders on a more regular basis (Boba and Santos, 2011). Data would include taking information from recent police reports. Crime analysts would conduct a thorough data

examination that would lead the analysts to group similar incidents together such as: hotspots, series, and sprees (Boba and Santos, 2011; Goldstein, 1990b). After placing similar crime reports together geographically or by other case similarities, a substantive problem-solving approach can be applied in order to solve these designation areas (Goldstein, 1990b). Most of these problem-solving solutions have been somewhat routinized. This is because many of the property-type crimes are all subjected to a basic process during the investigative process and this routinization has proven successful over time. If there is a different type of facet associated with a case or cases, then mid-managers would institute additional directives to their subordinates (T. Henkel, Personal Interview, August 28, 2019; J. Inigo, Personal Interview, August 26, 2019). This problem-solving approach would encompass directed patrols by road-patrol officers as well as pawn checks, repeat-offender checks, evidentiary analysis, and neighborhood canvasses by detectives (T. Henkel, Personal Interview, August 28, 2019; J. Inigo, Personal Interview, August 26, 2019). The Stratified Model encompasses many of the established data-driven facets of Problem-Oriented Policing (Boba and Santos, 2011; Dabney, 2010; Magers, 2004; Weisburd et al. 2003).

Goldstein (1990a) contends the lack of change within the police environment provided by the administration that has initiated the change in the first place often sends a confusing message up and down the rank and file of a police agency. To explain this concept further, a police agency provided a group of police officers working on a tenancy type project with some independence in their decision-making process, however, the administration maintained tight control over their decision making. This tight control

prevented the officers from utilizing this new level of independence and therefore proved counterproductive (Goldstein, 1990a).

Traditional policing relies on a pyramid shaped hierarchy to effectively disseminate activities downward from the top to the bottom of the organizational structure and therefore limits police discretion (Boba and Santos, 2011; Haberman, 2016). Goldstein (1990b) reasons that police discretion has been recognized as being problematic, particularly when it comes to the seemingly “disorganized, unarticulated, and therefore unreviewable manner” (p.147) in which it has been conducted. In response, police agencies have implemented additional guidelines and standard operating procedures to gain additional control over their officers. This specific response of implementation also allows the public to review and further scrutinize police policies as the police attempt to become more accountable and trustworthy (Goldstein, 1990a; Goldstein, 1990b).

Jenkins (2016) asserts in his study involving two large Mid-Atlantic police departments that a large percentage of officers value their high level of discretion when solving problems. Kamulu and Onyeozili (2018) argue that “good discretionary policing” (p. 73) that encompasses many positive attributes such as: respecting the law, observing personal accountability, observation of personal rights taking close consideration of ethnic and racial differences must be embraced by agencies in order to perpetuate their effectiveness and legitimacy. Miller (2006) on the other hand argues that a rule-based system needs to be consistently enforced in order to prevent bias from having a controlling effect. Miller continues when he stresses the importance of officers to adhere to agency values and decision-making rules.

The Stratified Model is primarily a top-down approach and by using a traditional policing hierarchy organizational structure, top administrators and mid-managers can actively direct information and activity downwards to the front-line officers and sergeants (Boba and Santos, 2011). In the Stratified Model, there are very limited aspects where the front-line police officer can utilize their discretion. An example may be during a consensual citizen stop or traffic stop. The top-down approach severely limits police discretion through its directives and thereby contributes to the furthering of the Problem-Oriented Policing philosophy. The built-in accountability aspects of the Stratified Model set this crime-reduction model apart from others as it is this accountability that has been established agency wide and therefore ingrained into the fabric of the organizational structure (Boba and Santos, 2011).

Research Questions

These key aspects have been defined below in the following quantitative research questions.

RQ1- What are the average opinions of employees of the Port St. Lucie Police Department with respect to the actions (i.e., processes) that are involved in producing specific outcomes (i.e., products) of the organization?

RQ2- What are the average opinions of employees of the Port St. Lucie Police Department with respect to the quality of the outcomes produced by the organization?

RQ3- What are the average opinions of each type of employee with respect to the processes and products of the organization?

Chapter 3 Methodology

A goal of this research study is to obtain the self-reported opinions throughout the organization that perform the actual work within the Stratified Model. These opinions will address how all employees within the organization view available technology, communication, management approach, use of intelligence, dissemination of information, efficiency, and management availability within the Stratified Model. The survey research instrument developed for this undertaking will be introduced. There are several levels of accountability that have been built into the Stratified Model that provide a mechanism to activate within the agency should a persistent criminogenic problem of any type become unresolved (Boba and Santos, 2011).

A survey approach is necessary for this type of research undertaking in order to obtain anonymous, unbiased perceptions and opinions of the personnel within the organization that are doing the day-to-day work of the Stratified Model. The Port St. Lucie Police Department began a gradual implementation of the Stratified Model 2004-2011 and then fully implemented this crime control model beginning in 2012 (Santos, 2013). The agency workers combine their efforts in order to collectively contribute to the efficacy of the Stratified Model. It is the workers of an agency who perform the duties and have the responsibilities necessary for the successes or failures of the agency.

There has been limited literature relating to the Stratified Model outside the original architects, Boba and Santos. This is likely due to being relatively a new concept in the overall scheme of crime reduction models. There is no literature available relating to the different perceptual observations of the workers throughout any agency currently utilizing the Stratified Model. The addition of future literature relating to the Stratified Model may lead to further success of this crime reduction model.

Participants

The participants of this study include sworn and civilian employees of the Port St. Lucie Police Department. As of month, end March 2021, there were a total of 315 personnel within the Port St. Lucie Police Department. There are 256 sworn personnel. A sworn personnel member would be a person that is a State of Florida certified police officer. This would include all ranks within the organization. There are 112 total civilian employees, of which 59 support the law enforcement services aspect of the Port St. Lucie Police Department.

There will be 53 excluded civilian employees and they include 8 Animal Control Officers, 1 Animal Control Administrative Assistant, 1 Animal Control part-time kennel worker, 1 Civilian Background Investigator and 42 part-time school crossing guards. These 53 employees work under the Port St. Lucie Police Department umbrella, however, do not serve in any law enforcement support capacity.

Sampling Method

The sampling method employed for this research project will be of a convenience sampling of the Port St. Lucie Police Department (FL) from the total number of surveys that have been submitted. The completed surveys will be submitted anonymously to a predetermined website address only accessible by the researcher on the Microsoft forms website. There are 315 employees that work for the Port St. Lucie Police Department. The number of employees is based upon an employee spreadsheet furnished by the PSLPD Fiscal Manager in March 2021. This convenience sampling method would be appropriate for this study as the focus for this study would include the agency employees'

self-reported opinions from all organizational levels, thus, providing a rich diversity of perceptions and opinions (Creswell and Creswell, 2018).

The Stratified Model was originally published in 2011 as part of a grant project with the United States Department of Justice and their Community Oriented Policing Services (COPS) division (Boba et al. 2011). This effort was completed in order to address weaknesses of other crime reduction models while instilling an agency-wide approach to crime reduction. “Practice-based research” (p. 7) was implemented over a seven-year period prior to the full implementation of the Stratified Model.

GPower 3.1.9.7 was used to establish a minimum sample size based upon an effect size of .15. An error probability of .05 and a power of .95 were calculated to determine that a sample size of 74 was needed to provide a high enough level of reliability for the associated research questions. For this study, there were 121 completed electronic survey submissions out of a possible 315 total employees (38.4%).

The Survey Instrument (Procedures and Design)

The purpose in the development of a new survey instrument for this study was predicated on obtaining employee perceptions that could be easily interpreted with little ambiguity between rating points. The five-point rating scale offers somewhat less accuracy than the seven-point scale. The seven-point scale is therefore able to provide more precise results in a given survey situation. The ability for more precise survey ratings provided the motivation to utilize the seven-point scale.

The neutral point in the rating scale provides that middle juncture where the participant may not be able to fully commit to one end of the bi-polar scale or the other. The employee motivating factors leading to a generally neutral rating should be examined

and further broken down into their individual components in an effort to ascertain why the participants were unable to strongly endorse the effects of the Stratified Model on products and processes within the organization. This approach has been utilized by many studies and further expands the Likert Scale, which is traditionally a five-point measurement to a seven-point measurement scale. The seven-point scale has been found present a higher grade of judgement than a traditional 5-point Likert Scale (Al-Hindawe, 1996).

The basic design of the electronic survey was developed based on a form of the Job Descriptive Index (JDI). The JDI was created by Bowling Green State University and is a recognized research instrument that measures five categories related to job satisfaction (Balzer et al. 1997; Despain, 2008). The JDI encompasses approximately 18 different short phrases that provide insight into an organizational employees' personal perception. The short phrases are answered either "yes or no." At the end each section there is an area where the survey participant will be given the opportunity to expound upon their answers. The six categories are: people on your present job, job in general, work on present job, pay, opportunities for promotion, and supervision.

The JDI was combined with Semantic Differential Scale for surveys in order to address the specific needs of this study. The Semantic Differential Scale was developed by Osgood, Suci, and Tannenbaum in 1957. This scale measures the connotative meaning of cultural subjects such as worker perceptions relating to the Stratified Model. Participants are provided a guide in the form of often bi-polar words in order to express their rating on either a five-point or seven-point rating scale with the middle number being neutral.

The Semantic Differential Scale has been used in a wide variety of studies ranging from ratings of self-esteem in adolescents (Lackovic-Grgin and Dekovic, 1990) to attitudes towards drug users (Ahlgren and Eburne, 1981) to cross validating expert witness research (Brodsky et al. 2010). Word groupings for this study were carefully devised in accordance with the areas of concentration necessary to appropriately capture and measure the worker's perceptions throughout the Port St. Lucie Police Department.

The approach of this survey is to provide bi-polar words that can be associated and further measured with some type of internal or external mechanism within the organization that will address specific processes and products of the Stratified Model. The participants will rate these bi-polar words from a scale of 1-7. An example would be honest 1 2 3 4 5 6 7 dishonest (Al-Hindawe, 1996). If the participant interprets the content or subject of that specific question to be honest, then the participant would choose the level of honesty they feel is applicable using the following scale. If honest then 1. If fairly honest, then 2. If somewhat honest then 3. If neutral on the question, then 4. If somewhat dishonest then 5. If fairly dishonest then 6. If dishonest then 7.

Various categories of organizational interest will be addressed and the participants from all areas within the organization will have an opportunity to provide their input via the provided electronic survey. The key component of this approach is to determine how members of the organization view key aspects of the Stratified Model's flow of work and information as it proceeds through all levels of the agency.

The survey instrument required a site approval letter was created as the Port St. Lucie Police Department, 121 SW Port St. Lucie Blvd., Port St. Lucie, FL 34984 as the intended site of the survey research undertaking. Police Chief John Bolduc

acknowledged his approval, signed the letter, and submitted the letter to the college for their review. The social behavioral general consent form was fully completed and submitted for Institutional Review Board approval.

One of the key components of this survey is to ensure confidentiality throughout the entire survey process. Individual confidentiality will be observed throughout the entire process by providing different methods of submitting completed surveys. Each employee throughout the organization will be provided an email containing an attached copy of the Participant Letter for Anonymous Surveys as well as an internet link that directs the participant directly to the Microsoft forms survey. When completed and submitted, the participant will click on submit and the survey will go directly to the Microsoft Office 365 Home that is only accessible by the researcher.

The completed surveys can be reviewed, analyzed, and further delineated at the end of the 14-day survey period. The survey submission process was tested and determined the received completed test surveys were anonymous and not attached to any email addresses or names. The anonymous manner and handling of the survey should provide an avenue for a higher completion rate.

A short presentation will be made by the researcher that is accessible on the electronic survey to the employees of the Port St. Lucie Police Department prior to the implementation of the on-line survey. The purpose of this presentation would be to answer any questions and to provide additional focus on the high level of anonymity provided throughout the survey process. This should also lead to an increased percentage of completion.

Procedure

The survey completion time should be estimated to be between 20-30 minutes and consists of two sections; section one will ask nine questions consisting of basic demographic information such as: gender, ethnicity, level of formal education, law enforcement or civilian employee, rank, which is optional, years of experience, current full-time assignment, and any past assignments. The demographic section of the survey will be auto populated from the survey submission directly onto an Excel spreadsheet.

Section two consists of nine questions involving different aspects of the agency and each relating to six-specific areas of the organization's approach to the Stratified Model with their accompanying bi-polar words used to describe employee perceptions. The participants will then be afforded the opportunity to rate these bi-polar words using a seven-point scale relating from one extreme to the other. The six-specific areas include available technology (outdated-innovative), communication (receive timely feedback-receive no feedback), management approach (laidback-strict), use of intelligence (accountable-irresponsible), dissemination of information (very useful-of no use), efficiency (waste of resources-productive), and management availability (inaccessible-approachable). The final question in the survey provides an opportunity for the participants to assert their written opinion in an open-ended-text box. From these six areas of concentration, various themes can then be developed resulting from the self-reported answers of the completed surveys (Creswell and Poth, 2018, p. 43).

Figure C.- Research Questions and Their Related Survey Questions

<p>(3) Questions (RQ)- Each question has been designed to address specific internal components of the Stratified Model.</p>	<p>(63) Survey Questions (SQ)- All (9) survey questions have (7) sub-survey questions that require answers and address each research question. The averages will be analyzed.</p>
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RQ1- What are the average opinions of employees of the Port St. Lucie Police Department with respect to the actions (i.e., processes) that are involved in producing specific outcomes (i.e., products) of the organization?	The average answer to each of the seven process questions was determined. The mean, as well as standard deviations, are provided in Table 2 (p. 84)
RQ2- What are the average opinions of employees of the Port St. Lucie Police Department with respect to the quality of the outcomes produced by the organization?	To answer this research question, the average answer each of the nine product questions was determined. These means, as well as standard deviations, are provided in Table 3 (p. 86).
RQ3- What are the average opinions of each type of employee with respect to the processes and products of the organization?	To answer this research question, the average answer for each of the seven process questions and the nine product questions was determined for each of type of employee. These means, as well as standard deviations, are provided in Table 4 (p. 90) for processes and Table 5 (p. 91) for products.

All the questions within survey will be listed as required answers for this electronic survey. Please see the full survey in Appendix A.

Each question is followed by a quick example of the Semantic Differential Scale which is to provide bi-polar words that can be associated and further measured with some type of internal or external mechanism that will address specific processes and products in the Stratified Model. The participants will then rate these bi-polar words from a scale of 1-7. An example would be honest 1 2 3 4 5 6 7 dishonest (Al-Hindawe, 1996). If the participant felt the compelled for the question content to be honest, then the participant would choose 1. If they were fairly honest, then 2. If somewhat honest then 3. If neutral on the question, then 4. If somewhat dishonest then 5. If fairly dishonest then 6. If dishonest then 7.

After completing the electronic survey, the participants would need to simply click "Submit" and the survey will be deposited in the Microsoft Office 365 form's

section that will only be accessible by the researcher. The participant letter for anonymous surveys will be accessible through an email link. This study is done solely for research purposes.

Data analysis

Quantitative results

In part one of the electronic survey, basic demographic information will be sought, but still observing the anonymity of the participants. This information will include gender, ethnicity, level of formal education, whether or not the participant is a sworn law enforcement officer or civilian employee, sworn law enforcement rank, civilian assignment, sworn law enforcement current assignments, sworn law enforcement past assignments, years of experience for both civilian employees and sworn law enforcement personnel.

In part two of the electronic survey, participants will be asked to provide their perceptions to specific questions relating to the internal components of the Stratified Model. The answers that are provided by the participants will be conducted on a seven-point scale throughout the nine-question section.

Different variable combinations will be analyzed combining the demographic information in section one with the ratings in section two of the survey. The mean and standard deviations will be reported when conducting these combination analyses through Microsoft Excel. To answer each research question, the mean scores on items pertaining to each survey question will be analyzed.

Limitations

This survey assessment has limitations that prohibit this study from being generalized to all law enforcement organizations. This study only included participants from the Port St. Lucie Police Department (Florida). This study was limited to approximately (315) sworn-law-enforcement personnel and civilian support staff whose duties are law enforcement related. A Microsoft Forms electronic survey was the only instrument used to collect data. This online survey form requires the participants to possess basic computer skills in order to complete. The results and subsequent analysis are solely based upon the survey results that are derived from employees' perceptions at that time.

The participants will be asked to choose the most appropriate answer to them. The first section of the survey entails the participant to provide basic demographic information, yet still remain anonymous. The second section of the survey require the participants to choose an answer based upon their perception and experiences. These perceptions and experiences should be their own and not based upon what they may have heard or seen. The participants are encouraged to complete their electronic surveys alone and without any outside resources. They were asked not to discuss their answers with any other employees while the survey period is being conducted. There was an assumption the participants followed these instructions.

Validity of the Instrument

“Do the items measure the content they were intended to measure?” (Creswell and Creswell, 2018, p. 153). This study was designed to measure 63 different combinations of internal processes relevant to the Stratified Model within the Port St. Lucie Police Department. These 63 different internal processes were also compared along 11 different

subgroups of employees that were split out from the initial average employee group. The combination of internal processes and subgroups provided rich data that were analyzed, and recommendations were made.

The instrument used in this study provided abundant data that answered the specific research questions associated with this study. There are many other aspects of the Stratified Model that should be studied, such as employee satisfaction or possibly efficiency. Other questions need to be addressed, such as are employees satisfied with their role within the Stratified Model? Are employees working efficiently towards organizational goals? Additional instruments and future studies would need to be established to answer these questions.

“Do the results correlate with other results?” (p. 153). This was the first study of its kind involving the perceptions of participants that employ the Stratified Model. There are other law-enforcement agencies that have begun to employ the Stratified Model throughout the United States and have sought the assistance of the Port St. Lucie Police Department to get their programs up and running (R. Del Toro, Personal Interview, September 12, 2019). Future studies would need to be conducted in an attempt to replicate the findings of this study.

“Do items measure hypothetical constructs or concepts?” (p. 153). The research questions associated with this study addressed concepts involving the average employee with respect to what are the average opinions of employees with respect to actions (i.e., processes) that are involved in producing specific outcomes (i.e., products) of the organizations; what are the average opinions of employees with respect to the quality of

outcomes produced by the organization; and what are the average opinions of each type of employee with respect to the processes and products of the organization?

This study was developed to obtain employee perceptions while working under the conditions of the Stratified Model. Specific processes and products were addressed with the research questions of this study. This study did not address other attributes such as employee efficiency, employee motivation, or employee satisfaction. When dealing with a police agency, there would likely have been other products and processes that could better address employee efficiency, motivation and satisfaction involved with the Stratified Model. These other products and processes that were unintentionally missed or overlooked should be addressed in a future study.

Reliability of the Instrument

There was a single group of employees all employed by the Port St. Lucie Police Department surveyed for this research study. To improve the reliability of the instrument associated with this study, a retest of the electronic survey should be completed. The purpose of the retest separated by time is to address “consistency, or stability, over time” (Huck, 2012, p. 69). After the retest, a test-retest reliability coefficient can be established. Ideally, a figure close to 1.00 would suggest a high level of reliability for this research instrument (Huck, 2012).

The instrument used in this study was developed by combining two established instruments, the JDI and Semantic Differential Scale. This was the first study of its kind where perceptions of internal processes and products were obtained from workers actively using the Stratified Model. The JDI and Semantic Differential Scale instruments were valid and reliable in previous studies, but when combined, will still need to be

further tested for sustained validity and reliability in this type of context. Further testing of this instrument will also expose areas needed for improvement.

Reliability of the electronic survey associated with this study was quantified using 121 recoded-completed responses. Moreover, a split-half internal consistency methodology was used to determine reliability. A Spearman-Brown figure for internal consistency reliability of .952 was obtained. A figure around .7 is questionable. A figure more than .8 is considered good (Huck, 2012).

A Cronbach's alpha value of .945 for internal consistency was calculated using the recoded-average-employee data that were obtained from the participant results. The optimal range for this value was between .7 and .9. It was suggested that a Cronbach's Alpha figure over .9 should be checked for question redundancy among the survey questions (Creswell and Creswell, 2018). Tavakol and Dennick (2011) indicated an optimal range for a Cronbach's alpha value to be between .7 and .95.

Chapter 4 Results

The purpose of this study was to discover employee perceptions as they relate to specific work processes within the Stratified Model. The Stratified Model is a crime-reduction model that was developed and gradually implemented first within the Port St. Lucie Police Department between 2004-2011. The full implementation of this crime-reduction model occurred in 2012.

The current study provided an opportunity to explore internal perspectives regarding specific work processes within the Stratified Model. These perspectives were rich in content and shed some valuable insight regarding internal mechanisms that had been established during the implementation of the Stratified Model. The survey method for this research undertaking used a seven-point rating scale, ranging from “1” to “7”. Each of the participants was provided semantic differential type items with bi-polar words to choose what his opinion was concerning the quality of the considered work process or product within the Stratified Model at his department. With this scaling, the median score was a four, which can be construed as an impartial (neutral) response; since the median position indicated that the respondent was not more positive nor more negative about the effectiveness of the department to accomplish the considered process or product. This type of methodology is an easy-to-use method of obtaining information about beliefs or attitudes about a phenomenon (Fink, 2006).

Demographic Characteristics

Survey question #1 consisted of the Participant Letter for Anonymous Surveys. At this point, the participant could answer agree and move onto the body of the electronic survey or they could answer “no” and exit the survey. There was a total of 124

participants that accessed the electronic survey. There were 121 participants that approved the Participant Letter for Anonymous Surveys or 97.6% ($n=121$). Three of the participants or 2.4% of the sample elected “no”.

Demographic and job-related questions

Survey questions 2-10 consist of demographic and job-related questions.

Table 1. Demographics of the Sample

Demographic Variable	<i>n</i>	% of sample
Gender ($n=121$)		
Male	88	72.7
Female	31	25.6
Non-Binary	0	0
Prefer Not To Say	2	1.7
Ethnicity ($n=121$)		
White	95	78.5
African American	5	4.1
Hispanic	17	14
Asian	0	0
Other	4	3.4
Education ($n=121$)		
High School	4	3.4
Less than Associate’s Degree	23	19

Associate's degree	30	24.8
Bachelor's Degree	41	33.9
Master's Degree	23	19
Ph.D.	0	0
Type of Agency Employee (<i>n</i> =121)		
Civilian	19	16
Sworn Law Enforcement	102	84
Sworn Law Enforcement Ranks (<i>n</i> =102)		
Officer/Detective	71	69.6
Sergeant	23	22.5
Command Staff	8	7.9
Civilian Employee Current Assignment (<i>n</i> =19)		
PSA	4	21.1
Records	0	0
Administrative Staff	8	42.1
SID/CID Staff	4	10.5
Road Patrol Support Staff	3	15.8
Sworn LEO Employee Current Assignment (<i>n</i> =102)		
Administration	8	7.8
Operations	3	2.9
Support	7	6.9
Road Patrol	59	57.8
CID	12	11.8

SID	6	5.9
District Support	3	2.9
Professional Standards	4	3.9
Sworn LEO All Past Assignments		
Administration	8	
Operations	14	
Support	26	
Road Patrol	91	
CID	34	
SID	23	
District Support	29	
Professional Standards	13	
All Employees Years of Experience (n=121)		
<2	6	5
3-5	8	6.6
6-10	23	19
11-15	15	12.4
16-20	28	23.1
>20	41	33.9

Summary of Demographic Information

The typical participant for this survey was a male (88%), white (78.5%), sworn-law-enforcement (84%), with at least an associate/bachelor level or education (58.7). The

typical participant was a police officer/detective level (69.6%) assigned to road patrol (57.8%) with more than 16 years of experience (57%).

Answers to the Research Questions

The internal components that lead to the research questions from chapter 2 were broken down into processes and products consisting of 63 opportunities for the participant to rate those internal components. The same seven sub-questions (processes) within the nine product questions consisted of bi-polar verbs and were purposively situated to essentially force the participant to slow down and thoroughly read through the choices and then decide versus just selecting the same result as they went down the list. By approaching the sub-questions from this manner, it was necessary to reverse-code the three questions that went against the negative-positive flow of answers. Sub-question #2 addressed Communication and the bi-polar verbs posted were: receive timely feedback-receive no feedback. Sub-question #4 addressed Use of Intelligence and the bi-polar verbs posted were: accountable-irresponsible. Sub-question #5 addressed Dissemination of Information and the bi-polar verbs posted were: very useful-of no use. The seven-point scale for these questions were reverse coded in order to obtain a more reportable means that agreed with the negative-positive flow of the other sub-questions. The scale for these three questions were originally 1 2 3 4 5 6 7 and were reversed to display the participant choices of 7 6 5 4 3 2 1.

An example regarding the participant sequence selection for the first category of available technology, if the participant agreed that available technology is outdated they would select 1, somewhat outdated 2, or a little outdated 3. The participant would select 4 or neutral if they were undecided. If the participant agreed that available technology was

more innovative, they would select a little innovative 5, somewhat innovative 6, or innovative 7. The remaining sub-questions from the survey were created in a similar manner.

The first research question asked, “What are the average opinions of employees of the Port St. Lucie Police Department with respect to the actions (i.e., processes) that are involved in producing specific outcomes (i.e., products) of the organization?”. To answer this research question, the average answer to each of the seven process questions was determined. The mean, as well as standard deviations, are provided in Table 2. As can be seen in Table 2, the range of means for the process questions was .68 as the low was 4.04 (Communication) and the high was 4.72 (Management Approach Towards Strictness). The 4.04 mean for Communication was slightly above the neutral number of 4. The 4.72 mean for Management Approach was closer to a little strict (5) versus remaining neutral.

The mean across all of the processes was 4.32, which indicates the average opinion of employees is slightly more satisfied with the processes of the Stratified Model than not as their answers were greater than the neutral number of 4. The mode was 4 for all of the processes.

Table 2

Mean Ratings On All Process Questions For All Employees Sampled (n=121)

Question	Mean	Standard Deviation
Q1- What are the average opinions of employees of the Port St. Lucie Police Department with respect to available technology within the organization?	4.38	1.52

Q2- What are the average opinions of employees of the Port St. Lucie Police Department with respect to communication within the organization?

4.04 1.67

Q3- What are the average opinions of employees of the Port St. Lucie Police Department with respect to management approach within the organization?

4.72 1.37

Q4- What are the average opinions of employees of the Port St. Lucie Police Department with respect to use of intelligence within the organization?

4.14 1.72

Q5- What are the average opinions of employees of the Port St. Lucie Police Department with respect to dissemination of information within the organization?

4.07 1.72

Q6- What are the average opinions of employees of the Port St. Lucie Police Department with respect to efficiency within the organization?

4.52 1.52

Q7- What are the average opinions of employees of the Port St. Lucie Police Department with respect to management availability within the organization?

4.63 1.52

Mean Across All Processes 4.32 1.59

The second research question asked, “What are the average opinions of employees of the Port St. Lucie Police Department with respect to the quality of the outcomes produced by the organization?” To answer this research question, the average answer each of the nine product questions was determined. These means, as well as standard deviations, are provided in Table 3. As can be seen in Table 3, the range of means for the process questions was .22 as the low was 4.3 (Daily Accountability Meetings for Minor Crimes) and the high was 4.52 (Working with Crime Analysts During the Process of Gathering Information).

The mean across all of the products was 4.37, which indicates the average opinion of employees is slightly more satisfied with the processes of the Stratified Model than not as their answers were greater than the neutral number of 4. The mode was 4 for all of the processes.

Table 3

Mean Ratings On All Product Questions for All Employees Sampled (n = 121).

Question	Mean	Standard Deviation
Q8- What are the average opinions of employees of the Port St. Lucie Police Department with respect to how the organization is working concerning facilitating completed reports?	4.35	1.67
Q9- What are the average opinions of employees of the Port St. Lucie Police Department with respect to how the organization is working concerning facilitating number of completed cases/designations?		

4.34 1.54

Q10- What are the average opinions of employees of the Port St. Lucie Police Department with respect to how the organization is working concerning facilitating reduction of crime in hot spots, neighborhoods (arrests, displacement, amount of activity)?

4.44 1.82

Q11- What are the average opinions of employees of the Port St. Lucie Police Department with respect to how the accountability process enables you to do your job when you are assigned to work a designated area such as a spree or hot spot?

4.41 1.65

Q12- What are the average opinions of employees of the Port St. Lucie Police Department with respect to the daily accountability meetings that you have for serious crimes?

4.36 1.53

Q13- What are the average opinions of employees of the Port St. Lucie Police Department with respect to the daily accountability meetings that you have for minor crimes?

4.30 1.50

Q14- What are the average opinions of employees of the Port St. Lucie Police Department with respect to the process of working with crime analysts during the process of gathering information for the accountability meetings?

4.52 1.67

Q15- What are the average opinions of employees of the Port St. Lucie Police Department with respect to the process of working with detectives during the process of gathering information for accountability meetings?

4.31 1.54

Q16- What are the average opinions of employees of the Port St. Lucie Police Department with respect to the process of working with supervisors during the process of gathering information for accountability meetings?

4.35 1.60

Mean Across All Products 4.37 1.62

The third research question asked, “What are the average opinions of each type of employee with respect to the processes and products of the organization?” To answer this research question, the average answer for each of the seven process questions and the nine product questions was determined for each of type of employee. These means, as well as standard deviations, are provided in Table 4 for processes and Table 5 for products. The sample was broken down into several sub-categories from all employees. They included sworn-law-enforcement officers (all levels), civilian employees, command staff (lieutenants, commanders, assistant chiefs, and chief), sergeants, officers/detectives (same rank at PSLPD), all employees with less than two years of experience, all employees with 3-5 years’ experience, all employees with 6-10 years’ experience, all employees with 11-15 years’ experience, all employees with 16-20 years’ experience, and all employees with more than 20 years’ experience.

As can be seen in Table 4, the range of means for the process questions was 2.46, as the low was 3.36 (Command Staff, Dissemination of Information) and the high was 5.82 (Command Staff, Management Availability). The means across all of the process questions as they relate to each type of employee was 4.78, which indicates the average opinion of employees is more satisfied with the processes of the Stratified Model than not as their answers were greater than the neutral number of 4. The mode was 4 for all of the processes.

As can be seen in Table 5, the range of means for the product questions was 1.03, as the low was 3.80 (Employees with 3-5 years of experience, Daily Accountability Meetings Related to Minor Crimes) and the high was 4.83 (Command Staff, Working With Crime Analysts During the Process of Gathering Information). The means across all of the product questions as they relate to each type of employee was 4.55, which indicates the average opinion of the individual employee groups are more satisfied with the processes of the Stratified Model than not as their answers were greater than the neutral number of 4. The mode was 4 for all of the products.

Table 4

Mean Ratings On All Process Questions for Each Type of Employee Sampled (Standard Deviations in Parentheses).

Process Questions							
Type of Employee	Q1	Q2	Q3	Q4	Q5	Q6	Q7
Sworn LEO, all level (n=102)	4.51(1.57)	4.00(1.69)	4.76(1.41)	4.08(1.75)	4.02(1.74)	4.50(1.55)	4.60(1.67)
Civilian Employees (n=19)	4.50(1.22)	4.24(1.50)	4.50(1.08)	4.49(1.50)	4.35(1.57)	4.65(1.33)	4.76(1.37)
Command Staff (n=8)	5.78(1.17)	3.25(2.19)	5.71(1.07)	3.42(2.30)	3.36(2.35)	5.64(1.67)	5.82(1.60)
Sergeants (n=23)	4.82(1.29)	4.22(1.70)	4.93(1.38)	4.28(1.83)	4.22(1.77)	4.67(1.35)	4.72(1.51)
Officer/Detective (n=71)	4.26(1.60)	4.02(1.60)	4.59(1.41)	4.09(1.63)	4.03(1.62)	4.30(1.53)	4.41(1.67)
<2 Years Exp. Emp All levels, (n=6)	4.11(1.85)	3.39(1.60)	5.06(1.34)	3.46(1.75)	3.39(1.57)	4.76(1.60)	5.02(1.45)
3-5 Years Exp. Emp All levels, (n=8)	3.95(1.73)	3.86(1.54)	4.44(1.44)	3.83(1.64)	3.78(1.68)	4.11(1.69)	4.29(1.80)
6-10 Years Exp. Emp	4.44(1.16)	4.11(1.48)	4.44(1.25)	4.17(1.67)	4.00(1.64)	4.68(1.39)	4.78(1.46)

All levels, (n=23)									
11-15 Years Exp. Emp All levels, (n=15)	4.37(1.43)	4.08(1.57)	4.41(1.41)	4.25(1.51)	4.13(1.45)	3.96(1.41)	3.82(1.56)		
16-20 Years Exp. Emp All levels, (n=28)	4.31(1.81)	4.10(1.79)	4.88(1.44)	4.29(1.71)	4.25(1.82)	4.42(1.59)	4.34(1.67)		
>20 Years Exp. Emp All levels, (n=41)	5.06(1.27)	4.17(1.89)	5.21(1.20)	4.23(1.99)	4.32(1.85)	5.08(1.26)	5.38(1.32)		

Table 5

Mean Ratings On All Product Questions for Each Type of Employee Sampled (Standard Deviations in Parentheses).

Product Questions									
Type of Employee	Q8	Q9	Q10	Q11	Q12	Q13	Q14	Q15	Q16
Sworn LEO, all level (n=102)	4.30(1.68)	4.32(1.56)	4.40(1.84)	4.39(1.69)	4.32(1.58)	4.27(1.55)	4.52(1.72)	4.28(1.59)	4.33(1.69)
Civilian Employees (n=19)	4.55(1.60)	4.39(1.40)	4.60(1.67)	4.47(1.38)	4.56(1.22)	4.48(1.17)	4.52(1.36)	4.45(1.25)	4.45(1.34)
Command Staff (n=8)	4.57(2.18)	4.71(2.14)	4.78(2.28)	4.71(2.18)	4.75(2.13)	4.67(2.35)	4.83(2.28)	4.66(1.99)	4.67(2.11)
Sergeants (n=23)	4.53(1.68)	4.50(1.56)	4.53(1.73)	4.63(1.62)	4.50(1.45)	4.49(1.36)	4.75(1.78)	4.35(1.42)	4.67(1.60)

Officer/Detective 4.20(1.60) 4.23(1.48) 4.32(1.82) 4.28(1.65) 4.21(1.54) 4.15(1.48) 4.40(1.61) 4.21(1.58) 4.18(1.57)
(*n*=71)

<2 Years Exp. Emp 4.14(1.87) 4.02(1.87) 4.19(1.93) 4.07(1.54) 4.17(1.56) 4.14(1.46) 4.21(1.87) 4.33(1.78) 4.24(1.88)
All levels, (*n*=6)

3-5 Years Exp. Emp 3.96(1.56) 4.04(1.56) 3.95(1.86) 3.84(1.66) 3.91(1.35) 3.80(1.43) 4.66(1.58) 3.98(1.69) 4.20(1.98)
All levels, (*n*=8)

6-10 Years Exp. Emp 4.32(1.57) 4.25(1.41) 4.49(1.65) 4.39(1.44) 4.43(1.43) 4.34(1.36) 4.42(1.43) 4.37(1.35) 4.35(1.53)
All levels, (*n*=23)

11-15 Years Exp. Emp 4.33(1.66) 4.25(1.61) 4.33(1.91) 4.29(1.70) 3.95(1.23) 3.85(1.21) 4.30(1.34) 4.11(1.24) 3.91(1.26)
All levels, (*n*=15)

16-20 Years Exp. Emp 4.29(1.70) 4.40(1.42) 4.42(1.87) 4.49(1.80) 4.43(1.65) 4.33(1.59) 4.55(1.87) 4.21(1.76) 4.20(1.57)
All levels, (*n*=28)

>20 Years Exp. Emp 4.51(1.70) 4.48(1.55) 4.59(1.81) 4.56(1.64) 4.54(1.60) 4.55(1.57) 4.64(1.73) 4.47(1.51) 4.66(1.60)
All levels, (*n*=41)

Other Findings

Survey question #20 consisted of an open-ended prompt that requested, if desired, additional explanation to any of the survey questions or an opportunity for the participant to state their opinion. There were 24 comments left for survey question #20. These comments were copied in their entirety directly from the survey on Table #6.

Two prominent themes were identified from the 24 submitted comments. The first addressed a potential lack of understanding regarding accountability meetings as six (25%) of the free-form answers indicated they do not attend accountability meetings at the officer or sergeant levels. Accountability meetings consist of daily briefings at the road patrol and sergeant levels and are approximately 20-30 minutes in length. These meetings are held prior to the beginning of each shift and are conducted by using information provided by the crime analysts. Shift briefings contain information pertaining to any relevant designations that are currently being worked along with any quality-of-life issues such as traffic enforcement. Shift briefings also provides an opportunity for training and education that can be accomplished in this short amount of time.

The second theme identified addressed multiple subthemes that were similar in nature. Seven (29.2%) of the respondents voiced their concern regarding the restrictions or hindrances related to the effectiveness of the Stratified Model. Outdated technology was listed as a hindrance as well as the reactive nature of the Stratified Model. Five (20.1%) of the respondents indicated that because of the reactive nature and strict adherence to the Stratified Model essentially limited officers from using their individual creativity towards a more proactive approach to policing.

Table 6

Free form answers by anonymous employees for survey question #20.

Response	Narrative
1	Questions related to sworn personnel need a N/A option for civilians since survey won't allow for submission without an answer.
2	RE: advocates - department doesn't utilize them or their services. Could greatly aid dept in everyday reduction of services if utilized better
3	Regarding all the questions, the main issue with Stratified Model is that it is meeting, agenda, and action item driven. Everyone is so busy checking the boxes and being held accountable that they are swamped with work and not doing real police work. The incoming new officers aren't learning real police work, i.e., "how to be cops". They are just learning how to check boxes and accountability.
4	I do not have daily accountability meetings as indicated in questions 15 and 16. That is why I answered with all neutral responses because there was no "N/A" response to select.
5	15-19 I can't say we've really done. Yes we do the leg work but I believe CID does more of the accountability meetings and coordinates with the analysts than we do so that's why I put neutral.
6	Overly strict adherence to a formalized process, such as the stratified model, can hamper creativity by members of the organization.
7	this department is re-active and not pro active.
8	In my opinion, the stratified model is given too much credit. It is a reactive approach to law enforcement. The administration puts too much emphasis on this model when it can be shown all it does is move all police officers to one area, thwarting crime in that area and pushing it to another area. It does not deter crime just displaces from its initial area. If I were to change anything with it, instead of marked patrol cars in the area of spree's or hot spots, I would utilize bait cars and undercover surveillance. This would stop the criminals in the act and not wait for another crime with more evidence to collect.

- 9 Technology can only go so far without the proper people in place to gather information work with technology and to get that information out. Supervisors are strict when it comes to working hot spots yet they aren't in touch with real policing due to after they get promoted they forget what it's like to be a police officer.
- 10 Overall our dept does excellent job on dissemination of information
- 11 I was not allowed to leave questions blank answering as a civilian.
- 12 N/A
- 13 I really can't provide a lot of insight on these meetings, as I do not attend the meetings.
- 14 The Lieutenants task their Sergeants with counting up all the time spent in sprees and hotspots. The software is outdated on smartforce and takes too long to sit and count widgets to get the times for each shift and officers. It is made to be almost like a contest pitting one shift against another which I can't stand. After all these years, I don't see the value in it. Known offenders are placed on bulletins and are constantly being harassed by detectives who are told they have to speak to them (even if the suspect is another color). There is no time for officers to actually do any type of proactive work as every minute of their day is spent running call to call or making sure they get those traffic stops in. There is such a lack of manpower. We have less officers now than we ever did. It is unsafe and unacceptable. Currently, Sergeants are running calls for service or handle calls from their car in an attempt to clear out calls. The city still believes we are a "small town" which we are not. Our citizens are spoiled and needy which is what the city has promoted and now, we are stuck as people don't want to be told no. There simply isn't time for responding to nonsensical calls for service. I could go on and on; however, I know you already know this but it makes me feel good to actually be able to write it and not be crucified.
- 15 best of luck with everything Rob... :)
- 16 This is a very effective program that has yielded great results. There are no accountability meetings under district Lieutenant level. Most communications under that level are informal interested or specifically directed. Resources on the road are limited split between pressing for traffic numbers. There is never discussion of prioritizing hotspots and spree areas. Tying up

patrols for random airbag theft when 15 ford duellys are being stolen needs specialized. info goes down, never up.

- 17 The majority of my answers were neutral, I have been middle of the road with the S.M. I do believe that the Stratified Model needs a tune up and that technology can serve us in a better way. How to tune up the Stratified Model is the \$64,000,00 question.
- 18 Nothing further
- 19 No
- 20 I disagree with the stratified model and think we should be more proactive on the street instead of reactive. We need LPR's and more officers on the roadways. New technology and specialized units for specific cases.
- 21 18) As a first line supervisor, I'm not normally involved in this process.
- 22 Most of the answers to the questions were based on my past knowledge and experience in the agency, as I do not participate in any meetings or work with detectives.
- 23 none
- 24 I don't really participate in the accountability meetings etc. that's why my answers are neutral.
-

Chapter 5 Discussion

The purpose of this study was to discover employee perceptions as they relate to specific work processes and products within the Stratified Model at the Port St. Lucie Police Department (FL). Each employee within the organization works a specific aspect of the Stratified Model and collectively every employee at all organizational levels participate. All employees within the organization were given the opportunity to rate internal mechanisms within this crime-reduction model. The Stratified Model has enjoyed continued statistical success in crime reduction over and above state and national crime reductions for seven-straight years.

In this study, these sought-out perceptions involved how agency employees of the Port St. Lucie Police Department view their specific work contributions as they relate to seven-different internal organizational categories. These categories involve available technologies, communication, management approach, use of intelligence, dissemination of information, efficiency, and management availability within the Stratified Model. The employees were able to provide any suggestions to improve the Stratified Model. Lastly, employees were able to expound further regarding their previously listed answers.

The Stratified Model was first introduced within the Port St. Lucie Police Department in 2004 by Boba and Santos (2011). In 2012, this crime-reduction model was fully implemented into the fabric of the agency and has been used exclusively since. There has been a significant crime reduction in Port St. Lucie since the inception of the Stratified Model (FBI, n.d.). These items were previously discussed in chapter 1.

The previous crime reduction models used by the Port St. Lucie Police Department had limited success as evidenced by the flat crime-reduction rates during the

time period prior to the gradual implementation of the Stratified Model (1999-2004). The four different policing districts were not using the same crime-reduction approaches appropriately and this lack of cooperation between districts caused friction. It was this friction that perpetuated the communication breakdown organizationally. A lack of agency buy-in continued to fester primarily due to the ineffectiveness of these multiple and differing crime-reduction philosophies (Santos, 2013). The captains would apply their own crime-reduction philosophy. Often, a small group of officers would complete the various crime-reduction tasks as directed by the different captains (Boba and Santos, 2011; R. Del Toro, Personal Interview, September 12, 2019).

Once the Stratified Model had been fully implemented, it was vital for the entire agency to buy in to this new crime-reduction approach (Santos, 2013). The top administrators were tasked with implementing this new approach through its initial growing pains. There was considerable pushback predominately from the captains' level of the organization. New guidelines and policies were established that departed from how things were always done and forced all organizational employees to do their job a new way and with a higher level of accountability (Boba and Santos, 2011; R. Del Toro, Personal Interview, September 12, 2019). The statistical success of the Stratified Model was evident by the large reduction of crime in Port St. Lucie over a period of seven years (2012-2019) (FBI, n.d.).

At the conclusion of the current literature review, it was determined that no other studies had been written addressing employee perceptions relating to crime-reduction models. This could be because that nearly all of the available literature pertaining to the Stratified Model had originated from Boba and Santos or a few of their students. There

was a gap in the available literature revealed pertaining to how the Stratified Model workers perceived specific internal work processes and products that influenced organizational goals and the accompanying results. To address this gap, research and survey questions were developed and put before the employees of the Port St. Lucie Police Department. Both civilian and sworn-law-enforcement officers were invited to participate. The research questions were developed in order to obtain the employee perceptions regarding both the internal processes as well as products that resulted from the internal processes.

For this study, an electronic survey was developed in Microsoft Forms that addressed the different processes and products relevant to the internal components of the Stratified Model. After the demographic questions, the employees were provided a seven-point Likert Scale consisting of bi-polar verbs in order to establish quantifiable opinions of these products and processes.

Additionally, it is important for employees to see the fruits of their labor. The overall crime rate for the City of Port St. Lucie has significantly decreased during the past several years, but which factors within this crime-reduction continue to motivate organizational employees? Opportunities for additional study present themselves in the form of identifying these motivational factors and then determine which combinations of factors actually provide sustenance for employees to continue operating at a high level of performance.

Research Question #1

What are the average opinions of employees of the Port St. Lucie Police Department with respect to the actions (i.e., processes) that are involved in producing

specific outcomes (i.e., products) of the organization? To answer this research question, the average answer to each of the seven process questions was determined.

Overall, the average opinions of employees in regard to questions addressing products and processes were slightly positive as all of the mean scores were more than 4, but less than 5. The mean for these sub-questions ranged from 4.04-4.52. These scores would indicate the average employee is generally satisfied with how the internal components of the Stratified Model work in relation to how processes become products as data travels throughout the organization.

Research Question #2

What are the average opinions of employees of the Port St. Lucie Police Department with respect to the quality of the outcomes produced by the organization? To answer this research question, the average answer each of the nine product questions was determined.

Overall, the average opinions of employees in regard to questions addressing products and processes were slightly positive as all of the mean scores were more than 4, but less than 5. The mean for these sub-questions ranged from 4.30-4.51. These scores would indicate the average employee is generally satisfied with how the internal components of the Stratified Model work in relation to the quality of outcomes produced by the organization.

Research Question #3

What are the average opinions of each type of employee with respect to the processes and products of the organization? To answer this research question, the average

answer for each of the seven process questions and the nine product questions was determined for each of type of employee.

The subgroup consisting of the command staff had the highest mean in nearly all of the survey questions. There were three survey questions where the command staff did not have the highest mean. For these three questions, the command staff had the lowest mean. This would include survey questions #'s 2, 4, and 5. What should be pointed out is that these three questions were the questions that required reverse coding as the order of the bi-polar verbs were reversed. This phenomenon only seemed to appear with the command staff mean for those three specific research questions. There is no evidence to suggest the command staff's mean score for research questions #'s 2, 4, and 5 were not true nor illegitimate.

The command staff also has the highest overall mean when all of the survey questions were combined with a mean of 4.71. The sub-group consisting of employees with more than twenty years had an overall mean of 4.65. Both sub-groups had fairly positive overall ratings as to how they viewed the various internal processes and products relating to the Stratified Model.

Contrary to the highest mean rating scores, the subgroup consisting of employees with 3-5 years of experience had the lowest overall mean when applied to all of the survey questions (4.04). This subgroup had the lowest mean score in 7 of 16 research questions. This same subgroup was second or third to last in seven additional research questions.

Overall, the average employee of the Port St. Lucie Police Department had a more positive rating than negative in each of the questions which suggests they are essentially satisfied with the current state of the Stratified Model.

Interpretations of Findings

Technology continues to advance as well as the methodology in which information can effectively travel throughout an organization. The agency intra-net has been in place within the Port St. Lucie Police Department since 2006 and officer/detectives have been actively submitting information to the intra-agency thread since 2013. Some participants cited during the free-writing portion of the survey that outdated technology inhibited communication and acted as a hindrance to their ability to do their job effectively. It should be noted the average-agency employees had a mean of 4.38 when addressing available technology and a mean of 4.04 when addressing communication within the organization. This score suggests the average-agency employee is more satisfied with available technology than not. However, the command staff had a considerably higher mean (5.78) with available technology but a decidedly lower mean (3.25) when they rated communication within the organization and (3.42) for use of intelligence.

The results of this study were expected in the aspect the average employee approved of the manner in which the Stratified Model was conducted as evidenced by their ratings to processes, products, and the quality of outcomes within the organization. It was not until the subgroups were later analyzed that interesting trends began to emerge. It was expected the command staff would have the highest overall rating when combining all of the categories. However, when it was determined the command staff's ratings for

communication within the organization, dissemination of information within the organization and use of intelligence were the lowest of any subgroup. This revelation provided the basis of the recommendations' section.

The command staff had the lowest mean ratings in three survey questions that addressed communication within the organization, use of intelligence within the organization, and dissemination of information within the organization. These three categories appear to be closely related as the common component among them is how information of any type effectively moves throughout the agency.

Currently, information, intelligence, and communication are directed throughout the agency by using email, the intra-agency portal (now called SmartForce) and accountability meetings (briefings for road patrol). Email is used for posting updated crime bulletins by one or more of the four crime analysts. During 2019, a tabulation aspect was implemented (J. Bolduc, Personal Interview, June 23, 2021). This tabulation aspect allows the lieutenants to calculate the data much quicker as the front-end user is responsible for inputting the information into a type of spreadsheet that now transmits the data into a usable table. One drawback of the current system would be that it is reliant upon good and timely information being posted onto the open-designation thread. An example would be that an officer that was conducting a close patrol in a designated hotspot or spree area is called away on a dispatched call, forgets to input their information until later in the shift or even the next day because they may have become involved in a longer type of call. That information will not be as timely and if they inadvertently do not list all of the details of their activity, the quality of the information will suddenly fall off.

In the future, the Port St. Lucie Police Department is hoping to have the capability of when an officer/detective/sergeant enters a designation area, their AVL (Automatic Vehicle Locator) will then notify the tabulation program to begin the time-keeping aspect. Ideally, OSSI would then be able to pull over any cases or activity that were pulled resulting from the time within the designation area (J. Bolduc, Personal Interview, June 23, 2021). One of the main problems that existed prior to the implementation of the Stratified Model was a lack of communication, and it was this lack of communication that had caused friction within different aspects of the agency that further perpetuated the organizational-communication breakdown (R. Del Toro, Personal Interview, September 12, 2019).

Power and Rienstra (1999) argue that managers can become so focused on subsystems such as tallying time and activity information produced by front-line workers that they fail to share potential related and important information (intelligence derived from front-line worker activity). Managers need to be able to discern valuable information from less-important information and then disseminate this information to the appropriate conduit. It is time to “start paying attention to internal communication and mechanisms” (p. 10) as this should provide an additional avenue for improved communication.

It was expected the employee group with over 20 years of experience had the second highest overall positive rating, only to trail the command staff. Employees with over 20 years of experience have generally accepted the Stratified Model as evidenced through their positive ratings. However, unexpected was the employee group with 3-5 years of experience had several process and product categories with a negative rating

(less than 4). The associated categories included available technology, communication within the organization, use of intelligence, dissemination of information, facilitating completed reports, facilitating the reduction of crime, accountability process, daily accountability meetings for serious crimes, daily accountability meetings for minor crimes, and working with detectives. This subgroup of employees is fairly new with the agency and perhaps has not fully grasped the aspects of the Stratified Model.

Context of Findings

A gap in the current research was identified during the literature review presented in chapter 2 regarding how employees perceive the crime reduction model's specific internal work processes that influence organizational goals and the accompanying results (Bond and Braga, 2015; Dabney, 2010; Firman, 2003; Jang et al. 2010; Magers, 2004; Weisburd et al. 2003). There is also a gap in the literature how workers perceive actionable processes, quality of outcomes, and products completed by employees within a crime-reduction model (Bond and Braga, 2015; Caudill et al. 2013; Cherney, 2008; Disaster Center, 2018; Firman, 2003; Haberman, 2016; Jang et al. 2010; Magers, 2004; Welsh et al. 2012; Willis and Mastrofski, 2018; Weisburd et al. 2003).

The purpose of the Stratified Model was to establish a higher level of responsibility throughout the agency through the use of accountability meetings. These meetings were described in chapter 2. The Stratified Model has only achieved limited support of its employees as evidenced by the mean scores of the electronic survey associated with this study. This notion suggests that additional work is needed by the administration to raise employee support. A raise in the level of employee support should also raise the level of motivation achieved by employees. This improvement could lead to

additional successes within the Stratified Model.

Prior studies in the areas of crime analysis, COP, POP, and COMPSTAT addressed the impact of the statistical success as a program or approach rather than focus on how the individual employee experience their work processes, their successes, their failures, their individual motivations and finally their level of satisfaction (Bond and Braga, 2015; Caudill et al. 2013; Cherney, 2008; Disaster Center, 2018; Firman, 2003; Haberman, 2016; Jang et al. 2010; Magers, 2004; Welsh et al. 2012; Willis and Mastrofski, 2018; Weisburd et al. 2003). While this study was directed at employee perceptions as they related to specific internal processes within a crime-reduction model, it did not specifically address the concept of job satisfaction. Future studies should include the concept of job satisfaction and motivational factors.

The free-form answers provided in the electronic survey provide some interesting points. One of the themes identified during the free-form answers indicated a lack of knowledge regarding accountability meetings below the lieutenant level. Daily briefings are held prior to the beginning of each shift; days, evenings, midnights. Information is provided during these meetings and resources are directed by the sergeants onto their subordinates (R. Del Toro, Personal Interview, September 12, 2019).

One of the primary tenets of the Stratified Model derived from COMPSTAT is the manner in which directives flow from the top of the organization to the front-line workers disseminated by the data generated by the crime analysts (Bond and Braga, 2015; Dabney, 2010; Firman, 2003; Jang et al. 2010; Magers, 2004; Weisburd et al. 2003). Additionally, crime analysis has traditionally been used as a tool for the determination of crime mapping, hot spots, offenders, and short-term crime solutions

(Bond and Braga, 2015; Burnett, 2007; Dabney, 2010; Jang et al. 2010; O'Connell, 2002; Ratcliffe, 2004; Santos, 2013; Santos, 2014; Santos and Santos, 2016; Santos and Taylor, 2013; Seigel, 2014; Shane, 2004; Weisburd et al. 2003). The Port St. Lucie Police Department relies on the crime analysts to essentially direct all of the designation activity throughout the organization (R. Del Toro, Personal Interview, September 12, 2019).

The information gathered by crime analysts must be relevant, accurate, timely, and lastly actionable (Santos and Taylor, 2013). Crime analysts are reliant upon inputs being each of these without question. But, what if they were not? The question is raised, can technological advancements overcome the issue if an officer is suddenly called away on a dispatched call that later turns into an arrest and a multi-hour event? Memories and details fade and are sometimes forgotten altogether. The information gained from these intra-agency posts are only as good as the quality of their inputs. Bullock (2012) asserts that technology actions should present themselves in the development of objectiveness; however, it was further argued these processes involved with crime analysis are “subjective and interpretive” (p. 140). Does this hinder the various processes necessary to adequately address the crime reduction needs? This would include the communication process, use of intelligence, and dissemination of information within the organization. Recall, these are the processes that were ranked very low by the command staff.

The information being disseminated from the crime analysts originate in the form of bulletins and emails that contain information regarding designations (C. Davis, Personal Interview, August 16, 2019). Workers are then directed to conduct activity within these designations and then report back their time and activity via the agency intranet (R. Del Toro, Personal Interview, September 12, 2019). Because work and

information are being directed down the organizational hierarchy, front-line workers simply do not have the ability to provide feedback except for information related to a particular designation. This gap in the literature and organizational activity were the primary reasons for the development of a survey that encouraged the perceptions of the workers within the organization. The workers doing the actual work should have an opportunity to provide perceptions regarding the processes and products within the organization.

All of the other studies located that addressed various crime-reduction models mainly concentrated on the positive/negative statistical rates of crime-reduction models and whether the statistical results were either short or long-term (Bond and Braga, 2015; Caudill et al. 2013; Cherney, 2008; Disaster Center, 2018; Firman, 2003; Haberman, 2016; Jang et al. 2010; Magers, 2004; Welsh et al. 2012; Willis and Mastrofski, 2018; Weisburd et al. 2003). These articles also did not discuss how to specifically motivate employees or how to retain their continued loyalty towards their respective crime-reduction models.

The Stratified Model is an accountability approach to crime reduction where directives are deployed from the upper levels of the organization. Because this is a top-down approach, there is little to no room for upward mobility of improvements or suggestions that may come from the officer/detective level or the sergeant level of the organization. Moore (2003) argues that COMPSTAT, which is one of the crime-reduction models used by the Stratified Model does not allow for the front-line officers to innovate, but rather comply with the top-down mid-managerial effect. These ideas are evidenced by the overall high rating of the organizational management approach

strictness ratings (4.72) from the average employee and throughout each subgroup that was identified. The range of means was 4.41-5.71 for this particular category.

The concept behind Community Oriented Policing (COP) was the easier dissemination of information, becoming proactive, high-visibility patrols and a quicker progression for the decision-making process as there were conceivably less organizational layers to create unnecessary bureaucracy. Community Oriented Policing allows for the community to proactively work alongside law enforcement in order to solve communal problems to include crime reduction (Bullock, 2012; Gill et al. 2014; Hendrix et al. 2019; Hochstetler, 2002). The Stratified Model is predicated on a traditional hierarchy of policing, which is more of a pyramid design versus a broader, flatter hierarchal structure of traditional policing. This pyramid design is structured for directives to be transmitted downward but limits the types of information being transmitted back up to relevant crime-reduction data and very little else (Boba and Santos, 2011; Haberman, 2016). Several of the free-form answers focused on the desire for the agency to become more proactive and less of the reactive nature as needed by the Stratified Model.

Bond and Braga (2015) suggest the elements of the accountability meeting process should include “cooperation behaviors, constructive feedback systems” (p. 28). These meetings should consist of workers that represent various roles throughout the organization and work groups. Many of the attributes from COMPSTAT were adopted by PSLPD’s interpretation of the Stratified Model. However, the qualities necessary for the decision-making process only exist at the command staff level of the organization.

The organizational activity that was delineated in the Workflow Explanation

(Figure A), and the Logic Model (Figure B), were consistent and supported by the survey data as being relevant. The various processes and products that were identified in figures A-B were instrumental in identifying the relevant data produced within the various subgroups. It was from this information that meaningful recommendations could be made.

The overall perception relating to the internal components of the Stratified Model given by the average employee of the Port St. Lucie Police Department was slightly positive, but not overwhelmingly positive. While this outcome was not unexpected, what could be done to potentially raise their ratings involving the internal components? Additional efforts should be sought to potentially expand the list of processes and products within the organizational structure. This expansion could uncover additional key elements that may expose employee motivational factors and therefore lead to ratings increase within certain aspects of the survey results.

The command staff had the highest mean ratings of any other subgroup, which indicates their support of the Stratified Model is stronger than any other subgroup. Recall, the command staff also had the lowest mean ratings for communication within the organization, dissemination of information within the organization, and use of intelligence within the organization. What if these areas were improved? Would that lead to an overall improvement as the average employees perceive those internal components?

The findings from this study underscore the need for better unit collaboration and information sharing. The findings also stress the need for the proper motivation of front-line workers that emanates from specifically the lower supervisory levels within the organization. As it stands, information and work directives are pushed from the top of the

organization to the front-line workers (Boba and Santos, 2011). Improvements should be easily voiced from the bottom and taken into consideration by the command staff without barriers. Different shifts should be speaking to each other in a timelier manner versus waiting for the bulletins to be disseminated. The vast experience readily available from the front-line workers should be relied upon on a more regular basis. Front-line officers are the ones answering the calls for service. These police officers are the ones occupying the designated areas and when properly motivated will produce the appropriate information that is later disseminated by the crime analysts. Examples were provided using real-life examples where the quality of information being inputted into the intra-agency threads was not timely, nor relevant, nor actionable. This will lead to a significant breakdown of the data and intelligence process within the organization (Santos and Taylor, 2013).

Motivation of the workforce by first-line supervisors (sergeants) would be key to upholding these crime-reduction strategies and continue to reduce the overall crime rate within the City of Port St. Lucie. Dabney (2010) suggested that first-line supervisors are vital to the motivational process because if they (the sergeants) are not motivated then how can their workers possibly be properly motivated? Dabney advocated the sergeant's level have very little to do with the data analysis or interpretation process and in fact their "supervisory function" (p. 42) has been significantly reduced as a direct result of the COMPSTAT process. Many of the attributes embedded in the Stratified Model originate from COMPSTAT. This is an interesting concept because some of the free-form answers support the notion of increased first-line supervisor involvement.

By reducing the overall supervisory function of the sergeants' level within the police organization would appear to stymie their ability to effectively lead and properly motivate their subordinates. Here are some specific comments taken from the free-form portion of the electronic survey that may shed some light on employee motivation by first-line supervisors:

“As a first line supervisor, I'm not normally involved in this process.”

“Supervisors are strict when it comes to working hot spots, yet they aren't in touch with real policing due to after they get promoted.”

“There are no accountability meetings under district Lieutenant level. Most communications under that level are informal interested or specifically directed.”

“Currently, Sergeants are running calls for service or handle calls from their car in an attempt to clear out calls.”

Bond and Braga (2015) argue that negative issues driven by “deficient problem-solving” (p. 28) could be attributed to a lack of cooperation between front-line officers and the civilian employees, such as crime analysts or police service aids. This lack of continuity could further contribute to the communication breakdown organizationally, which could lead to animosity between different sections of the agency (Power and Rienstra, 2010). The meeting process with the front-line workers could benefit from improved information sharing being successfully implemented from one area of the organization to others. This additional avenue of information sharing could act as a catalyst for a higher level of cooperation and motivation for the workers.

Gill et al. (2014) suggest that many of the innovations involved with COP depart from the traditional and reactive nature of policing that occurred prior to the institution of

COP in the 1990's. COP relies on long-term solutions as does the Stratified Model, however there is a distinct departure in their individual philosophies. Gill et al. continued with the notion that police were not tasked so much with crime fighting, but rather “order maintenance, service provision, reduction of fear, and conflict resolution” (p. 401). These attributes were instilled into COP as the front-line officers were empowered to become problem solvers.

Flash forward to the current time and to better understand the Stratified Model, we must appreciate that front-line officers now are multi-tasked with a laundry list of duties that would rarely show up on an officer's duty checklist, taking dispatched calls, investigating crimes, documenting their investigations, and then inputting their information onto the spreadsheet program of the intra-agency designation thread, traffic complaints, neighborhood complaints, and business complaints. They are also responsible for assisting animal control and code enforcement when the animal-control officers or code-enforcement officers are dealing with an uncooperative animal owner or homeowner/tenant. Front-line officers address flag-downs by citizens when the officers are actively patrolling their zone or assigned designations and then deal with those incidents. They are responsible for dealing with the mentally ill and alcohol/drug dependent people. They are expected to be experts in the art of de-escalation in any situation while keeping their head on a swivel to avoid being physically attacked at any given moment, sometimes while training a brand-new police officer.

The lack of manpower combined with increased population create a difficult situation for front-line workers of today's police departments to remain motivated each and every shift. However, they must remain motivated. Police officers take an oath to

uphold the law and to protect the citizens of their city/county/state. Recall from chapter two that the Port St. Lucie Police Department has the second lowest ratio of police officer per 1,000 citizens in the State of Florida (1.33/1,000). This number is only slightly behind Cape Coral (1.23/1,000 citizens) (FDLE, 2016). The average agency in Florida has a ratio of 2.5/1,000 citizens.

The studies that have been delineated in the literature review section of this paper address principles needed to obtain reasonable statistical result or reductions in crime. However, they do not specifically address employee perceptions, employee experiences, job satisfaction, or list improvements to these aforementioned areas. The areas of COMPSTAT, COP, POP and Crime Analysis were revisited, and keyword searches were performed in the areas of employee (cooperation, satisfaction, experience, perception, improvement, and motivation) in order to connect past literature with the results of this study.

COMPUter STATistics

Bond and Braga (2015) argue that participants involved in the meeting process do not contribute to the meeting because it may be perceived as “questioning authority” (p. 29). Meeting members were encouraged to participate in the meetings as a way of offering specific feedback versus being perceived as criticizing. Bond and Braga continued by suggesting additional participation in the meetings by members will lead to “improved outcomes” (p. 32).

Dabney (2010) noted that competition between units such as squads that are working at the same time, but just different geographical section of the city may experience an erosion of information being shared due to “heightened competition” (p.

45). Dabney also suggested that front-line officers tend to establish a comfort zone where they learn to do enough work to get by and not draw any attention to themselves. This notion departs from the organizational goals of the Stratified Model.

Community Oriented Policing

Gill et al. (2014) argue that police leaders are responsible for properly orientating their workers into a new culture and at all levels of the organization. Hendrix et al. (2019) suggest “there is little information about how perceptions of policing strategy vary within the department” (p. 740). This concept falls in line with the initial assessment of this paper in regards that no studies have been located regarding obtaining employee perception involved with a crime-reduction model.

Schnebly (2008) indicates a higher level of job satisfaction for newer officers that were trained in COP versus officers with more experience. A few of the free-form answers from the electronic survey support this notion: “The incoming new officers aren't learning real police work, i.e., "how to be cops". They are just learning how to check boxes and accountability.” This notion also supports how work is directed throughout the organization as a result of the Stratified Model crime-reduction model.

Tillyer (2018) asserts that officers with higher levels of discretion tend to make fewer arrests. Table 7 below depicts where the overall crime rates were observed with the respective number of arrests made for that associated year. Table 7 clearly indicates a rise and fall of the number of arrests over a ten-year period. We have learned the Stratified Model does not allow for much discretion at the front-line level and therefore the decrease in arrests should be attributed to the reduced overall-crime rate as that too decreased by a significant amount.

Table 7*Port St. Lucie Police Departments Overall Crime Rate and Number of Arrests By Year*

Year	Crime Rate	# of Arrests
2011	2685.11	2906
2012	2194.71	3155
2013	1751.70	3445
2014	1691.51	3948
2015	1624.22	3893
2016	1596.46	3736
2017	1312.94	2315
2018	1176.39	2120
2019	1143.41	2016
2020	Not available	1887

The crime rate number is based upon statistics obtained from the Uniform Crime Report (UCR), which is an annual report produced by the Federal Bureau of Investigations that address two different levels of crime and collectively contribute to the overall crime rate. This number is the number of crimes per 100,000 people in the United States. The purpose of this comparison is to allow towns and cities of differing populations to be accurately compared. The UCR has been in existence since 1930 and is finally giving way to an improved system called National Incident Based Reporting System (NIBRS). Index crimes include aggravated assault, forcible rape, murder, robbery, arson, burglary, theft, and motor-vehicle theft (FBI, n.d.).

Problem Oriented Policing

Bond and Hajjar (2013) suggested that front-line officers often rely on their experience to solve problems because they simply do not rely on the data analysis provided to them. This notion was also supported by Bullock (2013), who suggested that police officers developed a certain level of knowledge of their given patrol area, and this influenced what type of information was channeled towards the agency in the form of intelligence. This disconnect could cause additional breakdowns in the communication process. Bullock (2013) continued with her assertion that information that is immediately useful to front-line officers is commonly used while other information is usually discarded. Mazerolle et al., (2013) suggested that specific leadership styles were more effective by influencing workers to perform at optimum levels. The idea was to drive the workers to empower and innovate. This formula would lead to additional employee motivation.

There were articles that suggested additional studies were needed to address the importance of facilitating positive findings that cause undue stress on the messenger that is sometimes required to disseminate negative results (Welsh et al., 2012), and employee perceptions (Haberman, 2016). Sytsma and Piza (2017) was the only research study that focused on employee perceptions; however, the context of that focus was on bicycle patrols versus motor-vehicle patrols. Research studies focused on police employee perceptions appear to be an oddity and further become rarer when applying a crime-reduction model such as the Stratified Model.

Implications of Current Findings

The Stratified Model has been instituted within the Port St. Lucie Police Department for nearly a decade. The statistical accomplishment of the Stratified Model in

reducing the overall crime rate in the City of Port St. Lucie has been successful. Between 2011 and 2019, there has been a reduction of 57.4% in the overall crime rate. In light of the statistical success of the Stratified Model, there is still room for improvement that should lead to additional successes within this crime-reduction model.

During that period of time, there have been minimal upgrades to the manner in which information travels throughout the organization. The information that is disseminated travels from the top to the bottom using email and the agency intranet. Information pertinent to designations is then reported back by using the agency intranet. This information is then used at the different accountability meetings (C. Davis, Personal Interview, August 16, 2019; R. Del Toro, Personal Interview, September 12, 2019). Specific feedback from front-line workers regarding potential improvement to processes remains nonexistent. Many of the free-form answers support this concept.

There are several subsystems grounded within the agency. This would include the different divisions both civilian and sworn-law enforcement such as police service aids, records, crime-scene investigators, road patrol, criminal-investigations division, special-investigations division, district support, SWAT, administration, crisis-negotiation team, field training, training, and recruiting. These subsystems each have their own method of communication within each distinct unit. The value of the information is potentially being lost once the information leaves the individual subsystem. Moreover, this information could be overlooked or misinterpreted by others outside those subsystems unless it is effectively communicated (Power and Rienstra, 1999).

This situation can be improved by encouraging these subsystems to collaborate, thus pulling together the individual resources for the good of the entire organization

(Power and Rienstra, 1999). The strict nature (4.72 average employee mean) of organizational management approach allows for very little room for change being initiated from the bottom. Power and Rienstra (1999) discovered in their study that barriers to communication will ultimately hinder how information travels between these subgroups and how information travels from those subgroups upward. A lack of cooperation will continue to fester between the various groups and will result in further “fragmentation and animosity” (p. 10). Front-line workers expect their supervisors to possess more information than they do in order to allow the front-line worker to properly interpret downward traveling information.

A second recommendation involves the development of a mobile application that can be accessed by employees via smartphone. A PSLPD mobile application could contain many resources at one singular access point that are now only available to a few employees within the agency. The idea would be to push these potentially untapped resources towards the entire agency employee populace. ArcGIS, Crystal Reports, Microsoft Office Suite, Smart Force (PSLPD Intranet), RF Flow, NCIC/FCIC, CJIS, Jail, Department of Corrections, Department of Juvenile Justice, TLO, Florida driver’s license data, and Open Source are examples of data bases currently used by the agency (C. Davis, Personal Interview, August 16, 2019).

Russo (2017) indicated that a similar program in his department (FDNY) used Geographic Information Systems or GIS and was only available in kiosks located in the fire houses. The information needed to be easily attainable by the employees not only while on duty, but off duty as well. The GIS platform offers a tremendous opportunity for an “information-sharing platform” (p. 67). Russo (2017) also suggested a mobile

application be available to his agency to better communicate information between the fire and police departments. This was not the case at PSLPD; however, officers, detectives and other employees only have access to a limited number of programs while using agency computers such as the intra-agency portal and email. Email can be remotely accessed by employees while off duty, however the intra-agency portal can only be accessed by an agency-issued computer. The availability to a mobile application would allow all agency employees twenty-four-hour access.

As with any new technology, a pilot program would need to be initiated prior to full implementation (Russo, 2017). A small group of employees would be trained to utilize the full technology. Items can be added and subtracted to fit the informational demand necessary to improve the manner in which information travels throughout the agency.

A third recommendation would be to revisit the accountability meeting process at the lower levels of the organization. Results from the free-form writing section of the electronic survey indicated that many front-line workers and lower-level supervisors did not understand that daily briefings were a form of accountability meeting. While not specifically formalized like the COAR, STARCOM or daily administrative briefings, daily-road-patrol briefings are still an important conduit of information and direction to and from the lower levels of the organization. Perhaps, formalizing through training directed at this important informational point would allow employees to actively participate in the exchanging of information on a more regular basis. This would also present an opportunity for command staff to attend in order to accumulate additional intelligence from the ground level.

A fourth recommendation would be to appoint a communications/intelligence officer. This person would be responsible for directing information appropriately throughout the agency. They would act as a liaison between the crime analysts and the rest of the agency while regulating the flow of information/intelligence back and forth. As it stands, the crime analysts are responsible for compiling information obtained from police reports. Then, after consulting with their various databases (outlined in chapter 2) and analyzing the data for similarities, crime analysts are then responsible for producing timely and informational crime bulletins (C. Davis, Personal Interview, August 16, 2019). A potential problem with this approach could be the lack of expertise of crime analysts in the area of operational policing (Cope, 2004). This lack of expertise could result in the misinterpretation of the incoming data; should not, but it may. What could also impact the proper interpretation of data would be the quality of data coming from those initial police reports. While the quality of police reports has improved since the inception of the Stratified Model, additional improvements are still needed in order to raise the bar in which information is obtained, utilized, and later disseminated (R. Del Toro, Personal Interview, September 12, 2019). These three key areas, communication within the organization, use of intelligence within the organization, and dissemination of information within the organization were each rated low by the command staff. These recommendations provide an opportunity for improvement to an already successful crime-reduction model.

On June 25, 2021, this author met with Chief Bolduc of the Port St. Lucie Police Department and discussed some of the findings from this study. He was advised of the command staff's negative ratings involving communication within the organization,

dissemination of information within the organization and use of intelligence within the organization. Chief Bolduc reflected and in summary said that he has been involved in law enforcement for 34 years and during that time, poor communication always seems to come up as a possible hindrance to the organization and was not surprised at that result. He was surprised with the dissemination of information and use of intelligence negative ratings because he indicated that he holds a daily administrative staff meeting and at the end of every meeting he literally goes around the room and asks everyone in attendance if they have any questions or anything to add to the meeting. I explained the recommendations and received positive feedback regarding the mobile application. Chief Bolduc remained neutral on the communications officer, better collaboration at the lower levels of the organization, and additional training at the lower levels of the organization to better formalize the accountability meeting process (J. Bolduc, Personal Interview, June 25, 2021).

Follow-up conversations with the chief and administration should occur at least on a bi-annual basis to determine if any of the recommendations were utilized as well as their potential successes or failures, and any further remedies that may be realized. Additionally, interviews should occur with random workers within the organization to determine their perceptions regarding any improvements or degradations in work performance or work environment that may be contributed to additional factors. Ideally, these communications should be analyzed using qualitative research methodology such that a more nuanced understanding of the experiences of the employees can be well-documented and utilized for further improvement of the implementation of the Stratified Model.

Limitations

There are a variety of limitations of the current work that need to be addressed in future research. Generalization of this study to the entire law-enforcement community will be difficult because there was only one agency used in this study. The Port St. Lucie Police Department was the first to utilize the Stratified Model. There are other agencies that now employ the Stratified Model, and this should allow additional studies of this nature to be undertaken with the goal of replicating the results.

A Microsoft Forms Electronic Survey was developed that contained the appropriate survey questions that successfully answered the three research questions. The link that was provided to the Port St. Lucie Police Department worked without any issues. The results obtained from this electronic survey provided significant data that were later interpreted and disseminated into this report.

There was no identifying information associated with any of the received electronic surveys. The results of the completed survey were placed onto a Microsoft Excel spreadsheet for long-term storage in observance of the Institutional Review Board's compliance. Additional agencies utilizing a crime-reduction model should be sought out for future studies in order to better generalize the findings to the law-enforcement community.

The completed surveys received appear to be solely the work of the individual participant and not a collaborative effort. There were 24 free-form answers that were provided by the participants, and many provided opinions that lead to additional themes that were addressed in chapter 4. For future studies and in addition to the free-form

answers, a qualitative section providing open-ended questions should be developed to further investigate employee motivation factors and employee satisfaction.

A new instrument was developed for this research study. The instrument used for this study worked well as many of its attributes contributed to the abundant data that was obtained and later analyzed. Additional studies utilizing this instrument would be advised in order to provide more consistent validity and reliability. This study was the first use of this instrument and as such has provided limited evidence for its success. Efforts to replicate this study will ensure the long-term success of this instrument.

The basic design of the electronic survey was developed centered on the Job Descriptive Index (JDI). The JDI was created by Bowling Green State University and is a recognized research instrument that measures five categories related to job satisfaction (Balzer et al. 1997; Despain, 2008). The JDI encompassed approximately 18 different short phrases that provided insight into an organizational employees' personal perception. The short phrases were answered either "yes or no." At the end of each section there was an area where the survey be given the opportunity to expound upon their answers. The six categories are: people on your present job, job in general, work on present job, pay, opportunities for promotion, and supervision. The JDI was used in several different studies and provided results that were valid, reliable, and repeatable (Blanchard, 2014; Cohen, 2001; Peterson, 2014; Sharp, 2016; Stum, 2001; Swan, 2014; Tietjen and Meyers, 1998).

Although, the instrument developed for this study worked well, other instruments should also be tested in order to obtain the most relevant data when studying employee perceptions. Perhaps, involve a qualitative aspect that would possibly uncover root

origins to some of the answers realized in this study. These deeper realizations may lead to further improvements in the Stratified Model.

The JDI was combined with Semantic Differential Scale for surveys in order to address the specific needs of this study. The Semantic Differential Scale was developed by Osgood, Suci, and Tannenbaum in 1957. This scale measures the connotative meaning of cultural subjects such as worker perceptions relating to the Stratified Model. The purpose in the development of a new survey instrument for this study was predicated on obtaining employee perceptions that could be easily interpreted with little ambiguity between rating points. The five-point rating scale offers somewhat less accuracy than the seven-point scale. The seven-point scale is therefore able to provide more precise results in a given survey situation. The ability for more precise survey ratings provided the motivation to utilize the seven-point scale in the current study.

The neutral point in the rating scale provides that middle juncture where the participant may not be able to fully commit to one end of the bi-polar scale or the other. The employee motivating factors leading to a neutral rating should be examined and further broken down into their individual components in an effort to ascertain why a participant was unable to commit. The adopted measurement approach has been utilized by many studies and offers a more simplified alternative to the Likert Scale. Nevertheless, future research may be done that utilizes the Likert Scale to both determine the generality of the current results to another measurement scale, and also to solicit responses from employees in a way that does not include a neutral response alternative. The seven-point scale has been found to present a higher grade of judgement than a traditional 5-point Likert Scale (Al-Hindawe, 1996).

The Semantic Differential Scale has been used in a wide variety of studies ranging from ratings of self-esteem in adolescents (Lackovic-Grgin and Dekovic, 1990) to attitudes towards drug users (Ahlgren and Eburne, 1981) to cross validating expert witness research (Brodsky et al. 2010). Word groupings for this study were carefully devised in accordance with the areas of concentration necessary to appropriately capture and measure the worker's perceptions throughout the Port St. Lucie Police Department. Future studies would be needed that would incorporate different instruments to obtain more robust data when addressing employee perceptions.

At the conclusion of this study, it was important to reflect on this study's ability to competently address content validity, predictive validity, and construct validity (Creswell and Creswell, 2018). The instrument used in this study did provide abundant data, however, if research questions were expanded into other areas of concern, such as employee satisfaction or employee motivational factors, additional instruments, or expansion of this instrument would need to be utilized.

External Validity

While this study cannot be generalized to the entire law enforcement community, primarily because the Port St. Lucie Police Department was the only agency used. Future studies using the instrument associated with this study can be conducted with agencies currently using the Stratified Model or other crime-reduction models as the questions from this survey address products and processes within an organization.

Each police agency and city have their own individual qualities that create a certain level of uniqueness. What works for one agency may or may not work for another agency and this could be attributes to economic, demographic, geographical,

criminological, and sociological differences, or combinations of these characteristics between municipalities. These differences must be taken into consideration when weighing the valuation of generalizing results to the law enforcement community. Individual studies will need to be completed with these other organizations to determine their results based upon their uniqueness.

Is it reasonable to assume that employees surveyed in this study are satisfied with their work experience that results from a continual reduction in crime? This study indicates a slightly above neutral overall rating. This notion could be taken as it is generally accepted unless something better comes along. There was really no commitment obtained by the average employee of the Port St. Lucie Police Department except it is more positive than negative. A study such as this should be conducted at approximately five-year increments in order to track those perceptions and to see if improvements that have been implemented induce a positive or negative reaction over time. The instrument associated with this study should be expanded in order to obtain expanded information such as job satisfaction, job motivation, and perhaps job efficiency.

Conclusion

The Stratified Model was developed by Boba and Santos in order to provide a higher level of accountability with positive aspects of other crime-reduction models. The crime rate in Port St. Lucie (FL) has experienced a considerable reduction in the overall crime rate and also specific areas of crime such as burglary. There was an 80.4% reduction in burglaries between 2011 and 2018 (FBI, n.d.). Although, there have been large reductions in the crime rates of other cities of similar population size in Florida, the

Port St. Lucie Police Department has experienced a higher percentage of reduction when compared to the other nine most populous cities in the State of Florida (FBI, n.d.).

There was a gap in the available literature that addresses how workers of a police organization perceive the crime reduction model's specific internal work processes that influence organizational goals and the accompanying results. This study was conducted to fill that gap and to seek out the perceptions of the employees that are doing the actual work of the Stratified Model. Questions regarding processes and products were developed and provided to the employees of the Port St. Lucie Police Department. 121 of those employees chose to take part in this study and their data provided valuable insight to areas of interest that may need improvement.

Recommendations were made based upon the data, both in the quantitative section and the free form writing section. These recommendations were presented to the Chief of Police at the end of the study. There are future opportunities to apply this study and expand the research instrument to other departments in order to address their processes and products as they are perceived by their workforce.

References

- Ahlgren, A., & Eburne, N. (1981). Film technique for assessing attitudes towards drug users. *Journal of Drug Education, 11*(2). 117-127
http://www.leg.state.fl.us/Statutes/index.cfm?App_mode=Display_Statute&URL=0500-0599/0539/Sections/0539.001.html
- Al-Hindawe, J. (1996). Considerations when constructing a semantic differential scale. *La Trobe papers in linguistics*. 1-9
- Balzer, B. M., Kihm, J. A., Smith, P. C., Irwin, J. L., Bachiochi, P. D., Robie, C., et al. (1997). *Users' manual for the Job Descriptive Index (JDI: 1997 revision) and the Job In General scales*. Bowling Green, OH: Bowling Green State University.
- Blanchard, G.A., (2014). *Job satisfaction among probation and parole staff employed by the Commonwealth of Kentucky Department of Corrections*. Middle Tennessee State University dissertation.
- Boba, R. & Santos, R. (2011). *A police organizational model for crime reduction: Institutionalizing problem solving, analysis, and accountability*. Washington D.C.: United States Department of Justice.
- Bond, B.J., & Braga, A.A. (2015). Rethinking the Compstat process to enhance problem-solving responses: Insights from a randomized field experiment. *Police Practice and Research: An International Journal, 16*(1), 22-35.
doi:10.1080/15614263.2013.832250
- Bond, B.J., & Hajjar, L.M. (2013). Measuring congruence between property crime problems and response strategies: Enhancing the problem-solving process. *Police Quarterly, 16*(3), 323-338. doi:10.1177/1098611113497041

- Braga, A., Papachristos, A., & Hureau, D. (2012). Hot spots policing effects on crime. (D. Wilson, Ed.) *Campbell Systematic Reviews*, 1-98.
- Brodsky, S.L., Griffin, M.P., & Cramer, R.J. (2010). The witness credibility scale: An outcome measure for expert witness research. *Behavioral Science & Law* 28(6). 892-917
- Bullock, K. (2012). Community, intelligence-led policing and crime control. *Policing and Society: An International Journal of Research and Policy*, 23(2), 125-144. doi:10.1080/10439463.2012.671822
- Burnett, E. (2007). Crime analysis reporting and mapping for small agencies: A low-cost and simplified approach. *FBI Law Enforcement Bulletin*, 76(10), 15-22.
- Caudill, J.W., Getty, R., Smith, R., Patten, R., & Trulson, C.R. (2013). Discouraging window breakers: The lagged effects of police activity on crime. *Journal of Criminal Justice*, 18-23.
- Cherney, A. (2008). Harnessing the crime control capacities of third parties. *Policing: An International Journal of Police Strategies & Management*, 31(4), 631-647. doi:10.1108/13639510810910607
- Cochran, J.K., & Bromley, M.L. (2002). Auto burglaries in an entertainment district: Patron perceptions of risks and precautionary behaviors. *Journal of Security Administration*, 25(1), 1-15.
- Cohen, S. (Ed.). (2001). 2001 Job satisfaction survey: Desperate for direction. *Computer World*, 6, 10-15.

- Cope, N., Strategic Research, Metropolitan Police Service. (2004). Intelligence Led Policing or Policing Led Intelligence?. *The British Journal of Criminology*, 44(2), 188-203.
- Cordner, G., & Biebel, E.P. (2005). Problem-Oriented Policing in practice. *Criminology & Public Policy*, 155-180. doi:10.1111/j.1745-9133.2005.00013.x
- Corsaro, N., Gerard, D.W., Engel, R.S., & Eck, J.E. (2012). Not by accident: An analytical approach to traffic crash harm reduction. *Journal of Criminal Justice*, 502-514. doi:http://dx.doi.org/10.1016/j.jcrimjus.2012.08.003
- Creswell, J.W., & Poth, C.N. (2018). *Qualitative inquiry & research design: Choosing among five approaches*. Thousand Oaks, CA: Sage Publication.
- Creswell, J.W., & Creswell, J.D. (2018) *Research design: Qualitative, quantitative, and mixed methods approaches*. Thousand Oaks, CA: Sage Publication.
- Dabney, D. (2010). Observations regarding key operational realities in the Compstat Model of Policing. *Justice Quarterly*, 27(1), 28-51.
doi:10.1080/07418820902855370
- Despain, L. (2008). *The relationship between police supervisor training and job satisfaction levels as reported by patrol officers*. University of Phoenix dissertation.
- Disaster Center. (2018). *United States Crime Rates 1960-2017*. Retrieved from <http://www.disastercenter.com/crime/uscrime.htm>:
- Federal Bureau of Investigation. (n.d.). *Uniform Crime Report*. Retrieved from [fbi.gov](https://www.fbi.gov/services/cjis/ucr):
<https://www.fbi.gov/services/cjis/ucr>

- Fink, A. (2006). *How to conduct surveys: A step-by-step guide*. Thousand Oaks, CA: Sage Publications, Inc.
- Firman, J. (2003). Deconstructing COMPSTAT to clarify its intent. *Criminology & Public Policy*, 2(3), 457-460.
- Fitzpatrick, J.L., Sanders, J.R., & Worthen, B.R. (2011). *Program evaluation: Alternative approaches and practical guidelines*. Boston, MA: Pearson Higher Ed
- Florida Department of Law Enforcement. (2016). *Ratios of Full-time officers statewide-2016*. Retrieved from <http://www.fdle.state.fl.us/CJSTC/Publications/CJAP/CJAP-2016/Statewide-Ratios.aspx>
- Florida Senate. (2013). *The Florida Pawnbroking Act*. Retrieved from http://www.leg.state.fl.us/Statutes/index.cfm?App_mode=Display_Statute&URL=0500-0599/0539/Sections/0539.001.html
- Geoghegan, S. (2006). COMPSTAT revolutionizes contemporary policing. *Law & Order*, 54(4), 42-46.
- Gill, C., Weisburd, D., Telep, C.W., Vitter, Z., & Bennett, T. (2014). Community-oriented policing to reduce crime, disorder and fear and increase satisfaction and legitimacy among citizens: a systematic review. *Journal of Experimental Criminology*, 10, 399-428. doi:10.1007/s11292-014-9210-y
- Goldstein, H. (1990a). *Policing a free society*. Madison, WI: University of Wisconsin Law School.
- Goldstein, H. (1990b). *Problem-oriented policing*. New York: McGraw-Hill Publishing Company.

- Goldstein, H. (2003). On further developing Problem-Oriented Policing: The most critical need, the major impediments, and a proposal. *Crime Prevention Studies*, 15, 13-47
- Haberman, C.P. (2016). A view inside the "Black Box" of Hot-Spot Policing from a sample of police commanders. *Police Quarterly*, 19(4), 488-517.
doi:10.1177/1098611116655792
- Hendrix, J.A., Taniguchi, T., Strom, K.J., Aagaard, B., & Johnson, N. (2019). Strategic policing philosophy and the acquisition of technology: findings from a nationally representative survey of law enforcement. *Policing and Society: An International Journal of Research and Policy*, 29(6), 727-743.
doi:10.1080/10439463.2017.1322966
- Hochstetler, S. (2002). Community Oriented Policing concepts: Increasing community and officer involvement. *Law & Order*, 50(4), 34.
- Huck, S.W., (2012). *Research statistics and research*. Boston, MA: Pearson Publication.
- Jang, H., Hoover, L.T., & Joo, H.J. (2010). An evaluation of Compstat's effect on crime: The Fort Worth experience. *Police Quarterly*, 13(4), 387-412.
doi:10.1177/1098611110384085
- Jang, H., Hoover, L.T., & Lawton, B.A. (2008). Effect of broken windows enforcement on clearance rates. *Journal of Criminal Justice*, 36, 529-538.
doi:10.1016/j.jcrimjus.2008.09.003
- Jenkins, M.J. (2016). Police support for community problem-solving and broken windows policing. *American Journal of Criminal Justice*, 41, 220-235.
doi:10.1007/s12103-015-9302-x

- Kamulu, N.C., & Onyeozili, E.C. (2018). A critical analysis of the "Broken Windows" policing in New York City and its impact: Implications for the Criminal Justice System and the African American Community. *African Journal of Criminology and Justice Studies*, 11(1), 72-94.
- Kirby, S., & McPherson, I. (2004). Integrating the National Intelligence model with a "problem solving" approach. *Community Safety Journal*, 3(2), 36-47.
- Lackovic-Grgin, K., & Dekovic, M. (1990). The contribution of significant others to adolescent's self-esteem. *Adolescence*, 25(100), 839-846
- Magers, J.S. (2004). Compstat: A new paradigm for policing or a repudiation of community policing. *Journal of Contemporary Criminal Justice*, 20(1), 70-79.
doi:10.1177/1043986203262312
- Mazerolle, L. B. (2013). *Legitimacy in policing: A systematic review*. Brisbane, Australia: Campbell Systematic Reviews. doi:10.4073/csr.2013.1
- Mazerolle, L., Bennett, S., Davis, J., Sargeant, E., & Manning, M. (2013). *Legitimacy in policing: A systematic review*. Oslo, Norway: Campbell Systematic Reviews.
doi:10.4073/csr.2013.1
- Mazerolle, L., Darroch, S., & White, G. (2013). Leadership in problem-oriented policing. *Policing: An International Journal of Police Strategies & Management*, 36(3), 543-560. doi:10.1108/PIJPSM-06-2012-0055
- McCarthy, M.M., Porter, L.E., Townsley, M., & Alpert, G.P. (2018). The effect of community-oriented policing on police use of force: Does community matter? *Policing: An International Journal*, 42(4), 556-570. doi:10.1108/PIJPSM-10-2018-0148

- McGarrell, E.F., Freilich, J.D., & Chermak, S. (2007). Intelligence-Led Policing as a framework for responding to terrorism. *Journal of Contemporary Criminal Justice*, 23(2), 142-158. doi:10.1177/1043986207301363
- Miller, C. (2008). COPLINK CompStat Analyzer automates crime data analysis. *Law Enforcement Technology*, 136-142.
- Miller, E. (2006). Role-based policing: Restraining police conduct "Outside the legitimate investigative sphere". *California Law Review*, 94(3), 617-686.
- Moore, M. (2003). Sizing up COMPSTAT: An important innovation in policing. *Criminology & Public Policy*, 2(3), 469-494.
- O'Connell, P. (2002). *An intellectual history of the COMPSTAT Model of police management*. New York : The City University of New York.
- Peak, K.J., & Glensor, R.W. (1996). *Community policing & problem solving: Strategies & practices*. Upper Saddle River, NJ. Prentice Hall Publishing
- Peterson, B., (2014). *Job satisfaction and organizational commitment among correctional officers at an Iowa State Penitentiary*. Middle Tennessee State University dissertation.
- Port St. Lucie Police Department. (2018). *2017 annual report*. Port St. Lucie: City of Port St. Lucie.
- Power, M., & Rienstra, B. (1999). Internal communication in new corporate conglomerates developing a corporate communication model for loosely coupled businesses in local government. *The International Journal of Public Sector Management*. 12(6), 501-515.

- Ratcliffe, J. (2004). Crime mapping and the training needs of law enforcement. *European Journal of Criminal Policy and Research*, 10(1), 65-83.
- Russo, J., (2017). *Out from under a rock: Improving FDNY information sharing*. Naval Postgraduate School Master's Thesis.
- Santos, R.B. (2012). *Crime analysis with crime mapping*. Thousand Oaks, CA: Sage Publications.
- Santos, R.B. (2013). Implementation of a police organizational model for crime reduction. *Policing: An International Journal of Police Strategies & Management*, 36(2), 295-311. doi:10.1108/13639511311329714
- Santos, R.B. (2014). The effectiveness of crime analysis for crime reduction: Cure of diagnosis? *Journal of Contemporary Criminal Justice*, 30(2), 147-168. doi:10.1177/1043986214525080
- Santos, R.B., & Santos, R.G. (2016). Offender-focused police intervention in residential burglary and theft from vehicle hot spots: a partially blocked randomized control trial. *Journal of Experimental Criminology*, 12, 373-402. doi:10.1007/s11292-016-9268-9
- Santos, R.B., & Taylor, B. (2013). The integration of crime analysis into police patrol work. *Policing: An International Journal of Police Strategies & Management*, 37(3), 501-520. doi:10.1108/PIJPSM-08-2012-0075
- Schnebly, S.M. (2008). The influence of Community-Oriented Policing on crime reporting behavior. *Justice Quarterly*, 25(2), 223-251. doi:10.1080/07418820802025009

- Seigel, J. (2014). *Integration disconnect in police agencies: The effects of agency factors on the production and consumption of crime analysis*. Boca Raton, FL: Florida Atlantic University dissertation.
- Shane, J. (2004a). Compstat design. *FBI Law Enforcement Bulletin*, 12-19.
- Shane, J. (2004b). Compstat implementation. *FBI Law Enforcement Bulletin*, 73(6), 13-22.
- Sharp, J.M., (2016). *Job satisfaction in law enforcement officers according to generational cohorts*. Walden University dissertation.
- Sidebottom, A., & Tilley, N. (2010). Improving problem-oriented policing: The need for a new model ? *Crime Prevention and Community Safety*, 0(0), 1-23.
- Skogan, W.G. (2008). Broken Windows: Why and how we should take them seriously. *Criminology & Public Policy*, 7(2), 195-201. doi:10.1111/j.1745-9133.2008.00501.x
- Stum, D. (2001). Maslow revisited: Building the employee commitment pyramid, (29, 4), 4-10.
- Swan, A.A., (2014). *The influence of gender identity on job satisfaction in female officers*. Capella University dissertation.
- Sytsma, V.A., & Piza, E.L. (2017). The influence of job assignment on community engagement: Bicycle patrol and Community-Oriented Policing. *Police Practice and Research*, 1-18. doi:10.1080/15614263.2017.1364998
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, (2), 53-55. doi: 10.5116/ijme.4dfb.8dfd

- Tietjen, M. A., & Meyers, R. M., (1998). Motivation and job satisfaction. *Management Decision*, 36(4), 226-228.
- Tillyer, R. (2018). Assessing the impact of Community-Oriented Policing on arrest. *Justice Quarterly*, 35(3), 526-555. doi:10.1080/07418825.2017.1327609
- Trojanowicz, R., & Bucqueroux, B. (1990). *Community Policing: A contemporary perspective*. (K. Humble, Ed.) Cincinnati, OH: Anderson Publishing Co.
- Trojanowicz, R., Kappeler, V.E., Gaines, L.K., & Bucqueroux, B. (1998). *Community Policing: A contemporary perspective* (2nd ed.). Cincinnati, OH: Anderson Publishing Co.
- Vito, G.F., Reed, J.C., & Walsh, W.F. (2017). Police executives' and managers' perspectives on COMPSTAT. *Police Practice and Research: An International Journal*, 18(1), 15-25. doi:10.1080/15614263.2016.1205986
- Weisburd, D., Hinkle, J.C., Famega, C., & Ready, J. (2011). The possible “backfire” effects of hot spots policing: an experimental assessment of impacts on legitimacy, fear and collective efficacy. *Journal of Experimental Criminology*, 7, 297-320. doi:10.1007/s11292-011-9130-z
- Weisburd, D., Mastrofski, S.D., McNally, A.M., Greenspan, R., & Willis, J.J. (2003). Reforming to preserve: Compstat and strategic problem solving in American policing. *Criminology & Public Policy*, 2(3), 421-456.
- Welsh, B.C., Braga, A.A., & Hollis-Peel, M.E. (2012). Can “disciplined passion” overcome the cynical view? An empirical inquiry of evaluator influence on police crime prevention program outcomes. *Journal of Experimental Criminology*, 8, 415-431. doi:10.1007/s11292-012-9153-0

- Willis, J.J. (2011). Enhancing police legitimacy by integrating COMPSTAT and community policing. *Policing: An International Journal of Police, Strategies & Management*, 34(4), 654-673. doi:10.1108/13639511111180261
- Willis, J.J., & Mastrofski, S.D. (2018). Improving policing by integrating craft and science: what can patrol officers teach us about good police work? *Police and Society: An International Journal of Research and Policy*, 28(1), 27-44. doi:10.1080/10439463.2015.1135921
- Willis, J.J., Mastrofski, S.D., & Weisburd, D. (2007). Making sense of COMPSTAT: A theory-based analysis of organizational change in three police departments. *Law & Society Review*, 41(1), 147-188.

Appendix

An Employee Assessment Related to Specific Work Process Within the Stratified
Model

An Employee Assessment Related to Specific Work Processes Within the Stratified Model

Researcher: Robert W. Steinkraus, Jr.

Required

1. What is your gender?

- Woman
- Man
- Non-binary
- Prefer not to say

2. What is your ethnicity?

- White
- African American
- Hispanic
- Asian
- Other

3. What is your level of formal education?

- High-school diploma
- Some college less than Associate degree
- Associate degree
- Bachelor's degree
- Master's degree
- Doctorate degree

4. Are you a civilian or sworn law enforcement employee?

- Civilian employee
- Sworn law enforcement employee

5. Please list your rank if you are a sworn law enforcement employee

- Police officer/detective

- Sergeant
- Lieutenant, Assistant Chief, Chief of Police

6.If you're a civilian employee, please indicate your assignment

- PSA staff
- Records staff
- Administration staff (district, professional standards, operations)
- CID/SID staff
- Operations, support services, road patrol staff



7.Sworn law enforcement employee's current assignment (check all that apply)

- Administration
- Operations
- Support Services
- Road patrol
- Criminal Investigations Division
- Special Investigations Division
- District Support
- Professional Standards

8.Sworn law enforcement past assignments (check all that apply)

- Administration
- Operations
- Support Services
- Road Patrol
- Criminal Investigations Division
- Special Investigations Division
- District Support
- Professional Standards

9.How many years of experience in this field do you have?

- Less than 2 years
- 3-5 years
- 6-10 years
- 11-15 years

outdated- innovative							
Communication: Receive timely feedback- receive no feedback	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Management approach: Laid- back- strict	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Use of Intelligence: Accountable- irresponsible	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dissemination of information: Very useful-Of no use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Efficiency: waste of resources- Productive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Management availability: inaccessible- approachable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

An example for the first category of available technology, if you agree that available technology is outdated you click 1, somewhat outdated 2, or a little outdated 3. Neutral if you are undecided. If you agree that available technology is more innovative, then you would click a little innovative 5, somewhat innovative 6, or innovative 7. Leave blank if not applicable.

16. I want you to think about the process of working with crime analysts during the process of gathering information for the accountability meetings from your perception.

An example for the first category of available technology, if you agree that available technology is outdated you click 1, somewhat

outdated 2, or a little outdated 3. Neutral if you are undecided. If you agree that available technology is more innovative, then you would click a little innovative 5, somewhat innovative 6, or innovative 7. Leave blank if not applicable.

	1	2	3	4- Neutral	5	6	7
Available technology: outdated- innovative	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communication: Receive timely feedback- receive no feedback	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Management approach: Laid-back- strict	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Use of Intelligence: Accountable- irresponsible	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dissemination of information: Very useful-Of no use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Efficiency: waste of resources- Productive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Management availability: inaccessible- approachable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

17. I want you to think about the process of working with detectives during the process of gathering information for accountability meetings from your perception.

An example for the first category of available technology, if you agree that available technology is outdated you click 1, somewhat outdated 2, or a little outdated 3. Neutral if you are undecided. If you agree that available technology is more innovative, then you would click a little innovative 5, somewhat innovative 6, or innovative 7. Leave blank if not applicable.

	1	2	3	4- Neutral	5	6	7
Available technology: outdated-innovative	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communication: Receive timely feedback-receive no feedback	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Management approach: Laid-back-strict	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Use of Intelligence: Accountable-irresponsible	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dissemination of information: Very useful-Of no use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Efficiency: waste of resources-Productive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Management availability: inaccessible-approachable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

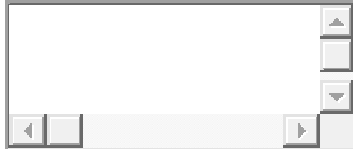
18. I want you to think about the process of working with supervisors during the process of gathering information for accountability meetings from your perception.

An example for the first category of available technology, if you agree that available technology is outdated you click 1, somewhat outdated 2, or a little outdated 3. Neutral if you are undecided. If you agree that available technology is more innovative, then you would click a little innovative 5, somewhat innovative 6, or innovative 7. Leave blank if not applicable.

	1	2	3	4- Neutral	5	6	7
Available technology: outdated- innovative	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Communication: Receive timely feedback- receive no feedback	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Management approach: Laid- back- strict	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Use of Intelligence: Accountable- irresponsible	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dissemination of information: Very useful-Of no use	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Efficiency: waste of resources- Productive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Management availability: inaccessible- approachable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

19.If you want to expound on any of the questions in this survey, please click on the answer box below, enter the associated

question number and any other detail that you wish to add. Thank you for your participation.

A rectangular form field with a scroll bar on the right and a submit button at the bottom right.

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