THE USE OF CLASSIFICATION SCHEMES BY POLICE INVESTIGATORS

By

Juli Liebler

A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

Criminal Justice -Doctor of Philosophy

2015

ABSTRACT

THE USE OF CLASSIFICATION SCHEMES BY POLICE INVESTIGATORS

By

Juli Liebler

There has been little research on the factors that affect investigative decision-making.

The purpose of this dissertation is to advance the knowledge on the theory of normal crime and to ultimately work toward finding ways to solve more crime. Through in-depth interviews, analysis of police reports, and the examination of crime data, this study provides a better understanding of how detectives solve crimes and the factors they consider when determining the level of effort to put forth to solve crimes.

The data suggest that for serious crimes, officers are internally motivated to solve these cases and will go to great lengths to solve them. The factors that make crimes serious are; violent/egregious acts, victim emotional trauma, victim vulnerability, and serial crimes.

Conversely, for typical crimes, investigative effort is motivated primarily by the likelihood that the case can be solved. Factors that affect investigative effort for typical crimes are; the evidence available, when a gun is stolen, the value of stolen property, political/media/community pressure, time available to investigate, and prosecutor constraints. Finally, there are some crimes that cannot be successfully adjudicated by the legal system. These include crimes in which the victim will not cooperate, crimes in which the victim is involved in illegal activity, and false reports. For these cases, investigators put forth enough effort to confirm that the crime cannot be prosecuted. The findings in this study are unique in that they offer a better understanding of investigator decision-making and offer new insight regarding the variables that affect investigative effort.

Copyright by JULI LIEBLER 2015

ACKNOWLEDGEMENTS

I would like to first thank Dr. Chermak for his support and guidance throughout this process. His advice and encouragement have been instrumental in the successful completion of this dissertation. I also appreciate the feedback provided by Dr. Dejong, Dr. McGarrell, and Dr. Silvey. Their insight and knowledge provided valuable contributions to my research.

I would also like to thank the members of the three police agencies that participated in the study. Their honest and thoughtful comments helped to advance the knowledge on this important topic.

Finally, I will be forever grateful for the support and encouragement from my family. My partner Veronica has been a constant source of inspiration and reassurance throughout this process, and my sons Julian and Alex always knew just what to say to make me smile and laugh at just the right times.

TABLE OF CONTENTS

LIST OF TABLES	vii
LIST OF FIGURES	viii
CHAPTER 1: INTRODUCTION	1
Statement of the Problem	1
Limitations of Previous Research	2
Significance of the Current Study	9
Outline of the Remaining Chapters	10
CHAPTER 2: LITERATURE REVIEW	11
Police Discretion	11
Constraints on Discretion	15
Solving Crime	19
Investigator Effort	23
Conclusion	26
Research Hypotheses	27
CHAPTER 3: METHODOLOGY	28
Research Approach and Rationale	28
Research Sample	30
Data Collection Procedures	31
Sampling Strategy	32
Sample Characteristics	38
Data Collection and Storage	38
Analysis	39
Strategies for Validating Findings	
Reliability	40
Ethical Concerns	40
CHAPTER 4: FINDINGS REGARDING ORGANIZATIONAL FACTORS	42
Community Comparison	
Community Characteristics	44
Jamison	44
Kensington	48
Lancaster	51
Overview	53
The Use of Extant Classification Schemes	55
Typical Crimes and Investigative Effort	60
Case Solvability	
Stolen Guns	64
Time Available to Investigate	67

Value of Stolen Property	68
Prosecutor Constraints	
Stagnant Crimes	71
Lack of Victim Cooperation	
False Reports	
Victim Involved in Illegal Activity	
Solving Crime and Clearance Rates	82
Investigative Effort and Clearance Rates	86
CHAPTER 5: FINDINGS REGARDING CONTEXTUAL VARIABLES	88
Contextual Variables and Discretionary Decision-Making	88
Pressure from City Officials/Media/Community Members	
Characteristics of the Offense and Discretionary Decision-Making	
Intolerable Crimes	
Violent or Heinous Crimes	94
Victim Emotional Trauma	98
Victim Vulnerability	102
Serial Crimes	106
CHAPTER 6: DISCUSSION AND CONCLUSION	110
Summary of Findings	110
Implications	
Limitations	
Future Research	121
Conclusion	123
APPENDECIES	124
REFERENCES	133

LIST OF TABLES

Table 1: Community Overview	43
Table 2: Police Department Comparison	53
Table 3: Ratio between the Number of Crimes and Number of Detectives 2011-2013	55
Table 4: How Crime is Solved	85
Table 5: Summary of the Variables that Affect Investigator Effort	113
Table 6: Complete List of Interviews	125
Table 7: Police Report Identifiers	132

LIST OF FIGURES

Figure A: Total Robberies and Burglaries 2011-2013	34
Figure B: Total Reports Reviewed	35
Figure C: Patrol and Investigative Experience	38
Figure D: Total Reported Crimes Against Persons and Property 2011-2013	45
igure E: Jamison Race/Ethnicity Data	46
Figure F: Kensington Race/Ethnicity Data	49
Figure G: Lancaster Race/Ethnicity Data	52
Figure H: Percentage of Crimes Cleared 2011-2013	83
Figure I: Sample Robbery and Burglary Reports Case Disposition	84
Figure J: Investigative Effort Decision-Making Process	115

CHAPTER 1

INTRODUCTION

Statement of the Problem

Although there has been considerable exploration of factors that affect line-level decision-making processes for most criminal justice occupations, there has been very little research that identifies the variables that influence police investigator discretionary decision-making. Scholars have gone to great lengths to better understand the behavior of patrol officers, prosecutors, public defenders, judges, probation/parole agents, and corrections officers, thus making significant theoretical contributions toward the body of knowledge regarding criminal justice theories and the criminal justice system in general and line level officer discretion in particular (Goodpaster, 1987; Jacob, 1997; McCleary, 1978; Sheingold & Gressett, 1987; Skolnick, 1994; Sudnow, 1965). Conversely, the lack of research examining investigator behavior has limited the amount of information available to help find ways to solve more crime as well as to improve organizational efficiency and effectiveness. It has also limited the advancement of theory on how investigators are similar and different from other street level bureaucrats.

This lack of research is surprising and unfortunate for several reasons. First, follow up investigation is a core function of the police mission. The success or failure of crime solving efforts impacts various aspects of a police agency and a community, including crime rates in general, agency reputation, agency credibility, public confidence, organizational effectiveness, and individual officer competence. It is therefore essential that researchers gain a better understanding of detective decision-making processes and how they affect the ability to solve crime. Additionally, patrol investigative processes are markedly different from follow-up

investigative processes. Cases that can be resolved quickly are typically handled by patrol officers; however detectives are often assigned more complicated and time consuming cases (Brown, 2001). Thus, it is prudent to study detective decision-making as a separate phenomenon rather than to extrapolate findings from patrol studies. Finally, there is a considerable body of existing raw data available on crime clearance rates. Because detectives play a significant role in clearance rates, developing a better understanding of investigator decision making can help to inform future research on this important issue.

Previous research relative to detective decision-making has generally been approached from three different perspectives. First, a number of studies have focused on Black's theory of law (1976), which suggests that extra-legal factors such as race, class, and gender predict the level of effort put forth by investigators, where victims in minority classes receive fewer investigative resources than those in the majority. Second, some studies surmise that investigators consider legal factors such as available evidence and the seriousness of a crime to determine the degree of investigative action a case receives. Finally, one study uses Sudnow's (1965) theory of normal crime to explain investigator decision-making. This theory suggests that detectives use short-hand classification schemes to determine the level of resources and effort cases receive.

Limitations of previous research

The vast majority of the studies on investigator decision-making use Black's theory of law to frame their research. These investigations postulate that variables such as victim race, class, and gender predict clearance rates and assume that lower status individuals receive less investigative effort from police. Of these studies, some found no support for victim devaluation (Brandl, 1993b; Roberts, 2007). For example, Roberts (2007) concluded that the significance of

victim characteristics disappeared after controlling for situational variables such as physical evidence, the available information, and the presence of witnesses. Others found a significant relationship between victim social characteristics and the rate at which crimes were solved; however, most studies established that it was not due to victim devaluation by police (Brandl, 1993a; Castro, 2011; Keel, Jarvis, & Muirhead, 2009; Litwin, 2004; Regoeczi, Jarvis, & Riedel, 2008; Ousey & Lee, 2010; Roberts, 2008; Rydberg & Pizarrio, 2014). Researchers instead postulate that differences in investigative success are related to factors such as group variations regarding willingness to cooperate with police rather than police devaluation of a particular class of individuals (Keel et al., 2009; Litwin, 2004). Additionally, some studies found support of victim devaluation by investigators; however, other variables were determined to be much stronger predictors of investigative success (Brandl, 1993b; Briggs & Opsal, 2012; Bynum, et al., 1982). Authors noted that although extra-legal factors affected successful resolution of cases, officer prejudice was not the primary cause. For example, Briggs and Opsal (2012) found support for victim devaluation of the Hispanic population by police; however, they conceded that this particular population is less likely to cooperate with police, which significantly hampers investigative efforts. Differences in language were also barriers to effectively communicating with police. Additionally, Brandl (1993b) found that though victim income influenced discretionary decision-making for burglary cases, however, Black's theory did not adequately explain the complexity of investigator decision-making for other crimes. Finally, Bynum et al., (1982) surmised that for the most part, extra-legal factors such as race, gender and employment status did not affect detective decision-making, with the exception that higher income areas of the city received better treatment for burglary cases. The authors suggest that "The routine approach to processing cases may override the influence of victim characteristics since extensive

investigation is somewhat rare" (Bynum, et al., 1982 p. 315). Interestingly, the authors suggest that Sudnow's theory of normal crime may be more appropriate for explaining discretionary decision-making by detectives.

For the studies that use legal factors as the basis for their analysis, most focus on investigative processes such as: evidence collection techniques, type of weapon used, etc. (Bloch & Bell, 1976; Eck, 1983). In many of these studies, decision-making based on legal variables is assumed by researchers rather than specifically stated. There are, however, a few studies that specifically examine investigator thought processes. Brandl (1993a) for example determined that investigators are influenced by the characteristics of the offense, i.e., use of a weapon, value of stolen property, and degree of injury to the victim. Additionally, the number of leads available influenced discretionary decision-making in some studies (Sanders, 1977; Greenwood, Chaiken, & Petersilia, 1977). Further, caseload and time pressure affected the amount of effort put forth (Brandl, 1993a; Waegel, 1981). Finally, organizational structure and culture were found to play a role in predicting investigator behavior (Ericson, 1981). Though these researchers found support for the legal decision-making hypothesis, they also conclude that the process of detective decision-making is much more involved and cannot be predicted by these factors alone (Bynum et al., 1981; Brandl, 1993b; Rydberg and Pizarro, 2014). Brandl (1993a, p. 29) stated "with theoretical and statistical formulations not accurately reflecting the actual structure of decision making it is of little wonder why statistical models have been largely unsuccessful in explaining decision making of detectives."

Another limitation of previous research is that more than half of the studies on detective decision-making focused exclusively on homicide investigations (Castro, 2011; Keel, et al. 2009; Litwin, 2004; Regoezci, et al., 2008; Roberts, 2007; Rydberg & Pizarro, 2014). Previous

research on discretionary decision-making has consistently shown that criminal justice agents have little freedom to make decisions based on personal or moral values for serious crimes, particularly for those that attract the attention of the media (Lipsky, 1980; Maynard-Moody & Mushno, 2003; McCleary, 1992; Skolnick, 1994;). Homicide investigators, therefore, have little latitude to consider extra-legal factors when making investigative decisions (Castro, 2011; Litwin, 2004; Ousey and Lee, 2010; Richardson & Kosa, 2001). As a result, it may not be appropriate to include this literature when reviewing previous research on discretionary decision-making by detectives.

Additionally, a majority of the research studies conducted on investigative decision-making examine single police agencies. While this provides an opportunity to gain a rich understanding of the complex processes that take place and allows researchers to see how multiple variables interact, it also may limit generalizability and thus omit contextual variations that occur across agencies. For example, studies using individual agencies cited the following impediments to investigative success: time pressure (Brandl 1993a), organizational constraints (Brown, 1981, Litwin, 2004) language barriers between police and victims/witnesses as well as percentage of illegal immigrants (Briggs and Opsal, 2012), higher unemployment and degree of racial segregation (Roberts, 2008), and local community cynicism toward police (Rydberg & Pizzaro, 2014). All of these variables tend to differ considerably across agencies; therefore, it is not prudent to extrapolate these findings to police agencies in general. To support this point, several studies specifically recommend considering contextual variables unique to the locality before drawing conclusions (Brandl, 1993b; Rydberg & Pizzaro, 2014). Though there has been limited success predicting investigative decision-making using legal and extra-legal

explanations, there are still significant gaps in understanding discretionary decision-making by detectives.

Perhaps a better theoretical approach lies in the theory of normal crime. This theory postulates that criminal justice agents use a heuristic process to develop implicit classification schemes as a means to efficiently manage a majority of their workload (Sudnow, 1965). In this process, each new case is compared to typical cases of the same nature, and if the facts are similar, a pre-determined procedure is used to manage that case. This mental shortcut method allows criminal justice agents to save time and energy because they do not need to gather and review all of the information about each case or to contemplate how to proceed with it. This permits criminal justice agents to effectively manage their caseload and avert the boredom and monotony that comes with processing multiple similar cases over a period of time (Waegel, 1981). Unfortunately, it may also have the effect of lowering clearance rates because detectives may fail to examine important clues that could ultimately solve cases.

To date, there has only been one study that uses this theory to explain detective discretionary decision-making. Using qualitative methods, Waegel (1981) found that police investigators developed unwritten and unstated categorization schemes for common crimes such as burglary and robbery in order to effectively manage their caseload. For crimes that are deemed to be normal, detectives apply a routine method for investigating them, which consists of less than a full investigation (Waegel, 1981). Conversely, for uncommon offenses, there is no short-cut template; therefore, the detective must consider the details specific to the case and develop an individualized plan of investigation. Special cases are those that are atypical and perhaps draw the attention of the media or some other influential body. They might include cases where there is serious injury or significant financial loss. These cases must be processed in

the way the criminal justice system intended them to be processed in order to maintain the legitimacy of the organization (Packer, 1964).

Waegel (1981) postulates that detectives classify crime events by examining both legal and extra-legal factors such as: the setting in which the crime occurred, victim competence and willingness to cooperate, victim lifestyle, relationship between the offender and the victim, and the amount of evidence available. These factors are important to detectives not because they serve as a means to discriminate against particular groups, but because they are good predictors of how well the case will compare with their heuristic for that type of incident. Through experience and trial and error assessment over time, detectives are able to make assumptions about what transpired in a particular case without examining every detail or clue (i.e. additional witness accounts, surveillance video, physical evidence, cell phone records, etc.). This process is necessary because limited resources prohibit every case from being investigated to the fullest extent, and detectives may lose interest in cases where the facts become redundant.

It should be noted that though Waegel (1981) suggests that there is only one schema for each type of crime, (i.e. robbery or burglary) it is conceivable that there may be more than one definition of normal for the same crime, particularly in larger jurisdictions. As an example, both an assault that occurs at a sporting event and an assault that occurs at a biker bar could both come to be defined as normal; however, detectives would use a different heuristic for each situation because several contextual and socio-economic factors would likely be different. It is also noteworthy that events that come to be defined as normal do not necessarily involve minority or disadvantaged population. For example, regarding an assault that occurs at a bar that is frequented by college students, both the suspect and victim would most likely be young, white, middle class males. If this type of event is a "normal crime" for the jurisdiction in which it

occurs, then race, social class, age and the location of the crime are important for predicting if the present event will constitute a typical event. Conversely, if an elderly African American female were assaulted at the same location, this would not likely be considered normal and therefore prompt the detective to make further inquiry into the case. This suggests that though police consider extra-legal factors when determining the level of time and effort to put forth on a case, those in the minority are not necessarily receiving less effort than those in the majority. This might explain why researchers continue to use Black's theory to frame their research yet find little or no relationship between social characteristics and investigative effort.

Though Waegel's (1981) study is the only research of its kind, there is additional support for the use of this theory to predict investigative decision-making. While not explicitly stated, research findings show characteristics of the short-hand typification process. For example, Brandl (1993a, pg. 29) postulates that detectives develop "complex, multi-faceted constructs" and use them extensively to manage their workload. Additionally, Willman & Snortum (1984, p. 36) concluded that detectives develop "special solutions" for some cases and "routine solutions" for others. Further, Bynum, Cordner, & Green (1982) suggest that eighty percent of the cases they examined were handled by routine processing, with very little time spent on the actual investigation. They also note that "since most cases are processed with minimal effort in this routine manner, a case may have to possess certain circumstances and conditions in order to free it from the bounds of normality, and thus require a more extensive investigation" (Bynum et al., 1981, p. 315). Additionally, the theory of normal crime has been used to successfully predict the decision-making behavior of nearly every other criminal justice occupation. This theory was originally developed to explain the behavior of public defenders in the judicial system (Sudnow, 1965). It has since been used to frame research on such professionals as: patrol officers

(Skolnick, 1994; Van Maanen, 1978), parole/probation officers (McCleary, 1978), as well as prosecutors and judges (Goodpaster, 1987; Jacob, 1997; Sheingold & Gressett, 1987).

Significance of the Current Study

The present study further refines research on investigative decision-making by exploring the use of classification schemes, how they vary across agencies, and how they impact investigator ability to solve crime. Specifically, a qualitative comparative case study of three police departments was conducted in an effort to explore the similarities and differences in investigative decision-making across agencies, using the theory of normal crime to frame the research. A qualitative comparative case study was most appropriate for this research for several reasons. First, previous publications indicate that detective decision-making is a complex process that involves multiple variables that are considered concurrently. Due to the limited research available, it would have been difficult to fully identify and measure these variables. Additionally, because context is so important in this process, it was necessary to develop a rich understanding of contextual variables that impact decision making and how they were similar and different across agencies. Finally, no study to date has examined multiple departments using the theory of normal crime. This study therefore advances the knowledge on this theory and contributes to a better understanding of detective decision-making.

In summary, there are significant gaps in previous research on investigative decision-making. Studies that use legal or extra-legal theories have failed to adequately explain investigative behavior. Most found either conflicting results or no relationship between variables. Additionally, many of these studies examine only homicides. Previous research indicates that investigators have very limited discretion in how to handle these cases. Further, a vast majority of studies on investigative decision-making uses a single agency to conduct their

research, thus limiting consideration of contextual variables that vary across agencies. Finally, though the theory of normal crime shows promise for predicting investigative behavior, there has only been one study that uses this theory to inform the study. This research was conducted over thirty years ago and again examines only one agency to draw conclusions.

Outline of the Remaining Chapters

The remainder of this dissertation will proceed as follows: Chapter Two examines previous research on discretion, investigative effort, and the factors that affect clearance rates. The research hypotheses are also presented. Chapter Three explains the methods for data collection and analysis. Chapter Four presents the findings regarding the organizational factors that were found affect clearance rates. Chapter Five discusses the findings regarding the contextual variables were found to affect clearance rates. Finally, Chapter Six summarizes the findings, discusses the implications and limitations of the research, and explores opportunities for future studies on this important topic.

CHAPTER 2

LITERATURE REVIEW

The purpose of this study is to examine police detective decision-making processes, how these processes vary within and across agencies, and how these processes affect investigators' ability to solve crime cases. It is therefore important to first understand not only the scope of their decision-making autonomy, but also the variables that can serve to enhance or constrain it. It is similarly meaningful to examine previous research detailing how detectives solve crimes as well as the factors that impact those processes. Though there is little research that successfully explains detective decision-making, much can be gleaned from examining studies on other criminal justice line level occupations.

Police Discretion

Theories of criminal justice contend that discretionary decision-making is a necessary component of line-level employee functioning. There are many reasons why discretion is an inherent part of the job. First, the volume of crime and finite resources make it impossible for criminal justice agents to provide adequate and equal treatment or service for every situation or case (Packer, 1964). The use of discretion therefore allows employees to more efficiently and effectively manage a large number of cases (Lipsky, 1980). Not unlike other criminal justice line-level employees, detectives are often assigned more cases than they can effectively process (Brandl, 1993a; Bynum et al., 1982). As a result, investigators typically have some discretion to decide which cases to investigate and how much effort to put forth on them, particularly for less serious or minor crimes (Waegel, 1981). It should also be noted that because caseloads can vary within and across organizations; the amount and value of service can also vary. Thus, workload is an important predictor of the quality and quantity of service provided by line level employees

(Lipsky, 1980; Sheingold & Grissette, 1987). Furthermore, the greater the numbers of available resources, the more options employees have. Some agencies may have better technology at their disposal, access to regional and/or state assets, or have a particular area of expertise that others do not possess. Resource availability therefore also affects discretionary decision-making for line level employees (Bernard & Engel, 2001; Lipsky, 1980; McCleary, 1992; Sykes, 1958).

Additionally, line-level employees have discretion because it is difficult for administrators to standardize or scrutinize most of what they do (Lipsky, 1980; McCleary, 1978; Maynard – Moody & Mushno, 2003; Van Maanen, 1978). Because criminal justice agents are dealing with human behavior, cases are often very complicated and require the consideration of multiple factors (Maynard- Moody & Musheno 2003; Skolnick, 1994). Though the crimes may be the same, the contextual circumstances are nearly always different. As a result, line level employees develop special job knowledge and expertise that make them uniquely skilled to do their job within the context of their environment (Muir, 1977; VanMaanen, 1978).

Systematizing processes for most line level criminal justice positions would not be practical because there are simply too many variables to consider. Administrators cannot create policies for every situation that employees might encounter. Attempting to do so would result in ambiguous and conflicting policies that are difficult to enforce (Feeley, 1977; Jacob, 1977; Worden, 1989). Additionally, it is typically not advisable for supervisors to second-guess how line level employees handle individual cases (Muir, 1977; Skolnick, 1994). Administrators often lack the street knowledge and wisdom that line level employees possess (McCleary, 1978). Administrators must therefore rely on line level employees to get work done. Moreover, most criminal justice line level employees spend significant time in the field and away from direct

supervision and their performance is hard to measure (Lipsky, 1980; Packer, 1964). Thus, discretion is an inherent component of their job.

Like other line level employees, detectives need the latitude to decide which resources to use, what leads to follow, what evidence to process, (because of variations in the amount of evidence available), the seriousness of the offense, witness/victim willingness to cooperate, and availability of leads. Additionally, detectives develop a high level of expertise that is unique to their position (Willman & Snortum, 1984). They are often able to accomplish tasks more quickly and efficiently through informal relationships that they establish over time (McCleary, 1978). Finally, investigators also spend a considerable amount of time in the field looking for suspects, meeting with witnesses, etc. Discretionary decision-making is an integral component of the criminal justice system, and it makes predicting line level behavior more difficult.

Previous research also suggests that line level employees have more discretion for cases that do not attract public attention (Hagan, 1989; Schinegold & Gresset, 1987; Skolnick, 1994; Sudnow, 1965; Sykes, 1958;). These might include minor crimes, crimes that happen frequently, or financial crimes. These categories of crimes do not seem to rise to the level of public scrutiny for many reasons. First, they are typically not as offensive or such a shock to the conscience of the public. Additionally, the pervasiveness of these types of crimes makes it difficult for the media or other informational outlets to report on all of them. Furthermore, much of what police officers do is exempt from public disclosure if the police can argue that releasing the information will hamper the investigation, at least initially. This suggests that there will be greater variation in how minor crimes are investigated than there is for serious crimes, thus making it more difficult to predict police behavior for less serious/low profile crimes (McCleary, 1992). This is consistent with the elements that are said to create what comes to be defined as a normal crime.

One of the considerations for determining if a crime is normal is the level of attention it is likely to get. Crimes where the victim is not likely to complain or does not have the social capital to be taken seriously fall into this category (Waegel, 1981).

Finally, line-level criminal justice employees are afforded some discretion because administrators rely on them to maintain the appearance of the legitimacy of the organization (Bitner, 1974; Goodpaster, 1987; McCleary, 1978; Wilson, 2006). This is necessary because the U.S. system of justice is no longer capable of functioning as was intended by the Constitution (Packer, 1964). As a result, criminal justice agencies have had to modify this system to make it more efficient. Though this modification has made it possible to process large number of cases, the tradeoff is that some of the fundamental protections guaranteed by the Constitution have been eroded. For example, the use of plea bargaining means that questionable searches, arrests, confessions, and evidence collection are not subject to scrutiny in an open forum. Cases with procedural issues are often pled to a lesser offense or dismissed (Skolnick, 1994). The fundamental problem with this practice is that most of the general public is under the impression that the justice system is functioning as was intended, and the government is therefore legitimate. Acknowledgement of the shortcomings of these processes would result in the erosion of public confidence, which might ultimately lead to the breakdown of public order (Packer, 1964; Skolnick, 1994). Criminal justice agencies must therefore present a socially constructed image to the public in order to be viewed as legitimate (Goodpaster, 1987; Jacobs, 1978; Lipsky, 1980; Scheingold & Gressett, 1987; Skolnick, 1994, Sykes, 1958). Organizations rely on their employees to maintain this façade, which suggests that management's power is not absolute (Goodpaster, 1987; Kraska, 2004; Sudnow, 1965; Sykes, 1958). This gives line level employees some leverage to manipulate policy. They can control the amount and quality of work they do,

sabotage organizational functions, and display negative attitudes if they disagree with policy decisions. As a result, they have the ability to resist policy changes and innovations and to have a certain amount of discretion regardless of what the organization tries to impose. Thus, line level decisions often become policy (Hagan, 1989; Jacobs, 1978; Lipsky, 1980; McCleary, 1978). This is consistent with institutional theory, which suggests that the myths of the environment are what matter (Wilson, 2006). The use of classification schemes is a good example of this phenomenon. Though they are used on a regular basis across all occupations within the field of criminal justice, research consistently suggests that they are only used when the public is not watching (Sudnow, 1965; Waegel, 1981).

Constraints on Discretion

Though discretion is an inherent part of line employees' work, they also must operate within certain constraints. This too can help predict behavior. First, and most important, criminal justice agents are constrained by the U.S. Constitution. Despite the fact that the some of the fundamental rights afforded by the constitution have deteriorated, they still serve as an important mechanism for oversight in some circumstances. Line level employees that violate these rights risk several different types of sanctions, particularly when the offense is egregious or controversial. Moreover, failing to follow established procedures can result in having a conviction overturned. Additionally, line level employees and their departments can be sued civilly and become subject to facing significant financial penalties. Line level employees can also face criminal prosecution under U.S. Code 1983, which prohibits violating an individual's constitutional rights under the color of law. Finally, line-level employees may face disciplinary sanctions, including termination from employment. Thus, the U.S. Constitution serves as an important mechanism for constraint on line level criminal justice employees. Detectives need to

be particularly aware of these constraints. Much of what they do is specifically addressed in the fourth and fifth amendment of the U.S. Constitution and subsequent case law. Interrogations, searches, and evidence collection are all important daily activities.

Second, line-level discretion is tempered by community standards of justice and civility (McCleary, 1978; Shingold & Gresett, 1987; Skolnick, 1994). As society has become more diverse, more educated, and more complex, there has developed increasing variation in opinion regarding what laws should be enforced and what level of due process should be afforded to defendants. Communities and regions fall along a continuum where at one end the focus is on efficiently processing criminals. Consensus theory suggests that citizens are willing to give up some of their rights to strengthen crime control efforts (Hagan, 1989). At the other end of the continuum, citizens are more inclined to support the due process model at the risk of some guilty defendants going free (Packer, 1964). Failure to meet community expectations can result in withholding funding for the agency and/or changing the leadership of the agency. External pressure from the community therefore plays a role in limiting discretion (Muir, 1997; Jacob, 1997; Hagan, 1989; Kraska, 2004). Additionally, communities can prioritize and dictate levels of enforcement, prosecution, sentencing, and incarceration in accordance with the resources available to them (Bloomberg, 1967; Flemming, 1990; Lipsky, 1980; Sheingold & Gressett, 1987; Sykes, 1958). Varying levels of resources leads to variation in how and what laws are enforced across communities (Bernard & Engel, 2001). Therefore, it is likely that communities which possess greater resources expect more investigative effort and therefore more success from their detectives thus constraining detective discretion more so than in disadvantaged communities.

Third, the level of scrutiny any given crime, case, individual, or agency is under predicts the extent to which criminal justice agents have discretion (McCleary, 1978; Skolnick, 1994; Shingold & Gressett, 1987). There is ample research that indicates police, prosecutors, judges and correctional employees have little discretion for very serious crimes or crimes that garner the attention of the public (McCleary, 1978; Skolnick, 1994; Shingold & Gressett, 1987). Media and politicians play a role in limiting discretion by exposing the realities of the process and help form the opinions and expectations of society (Hagan, 1989; Jacob,1997; Kraska, 2004 Muir, 1977). This is consistent with research on detective decision making for homicide cases.

Detectives do not have discretion to discriminate or put forth less effort on these very serious cases (Castro, 2011; Litwin, 2004; Ousey & Lee, 2010; Richardson & Kosa, 2001).

Fourth, line-level employees are constrained by pressure from their co-workers. It has been suggested that line level employees make decisions based on their own moral and ethical standards, which makes predicting their behavior difficult (Maynard-Moody & Mushno, 2003). However, there are constraints that help make prediction easier. Research on police behavior suggests that the distinctive features of the job – danger, authority, and isolation – create a collective consciousness, which prescribe certain responses for certain types of situations (Bittner, 1974; McCleary, 1978; Skolnick, 1994, Van Mannen, 1978) Additionally, line level employees are deemed competent by their coworkers when they understand how to handle their cases in accordance with unwritten rules that exist within the department (McCleary, 1978; Skolnick, 1994; Sudnow, 1965). Individuals face pressure to learn the typical response in an effort to maintain the appearance of legitimacy and make work predictable (Sudnow, 1965). Finally, line level employees are pressured to conform to average performance standards so that under-performers are not as easily identified and forced to work harder (McCleary, 1978).

Previous research on detective decision-making states there is a collective understanding on how to manage cases among co-workers (Brandl, 1993a).

Line-level employees are also constrained by organizational standards (Lipsky, 1980; McCleary, 1978). Though employer power is not absolute, administrators still have the ability to impose both formal and informal sanctions on employees who are not meeting expectations or following policy (Jacob, 1997). Employers often use punishment and rewards to keep employees in line and to guide decision-making within the organization (Flemming, 1990; McCleary, 1978; Muir, 1977; Sheingold & Gressett, 1987). Additionally, employees are sometimes constrained by lack of resources. Limited funding for overtime, specialized equipment, or third party services can hamper employee productivity and effectiveness. Organizations, therefore, must prioritize levels of enforcement, prosecution, sentencing and incarceration in accordance with the resources available (Bloomberg, 1967; Flemming, 1990; Lipsky, Sheigold & Gressett, Sykes, 1958).

Further, line level employees are constrained by other criminal justice agencies. This dynamic is known as coupling (Hagan, 1989). Coupling is described as an informal exchange relationship that exists between individuals and organizations and serves to more efficiently process cases (Feely, 1973; Flemming, 1990; Hagan, 1989; McCleary, 1978; Skolnick, 1994). It refers to the extent to which the actions of one organization predict consequences for another organization (Jacob, 1997). The more reliant agencies are on one another, the easier it is to predict behavior. This occurs in many ways. For example, agencies often depend on one another for unique resources such as specialized equipment or software, foreign language interpretation, or mutual aid staffing. Additionally, most police agencies are dependent on a regional crime lab to analyze their evidence and provide testimony regarding the results. Further, state agencies

often have supplemental resources including; undercover teams and polygraph operators, or special skills such as computer forensics. Only the very largest agencies are likely to have these services in-house. Detectives can also be constrained by other parts of the justice system. Prosecuting attorneys can refuse to issue charges, judges can dismiss cases, and correctional authorities can release inmates early if their facilities are overcrowded. Line level employees are therefore dependent on other agencies for assistance. As a result they must temper their requests for service in order to get the most important things done. Failure to do so can bog down the system and result in less cooperation from other agencies. This suggests that detectives are limited as to the level of investigation they can put forth on a case when they are dependent on other agencies for assistance. Investigators are particularly affected because they rely heavily on outside agencies for specialized forensic analysis and follow up prosecution.

Solving Crime

In addition to understanding the scope of investigator decision-making autonomy it is also important to look at previous research on factors that affect the ability of the police to solve crime. Though much has been written about U.S. crime rates and how they vary with population size, there is relatively little research on variations in the percentage of crimes solved across different communities. There have been some attempts to measure investigative productivity in terms of cost per investigation, hours of investigation expended per crime, and cost per crime cleared (Drebin & Brano, 1992; Wadman & DeLadurantey, 1984; Hatry, 1999). However, despite the fact that solving crime is an important function of police departments, there is little systematic research on variations in crime clearance rates across communities.

Many studies suggest that the single most important determinant of whether a case gets solved is victim and witness cooperation (Brown, 200l; Bennett, 1982; Greenwood, et al., 1975;

Keel, 2008). Victims and witnesses can provide valuable details such as the name or description of the offender, suspect vehicle information, or other unique identifying facts that can help break a case. Researchers have linked victim and witness willingness to cooperate with demographic variables such as their age and race (Keel, 2008; Litwin, 2004; Peek, et al., 1981). The correlation between age and cooperation with police shows the most consistent finding. Residents under the age of twenty-five are less likely to support the police and older residents (over 60) show more favorable attitudes toward police. (Addington, 2006; Decker, 1981; Jesilow, Meyer, & Namazzi, 1995; Peek, Lowe & Alston, 1981). Findings on race are not as decisive. In several studies, minorities have indicated a lower approval rating of police than white residents. (Decker, 1981; Flanagan & Vaughn, 1996; Huang & Vaughn, 1996; Litwin & Xu, 2007; Waddington & Braddock, 1991). Yet others have concluded that race is not a factor in levels of citizen satisfaction or clearance rates when other variables are controlled for. (Addington, 2006; Pucket & Lundman, 2003; Roberts, 2007).

Community characteristics have also been linked to the rate at which jurisdictions solve crime. More densely populated areas and communities with lower percentages of homeownership consistently report lower clearance rates (Goltz, 2007; Keel, Jarvis & Muirhead, 2009; Keel, 2008; Wolf, 2008). Larger communities are typically more densely populated than smaller ones (U.S Census, 2013). The relationship between poverty levels and clearance rates are mixed. Some studies conclude lower clearance rates for impoverished areas, while others found higher clearance rates (Borg & Parker, 2001; Sullivan, 1985). Researchers also found lower clearance rates for robbery and aggravated assaults in more racially segregated areas (Roberts, 2008; Eitle et al., 2005).

To date, two studies have examined the relationship between police agency size and clearance rates. Cordner (1989) examined data from 84 police agencies in the State of Maryland in an attempt to identify variables related to the size of an agency that impact clearance rates for all Part I and Part II offenses. Surprisingly, he found that neither the size of the police agency nor the officer workload was related to investigative effectiveness when controlling for several other agency level variables. He also found that non-urban police agencies had higher clearance rates regardless of size after controlling for number of index crimes, number of index crimes per sworn officer, and property crime as a portion of index crimes. He suggests that some unidentified characteristics of non-metropolitan police agencies and the area they serve contribute to their ability to solve crime. He concludes that "considerably more thought and research is needed to identify and test environmental and organizational variables affecting police agency investigative effectiveness." (Cordner, 1989 p. 154).

Further, Kennedy (2009) used existing data from 2,271 police agencies in the U.S. in an effort to measure the influence of police agency size on clearance rates for all Part I offenses. After controlling for the effects of variables that measure community demographics, agency structure, community policing tactics, and workload, he found a significant inverse relationship between police agency size and clearance rates for robbery, felony assault, and vehicle theft. However, clearance rates for homicide, rape, burglary, and arson were not impacted by the size of the police force. This implies that as the size of the police agency increases, the ability to solve some Part I crimes decreases, however, other Part I crimes are not affected by agency size.

Research also suggests that police investigative procedures can impact clearance rates. Several studies conclude that the actions of the first responding officer are critical to increasing the probability that a case is solved (Bloch & Bell, 1975; Carter, 2013; Eck, 1984; Greenwood &

Petersilia, 1975; Greenberg & Wasserman, 1979). Procedures such as securing the crime scene, collecting evidence, identifying witnesses, and conducting neighborhood canvases are positively related to clearance rates for serious crimes (Keel, 2008; Wellford et al., 1999). Follow up investigation techniques such as submitting evidence and latent prints for lab analysis, interviewing witnesses, searching for stolen property, and conducting suspect line-ups have also been shown to improve the probability of a crime being solved (Welford et al., 1999). Additionally, departments that regularly use analytical tools such as blood spatter examination, statement analysis, voice stress analysis, and criminal profiling are better able to solve crime (Keel, 2008).

Some organizational level variables also impact the likelihood of solving crime.

Caseload has been examined and found to be related to clearance rates in some instances
(Bayley, 1994; Keel, Jarvis, & Muirhead, 2009; Skogan, 1976; Schaemmann and Kalish, 1972).

However, some research has determined that the total number of cases per investigator does not affect clearance rates (Bennett, 1982; Pare et al., 2007; Ousey & Lee, 2010; Wellford et al., 1999). Additionally, police expenditures have little to no effect on clearance rates, but significant increases in expenditures and allowing officers to work overtime to finish investigating cases does increase clearance rates (Cloninger & Sartorius, 1979; Keel, 2008; Schaemman & Kalish, 1972).

Management structure, employee oversight, and organizational practices have also been examined in relation to clearance rates. Larger, more structured organizations, with more layers of supervision and formal rules are less effective at solving crime (Maguire, 1997; Moore & Braga, 2003). Additionally, organizations with accountability systems such as Compstat, formal case review, or stringent warrant submission policies consistently report higher clearance rates

(Greenwood, Chaiken, Petersilia, Prusoff, 1975; Keel, Jarvis & Muirhead, 2009; Moore and Braga, 2003; Wycoff & Cosgrove, 2001). Further, organizations that screen out cases using solvability factors and do not investigate cases that are not likely going to be solved also have higher clearance rates (Bloch & Bell, 1976; Greenberg & Wasserman, 1979). Some software programs have not been shown to increase clearance rates unless used in conjunction with other investigative techniques such as Compstat; however, computerized case management software has had a significant effect on clearance rates (Garicano & Heaton, 2006; Keel, et al., 2009). The level of officer training shows mixed results, with some researchers finding a correlation between training and increased clearance rates, and others finding no relationship. (Greenwood, et al., 1975; Keel, et al., 2009).

Investigator Effort

There is also evidence that police officers put a varying degree of effort into investigating crimes, depending on several factors, such as the amount of available evidence, seriousness of the crime, type of crime, extent of injury to the victim, and the total dollar loss to the victim.

(Bynum, et al., 1982; Skogan, 1976; Waegel, 1981). UCR reports consistently show that violent crimes have higher clearance rates than property crimes for Part I crimes (U.S. Department of Justice, 2011). In larger cities, most criminal cases receive no investigative attention or are not investigated beyond the initial stage (Greenwood, et al., 1975; Skogan, 1976). Additionally, high profile cases or cases where there is more political or media scrutiny receive more investigative effort than those that do not (Bynum, et al., 1982; Davies, 2007; Moore and Braga, 2003). Further, communities that have a more transparent government and are more concerned about civil rights tend to have higher clearance rates (Bennett, 1982; Swanson, 1978). Finally, detectives who specialize in investigating very few types of crimes may put forth less effort than

those that examine all types of cases. Studies have concluded that investigative specialization leads to monotony (Maguire, 1997). Conversely, generalist detectives enjoy the variety it brings to their work (Wycoff & Cosgrove, 2001).

The fact that officers put varying amounts of effort into investigating crimes suggests that the potential exists for more crimes to be solved. For example, when detectives take the extra time to locate hard-to-find witnesses, obtain search warrants for cell phone records, or seek out surveillance video from local businesses, they may develop enough evidence to solve a case that may not otherwise be solved. Conversely, when investigators conduct a routine investigation they may overlook valuable information that could potentially solve the crime. As was mentioned earlier, investigators typically have the discretion to decide how much effort they put into some investigations; however, more serious and high profile crimes tend to limit discretion across all types of criminal justice agencies (Litwin, 2004; McCleary, 1992; Sudnow, 1965).

This gives further support to the theory of normal crime and offers one explanation as to why clearance rates vary across cities. Perhaps the definition of a "normal" crime varies according to its pervasiveness, particularly for serious offenses. In order for a crime to be classified as routine, it would have to occur enough times that it can be processed with little thought or effort. In some jurisdictions the total number of serious crimes may never reach the point where they become "normal." Additionally, if the level of investigative effort for a normal crime is not universal across police agencies, the extent to which each type of crime is investigated may also vary across agencies. Further, as the total number of serious crimes increase, political and media scrutiny may decrease because citizens may become desensitized to violence; thus the level of investigative discretion may vary according to levels of serious crime. External pressure from the community plays a role in limiting discretion and helps form the

opinions and expectations of society (Hagan, 1989; Jacob, 1997; Kraska, 2004; Muir, 1997).

Additionally, agencies with higher crime rates may systematically eliminate certain types of cases that have a low probability of being solved, where others may put forth some investigative effort because those types of crimes do not occur enough to be defined as normal crimes.

Finally, some cities may tend to be less transparent and less concerned about civil rights than others. Though categorization schemes may be somewhat of a sub-conscious act, they may also have the effect of lowering clearance rates because police officers put less effort into investigations and perhaps therefore miss out on opportunities to solve crimes that could be solved with a little more thought and effort.

There is some evidence that indicates this dynamic may be occurring. For example, in Kennedy's (2009) study of clearance rates, homicide and rape cases did not vary according to population size when other demographic and organizational variables were controlled for; however, felony assault and robbery did vary. This suggests that in all cities, homicides and sexual assaults are important cases and receive the greatest amount of effort regardless of city size. However, perhaps as the pervasiveness or frequency with which serious assaults and robberies occur, the standard for what is considered a "normal crime" changes. Serious assaults and robberies generally happen less frequently in smaller communities; therefore, there may be more public scrutiny, less routinization, and less investigative discretion for those crimes. Consequently, they may be more vigorously investigated. More time and effort spent investigating leads to higher clearance rates (Brandl, et al., 1994).

The current study expands on Waegel's (1981) research on in several ways. Though his research was the first and only of its kind, it was written over thirty years ago and used only one site to collect data. This study examines detective decision-making at three different sites in an

effort to detect contextual factors that influence behavior. Additionally, this research explores how the use of classification schemes impacts crime clearance rates. This not only furthers the understanding of behavior, it also provides practitioners with potential valuable information about solving crime. Further, this study has the advantage of relying on more recent research that has examined alternative explanations and theories of investigator behavior and found either conflicting results or little relationship with other variables such victim devaluation (Brandl, 1993a; Castro, 2011; Keel, Jarvis, & Muirhead, 2009; Litwin, 2004; Regoeczi, Jarvis, & Riedel, 2008; Ousey & Lee, 2010; Roberts, 2008; Rydberg & Pizarrio, 2014) or investigative processes (Bynum et al., 1981; Brandl, 1993b; Rydberg & Pizarrio, 2014). Finally, the current study refines definitions of normal crime to gain a better understanding of extant classification schemes and how they are used to investigate crime.

Conclusion

This study builds on existing research by examining investigator decision-making processes in an effort to provide rich descriptions of the factors that affect detective thought processes. Previous studies suggest that for most cases, investigators develop classification schemes as a short-cut method of effectively processing their workload. Further, these investigative processes become routine and therefore do not constitute an exhaustive examination of all possible leads. Conversely, some cases rise above the level of normal and therefore receive a comprehensive investigation. Little is known about the use of classification schemes by detectives, how they vary across agencies, and how they impact the ability to solve crime.

Research Hypotheses

This study tested the following hypotheses:

- H1: Organizational limitations on specific case processing (The ratio between number of crimes and number of detectives) will increase the likelihood that police detectives rely on extant classification schemes.
- H2. Classification Schemes will vary across departments. Contextual variables, such as crime rates, the political environment, and media/public scrutiny will result in different priorities and different standard operating procedures by offense.
- H3: Detectives discretionary decision-making and thus reliance on these schemes are most likely to be influenced by characteristics of the offense (i.e., seriousness of the offense- as the seriousness of the offense increases, investigator discretion decreases), and victim level of social capital (as victim social capital increases discretionary decision-making decreases). All else being equal, these variables will drive these processes compared to other potential influences.
- H4: Crimes that are classified as typical by investigators will receive minimal investigative effort. Crimes that cannot be classified as typical will receive substantial investigative effort.
- H5: Crimes that receive minimal investigative effort are less likely to be cleared than those that receive substantial investigative effort. Thus, normal crimes are less likely to be cleared than other crimes.

CHAPTER 3:

METHODOLOGY

Research Approach and Rationale

This study further refines research on investigator decision-making using the theory of normal crime to guide the inquiry. The goals of this research study were to first develop a better understanding of the how and when detectives use extant classification schemes and how they affect investigative effort. Second, this study sought to explore how variations in investigative effort affect investigator ability to solve crime. And lastly, this research examined how the use of classification schemes varied across police agencies, and the variables that contribute to these variations. To achieve these research goals, a qualitative comparative case study methodology was used.

A qualitative study was most appropriate for this research for several reasons. First, it has been suggested that the process of creating extant classification schemes occurs at the subconscious level of thought (Waegel, 1981). Therefore, police investigators may not be fully aware that they are processing cases with little consideration for the uniqueness of each case. It would consequently be difficult to draw out specific quantitative variables that could be used to measure this phenomenon. Additionally, though the use of short hand typifications is pervasive throughout the field of criminal justice and in other fields as well, there has been very little research on how they might affect clearance rates and how they might vary across police agencies (McCleary, 1978; Skolnick, 1994; Sudnow, 1965). This project endeavored to fill these gaps in the existing research. It was therefore important to fully examine the intricacies of this process and how extant classification schemes may or may not have varied across agencies. Further, research suggests that classification schemes are related to the volume of cases

processed (Sudnow, 1965; Waegel, 1989). It is not clear, however, at what point they become "normal." It is also not clear what other variables affect classification schemes. A qualitative study was better suited for examining the multiple variables that create this phenomenon. Finally, because of the likelihood that some of the variables that affect classification schemes have not been fully developed or discovered, exploratory research was more appropriate for this type of challenge. It was therefore important to acquire a holistic understanding of variations in investigative processes that affect crime clearance rates.

The strengths of qualitative research include: understanding the meaning and context of participants, identifying unanticipated phenomena and influence, understanding processes, and developing causal explanations (Maxwell, 1996). A qualitative study was necessary to develop a more complete and elaborate picture of these processes and explanations, and more effectively add to the body of research on this important topic. This research will thus ultimately assist policy makers with important decisions about how to best use their resources.

The comparative case study methodology was selected for several reasons. First, the case study tradition of qualitative research seeks to develop an intensive description and understanding of a bounded social phenomenon (Creswell, 2007). Since the focus of this study was to examine whether or when police detectives rely on extant classification schemes across agencies, this genre provided the best fit for this type of analysis. Additionally, data collection for case studies typically uses multiple methods of data collection (Creswell, 2007). Because police departments document a vast majority of what they do, and because they are often highly scrutinized by the media, the public, and the government they serve, multiple sources of data were available for review. Further, multiple case analyses allowed for the collection of detailed information for both within-case analysis and cross-case analysis. This provided the best method

for extracting similarities and differences across police agencies. Finally, by providing thick, rich descriptions of the cases, this method provided an opportunity to apply the knowledge and insight gained through research to similar contexts and settings (Bloomberg & Volpe, 2012).

Research Sample

Three police agencies located in the Midwestern United States served as the research sites. All three sites are located in the same state. Agency and community names were changed to pseudonyms in order to maintain their confidentiality (hereinafter named Jamison, Kensington, and Lancaster). Further, specific characteristics, locations, and events that provide identifying information were excluded or changed. The three agencies used in this study were chosen for several reasons. First, access to the data and individuals involved in this study was readily available. The chief of police at each site agreed to allow me to access their records management system via the Internet and also agreed to facilitate interviews with officers at their respective departments. Additionally, the cities are similar in population size. Research indicates that police cultures, structures, and processes vary greatly in accordance with agency size (Paoline, 2003). By using similarly sized agencies, it was easier to detect contextual differences that were due to factors other than correlates of population size. Second, the cities selected for this project all have a population of less than 50,000 residents. Prior studies suggest that crimes come to be defined as normal when they happen with some frequency (Sudnow, 1965; Waegel, 1981). It would have been more difficult to discern differences among larger agencies because a higher percentage of crime reports would likely have been defined as normal due to the volume of crime that is reported to them. By examining these smaller agencies, I was able to get better understanding of the variables that impacted investigative effort. Further, detectives in these smaller agencies seemed to be more likely to provide access to the

information that needed to be gathered because larger agencies typically have more layers of administration, which can lead to difficulties in gaining access from multiple work groups.

Additionally, all three agencies use the same records management software. This provided an opportunity to collect data that was gathered using the same protocol across jurisdictions.

Finally, it was also important to examine variations in levels of discretion across agencies and how it affected investigative effort, and therefore clearance rates. Detectives in smaller agencies may have less discretion because they tend to be more highly scrutinized. It was important to see what effect varying levels of discretion had on investigative effort.

Data Collection Procedures

In an effort to gain a rich understanding of each police agency, it was important to collect data based on what has been learned from previous research. Four types of information were gathered as a part of the research process. These included: contextual, demographic, perceptual, and theoretical information. The contextual information or the factors unique to each jurisdiction were important because existing research suggests that detective decision-making is influenced by these variables (Sudnow, 1965; Waegel, 1989). Community demographic information was also collected. This information not only helped provide an overview of how the communities compare and contrast to one another, it also provided insight regarding the contextual variables that are said to affect detective decision-making. The perceptual information that was collected was the most important piece of the research. It was intended to determine participants' perceptions related to the development and use of categorization schemes. Perceptions are not facts; they are what they view as facts and are embedded in long-held assumptions and one's own frame of reference or view of the world (Bloomberg & Volpe, 2012). It was also imperative to seek out information that further developed and refined the theory of normal crime.

This provided support for the interpretation, analysis, and synthesis of data, as well as provided support for the conclusions and recommendations of the study. This material was collected through document review, interviews, and observations.

Sampling Strategy

Convenience sampling, quota sampling and systematic sampling were the three main sampling strategies that were utilized in this study. The primary unit of analysis for this project was each jurisdiction under study. Within each case, several levels of data were available, including; individual, group, and organizational levels of data. Data were collected and analyzed in several phases. First, demographic and organizational information was gathered from each jurisdiction. This provided an opportunity to analyze similarities and differences across communities and offered insight into contextual factors that affected detective decision making. It also afforded the opportunity to compare factors that have been shown to impact clearance rates. This information was collected by examining census data, organization charts, budget documents, relevant policies and procedures, and local government web sites.

Second, incident based crime data (NIBRS) reports for 2011-2013 for each of the three jurisdictions were obtained from the state police. The information contained in these reports included; the total number of reported crimes for each of the 95 reportable crime categories, the total number of crimes cleared for each category, and the percentage of crimes cleared. Crime rates were examined in an effort to determine which types of crimes seemed most appropriate for analysis in this study. After reviewing the data, the two crimes that were selected for review were robbery and burglary. These crimes were chosen for several reasons. First, it was important to select crimes that happened often enough to provide an adequate illustration of variations in investigative effort yet not so voluminous that they became redundant to

investigators. Additionally, it was necessary to select crimes that varied in levels of seriousness in order to examine variations in investigator discretion. As was mentioned earlier, previous research suggests that investigators have less discretion for serious cases (Castro, 2011; Litwin, 2004; Ousey & Lee, 2010; Richardson & Kosa, 20010. Utilizing these two crime categories also provided an opportunity to compare and contrast personal and property crimes. Finally, in the only other study that examined investigative effort using the theory of normal crime, researchers used burglary and robbery cases for their analysis (Waegel, 1981). Selecting these same variables provided an opportunity to draw direct comparisons to prior research.

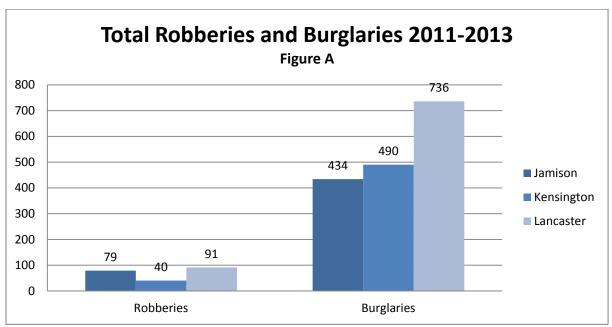
After receiving Human Subjects approval for this project, a sample of police reports from each jurisdiction was selected for review. The process for selecting this sample was as follows:

A list of all of the robberies and burglaries for the years 2011-2013 was extracted from each department's records management system. These reports were listed in chronological order.

According to department records, the total number of robberies per jurisdiction for the three year period ranged from 40 to 91. The total number of burglaries per jurisdiction ranged from 434 to 736 (See Figure A).

The quota sampling method was used to identify a representative sample of these data. Twenty-five robbery reports and 125 burglary reports from each jurisdiction were selected as the target number of reports. These reports were identified using the systematic sampling method by dividing the total number of reports by the target quota number, with each nth case included in the sample. Additionally, any reports that were identified as being related to those originally selected (serial crimes) were also included in the sample. Because there were relatively few total robbery reports, it was necessary to include a high percentage of these cases in order to have an adequate sample size. Selecting 25 robbery reports provided a range of 34 to 70 percent of the

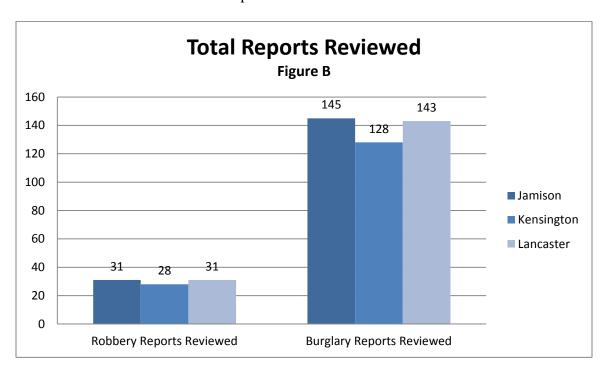
total number of reports for review. The sample size for burglaries was chosen because it provided a representative sample of reports across years and across months of the year. For burglary reports, a sample size of 125 provided a range of 19 to 31 percent of the total number of reports for review. Additionally, 2011-2013 reports were chosen for two reasons. First, the data was recent enough so as to be relevant to current policing practices yet not so fresh to include cases that had not been through the entire investigative process. Also, reviewing three years of data provided an opportunity to gain an in-depth understanding of the investigative process while minimizing the chance for anomalies in the data that may occur at a particular time of year, or during a particular year.



(Jamison, Kensington, Lancaster records management systems, 2015)

Using the above criteria, a total of 506 police reports were selected for evaluation in this study. Thirty-one robbery reports and 145 burglary reports from Jamison were analyzed. From Kensington, 28 robbery reports and 128 burglary reports were evaluated and from Lancaster, 31 robbery reports and 143 burglary reports were reviewed. (See Figure B).. The primary purpose of examining the reports was to search for evidence of routine or special processing of cases and

to identify variables that influenced these designations. This included the investigative processes that officers employed to examine crimes as well as the discourse they utilized to document their perceptions of these crimes. Each of these reports was examined for similarities and differences in the level of investigative effort exerted by both the initial responding officer as well as any follow up investigation that was conducted by detectives. The information that was gathered from the reports was used to identify themes and assist in the development of interview questions. The total number of crimes that were solved and how those crimes were solved was also included in the data collection process.



Each report was then read in its entirety and coded for several variables. These include; date, location of the offense, reporting officer, whether the crime was solved, and how it was solved. Additionally, specific details regarding the methods used to investigate the crime as well as the words and phrases that were chosen to describe the crime event were noted. Themes were developed and refined throughout this process. After the reports were reviewed, a list of interview questions was created using open-ended questioning techniques that sought to further

explore these themes and identify similarities and differences in investigative processes.

Because the routine processing of cases has been said to occur with little thought and effort, it was important to craft questions that elicited descriptions of investigator experiences related to this phenomenon and how they influenced their decision-making process. These questions were then reviewed by detectives from a similarly situated police agency. Questions were modified based on discussions with investigators to ensure that they aided in supporting or refuting the hypotheses. (See Appendix B for a complete list of interview questions).

The next step in the process was to conduct interviews at each of the three sites. The sample size for interviews was determined after considering multiple factors, including; not overburdening the cooperating agencies, conducting enough interviews to develop a comprehensive understanding of the investigative process, and adequately exploring themes that were identified in the report review process. Previous research on qualitative studies indicates that the average sample size is twenty-five (Seidman, 1998). The sample size initially targeted for this project was between 24-30 individuals.

I contacted the chief of each participating agency via email, confirmed their continued willingness to participate in the study, and requested permission to interview eight to ten sworn police officers from their department. Upon receiving authorization, I scheduled dates to go to each agency to conduct the interviews. Each chief provided me with a contact person at the agency to help coordinate the interviews. Jamison officers were interviewed first, followed by Kensington and then Lancaster. Interviews were conducted in April and May, 2015.

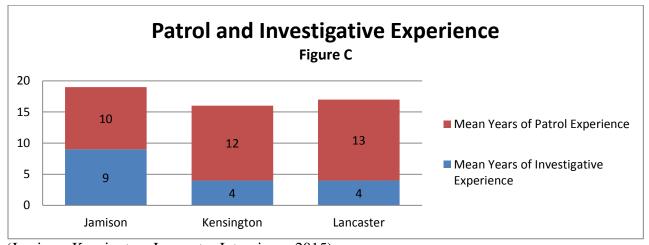
Upon my arrival at the respective agencies, I was introduced to the contact person and was provided a conference room to conduct the interviews. I requested to interview eight to ten sworn police officers at each site, especially those who had been or were currently assigned to

the detective bureau. The contact person from each department solicited volunteers for the interview from the pool of those that were working on the day that I was at the site. I interviewed each officer separately in a private room so that others could not hear the conversation. Prior to the start of the interview I explained that participation was completely voluntary and reviewed the Research Participant Information and Consent Form with each person. A copy of the consent form was also given to each of the participants. I also requested permission to record the conversation on a digital audio recorder in an effort to accurately document the dialogue. Due to the fact that I conducted face-to-face interviews, the identity of the participants is known to me; however, every effort has been made to keep their identities confidential. Each participant was advised that information regarding their identities as well as agency or community identifiers would be excluded from any reports or publications. I then provided each participant with a brief overview of the study prior to commencing with the interview. Interviews lasted between 45 and 90 minutes. After the interviews were completed, I transported the digital recorder to my office and secured it in a locked drawer until it could be transcribed. Each interview was transcribed into a Word document by a transcriptionist within a few days of the interviews taking place. I then compared the typed narrative with the recordings to ensure they were accurate.

The interviews were coded for patterns, trends, and themes within three days after the interview took place. The constant-comparative method of concurrently collecting, coding, and analyzing data was employed in an effort to develop themes. These themes were then further explored and refined in subsequent interviews at the remaining agencies (Glaser & Strauss, 1967). Similarities and differences within and across each organization was the focus of the examination.

Sample Characteristics

Twenty-four police officers were interviewed for this study. Eight interviews were conducted at each of the three sites. Of those interviewed, seventeen had experience working in the detective bureau, and the remainder were assigned to the patrol division for their entire career. Three of those interviewed were supervisors and two were females. The years of total police experience ranged from eight years to thirty years, with the mean and median being 17 years. Jamison officers averaged the most total investigative and patrol experience followed by Lancaster and then Kensington (See Figure C). In an effort to maintain the anonymity of the participants, no further demographic information was collected.



(Jamison, Kensington, Lancaster Interviews, 2015)

Data Collection and Storage

All documentation that was collected was stored in a secure location. Physical documents are locked in a file cabinet in my office. Electronic data including audio files is stored on my password protected computer and on a flash drive with WINZIP password protected folders. Any unnecessary or unused documents were destroyed.

Analysis

Themes were labeled with words that best described the data. The information was also divided into sub-categories as the research proceeded. As I interpreted the data, I was careful to convey it within the context of how the subject perceived it, using his or her words to describe it as often as possible. I also read the interviews several times to ensure I was accurately representing the entirety of each officer's thoughts and feelings to avoid taking statements out of context. The goal was to present an in-depth analysis of the cases and develop naturalistic generalizations so that other researchers could ascertain whether these themes could be transferred to other situations. Tables, figures and narratives are used to present a thick, rich description of the data (Creswell, 2007).

Strategies for Validating Findings

In an effort to accurately reflect investigator decision-making processes, several validation strategies were used. Triangulation involves collecting data from multiple sources using various methods in an effort to corroborate findings (Creswell, 2007). For this study, information gleaned from interviews was compared with different types of documents, including police reports and official crime data reports to support or refute participant statements, therefore providing a more holistic image of the phenomenon under study. Additionally, clarifying researcher preconceptions prior to commencing research was an important validation strategy (Creswell, 2007). Because I was a police officer for 28 years and have investigative experience, it was particularly imperative for me to reflect on my perceptions not only at the outset of the study, but also throughout the research process. Finally, vivid and dense descriptions were used to provide the reader with the opportunity to make their own determination of the transferability to other venues (Creswell, 2007). The use of an audio recorder and clarifying participant thought

processes offered a more accurate reflection of participant statements and decision-making and thus provided the reader with the opportunity to draw their own conclusions regarding the application in other settings.

Reliability

In qualitative research, reliability refers to the accuracy with which the data is presented (Cresswell, 2007). For this research, several techniques were used to enhance the reliability of the study. First, audio recording and subsequent transcription provided an accurate and detailed narrative for later review. This prevented issues of misquoting participants' statements due to memory issues. Additionally, whenever possible, exact quotes were taken from police reports in an effort to fully convey the author's intended description. Further, crime data was gathered from official records that had been submitted to the state police rather than relying on reports generated from each agency's record management system. Also, police reports were selected for review using the same records management software and the same query procedure. Finally, as recommended by Shenton (2004), it was also important to describe the data collection procedure in great detail and reflect on the effectiveness of the process throughout the data collection and analysis progression.

Ethical Concerns

Because I was the chief of police at an unrelated police agency during the interview process it was important to consider several ethical concerns and challenges. First and foremost, it was essential for interviewees to understand that their participation was voluntary. In order to do this I made every effort to establish a rapport with officers by explaining that the purpose of the research is to help police officers do their job better, and was not intended to measure or evaluate their individual performance in any way. Additionally, it was imperative that

participants provided honest feedback. I was concerned that there would be a tendency to downplay or avoid discussing any perceived weakness in their investigative ability. Upon reviewing the interviews and reflecting on process, it is my perception that most of those interviewed were forthright and truthful in their responses. There were a few individuals that said they investigate every case to the fullest extent regardless of the circumstances; however, the remainder seemed willing to share their personal feeling and perceptions whether positive or negative. It was also important to be mindful of the influence of my personal experiences as a police officer, detective, first line supervisor, and administrator. Though these experiences and insights were helpful, it was essential that I kept an open mind throughout the research process.

CHAPTER FOUR

FINDINGS REGARDING ORGANIZATIONAL FACTORS

This chapter opens by providing an overview of comparative demographic and crime data for each of the three communities that were examined in this study. Additionally, this chapter presents more detailed information about the characteristics of each community as well as the structure and standard operating procedures of each city's police department. Further, as with the tradition of qualitative research, major themes regarding investigative effort are identified and explored in detail using both within case and across case analysis. Finally, this chapter examines the different ways crimes are solved and the impact investigator effort has on solving crime.

Community Comparison

According to U.S. Census Data (2010) the three communities that were examined for this study are fairly similar in some regards and quite different in others (See Table 1). The population for each community ranges from approximately 35,000 to 41,000, with Jamison being the largest city in the study and Lancaster being the smallest. Though the populations are similar, the range for the land area in square miles is much greater. The city of Lancaster covers only about 10 square miles, whereas Jamison encompasses 25 square miles and Kensington is comprised of 35 square miles of land area. Lancaster has the highest population density at approximately 3,500 people per square mile, while Jamison and Kensington average about 1,500 and 1,100 respectively. Previous research suggest that population density has an impact on clearance rates, with more densely populated areas having lower clearance rates (Goltz, 2007; Keel, Jarvis & Muirhead, 2009; Keel, 2008; Wolf, 2008). Kensington has the highest graduation rates for both high school (95%) and college (35%) followed by Jamison at 93% high school

graduates and 33% with bachelor's degrees. Lancaster is a bit lower at 86% and 16% respectively. The state average for high school graduation is about 89% and approximately 26% of the population has bachelor's degrees.

Table 1: Community Overview							
	Jamison	Kensington	Lancaster	State			
Population ¹	41,000	37,500	35,000				
Percent High School Graduate ¹	93%	95%	86%	90%			
Percent Bachelor's Degree ¹	33%	35%	16%	26%			
Median Household Income ¹	\$49,000	\$59,000	\$35,000	\$48,500			
Median Value of Homes ¹	\$125,000	\$130,000	\$70,000	\$120,000			
Percent Homeownership ¹	63%	70%	70%	72%			
Unemployment Rate Jan. 2010²	7%	8%	14.5%	13.7%			
Percent Living in Poverty ¹	12%	10%	22%	17%			
Population Per Square Mile ¹	1,500	1,110	3,500				
Land Area in Square Miles ¹	25	35	10				
Total Violent Crimes 2011-2013³	252	199	580				
Ratio of Violent Crime/Residents	1:162	1:188	1:60				

(US Census, 2010¹; Bureau of Labor Statistics, 2015²; State Police Incident Crime Reporting Data, 2015³)

In terms of median home values and median household income, there are noteworthy differences among the three cities. Both Jamison and Kensington were consistent with state level data; however, Lancaster was significantly lower. Kensington had the highest median home values and household income at \$130,000 and \$59,000 respectively followed by Jamison (\$125,000, \$49,000) and Lancaster (\$70,000, \$35,000). This compared with state median home values of \$121,000 and household income of \$49,000 respectively. The percentage of homeownership was fairly consistent across communities with both Kensington and Lancaster at 70% homeownership, followed by 63% of Jamison residents owning their own homes. This was comparable to the state average of 72%. There were also major differences in the unemployment rates for the three cities. In January, 2010 Lancaster was struggling with an unemployment rate of 14.5 percent, followed by Kensington at 8 percent and Jamison at 7 percent. The state average unemployment rate was 13.7 percent for the same period (Bureau of Labor Statistics, 2015). The

percentage of residents living in poverty was also quite varied across communities. Lancaster had the highest percentage of residents living in poverty at 22 percent followed by Jamison at 12 percent and Kensington at 10 percent. Finally, Jamison had the lowest ratio of violent crimes (homicide, forcible rape, robbery, aggravated assault) per resident for 2011-2013 at one violent crime for every 162 residents followed by Kensington at a ratio of one violent crime for every 188 residents Lancaster was significantly higher at a ratio of one violent crime for every 60 residents reported over the three year period.

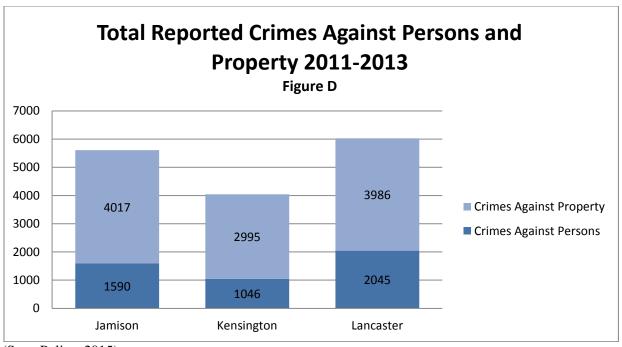
Regarding total reported crimes against persons and crimes against property for 2011-2013, the City of Kensington had the lowest number of crimes against persons at 1046, followed by Jamison at 1590, and Lancaster at 2045 (See Figure D). Kensington also had the lowest number of property crimes at 2995, followed by Lancaster at 3985, and then Jamison with slightly more at 4017 (State Police, 2015). Kensington also had the highest percentage of crimes cleared for both personal crimes and property crimes at 59 percent and 29 percent respectively according to State Police records. In terms of total crimes against persons and crimes against property, Lancaster reported the highest number followed by Jamison and then Kensington (State Police, 2015).

Community Characteristics

Jamison

The City of Jamison is approximately 25 square miles and has a population of roughly 40,000 residents. It is located on the outskirts of a metropolitan area that has a total population of about 200,000 residents. It can be characterized as a residential community with a significant retail shopping district. The local government is financially solvent and maintains a fund balance that is around 25 percent of the total annual budget (Jamison Comprehensive Annual

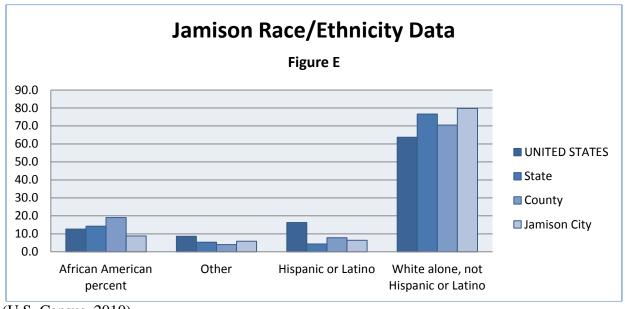
Financial Report [CAFR], 2013). The police budget is approximately 18 percent of the municipality's total budget. The city is governed by a council – manager form of government, with a professional city manager running the day-to-day operations of the city. Quality of life issues such as a low crime rate, good school district, well-kept neighborhoods, and recreational opportunities are important to this community (Jamison Website, 2015).



(State Police, 2015)

The local school district is considered desirable, with above average reading and math proficiency test scores as compared with the state average (U.S. News, 2015). There are many parks, recreational trails, sports complexes, and water sport facilities in the community. The municipality maintains a code enforcement division to enforce nuisance properties, cleanliness, yard maintenance, and "the accumulation of objectionable material" (Jamison Website, 2015). According to 2010 U.S. Census data, the community is made up of mostly white residents (80%), followed by African American (8%), Hispanic or Latino (6.4%) with other groups comprising the remainder of the population (4.6%). These percentages are fairly consistent with

the surrounding county and state government, however not as diverse as the U.S. as a whole (See Figure E)



(U.S. Census, 2010)

The Jamison Police Department has approximately 45 officers, many of whom are assigned to special units. These include crime prevention officers and school resource officers. They also have an officer assigned to a regional auto theft unit as well as an officer assigned to a regional narcotics team. There are four full time detectives, three of whom investigate all crimes that occur in their assigned district. The fourth detective serves as a financial crimes investigator. There are also two first-line supervisors (sergeants) assigned to the detective bureau that assist with interviews, surveillance, and other investigative functions in addition to their supervisory responsibilities. Finally, there is a middle manager (lieutenant) that manages the overall functions of the detective bureau. He reports directly to the chief of police. Several patrol officers are also trained as crime scene investigators, therefore, patrol officers are able to collect forensic evidence whenever they deem appropriate.

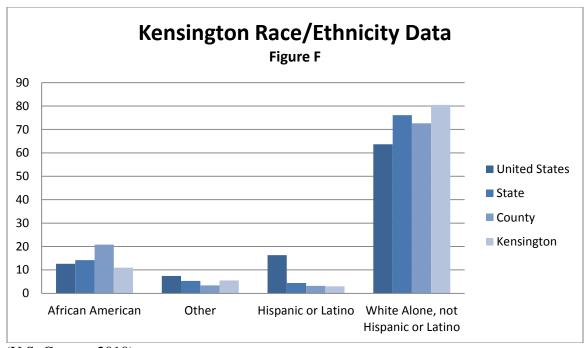
The Police Department can be characterized as an agency that has ample resources available to them. As a result, they are able to focus on not only responding to and investigating crime, but also pro-actively preventing crime and addressing other quality of life issues. Officers are allowed to utilize unlimited overtime to complete major investigations. Additionally, staffing levels provide patrol officers with sufficient opportunity to perform a thorough initial investigation. Detectives reported that they average about five new cases per week and have 15-20 cases open at any given time. The Jamison Police Department has a good working relationship with other criminal justice agencies within their ecosystem. The County Prosecutor's office is described as being easy to work with. Prosecutors will generally follow the detective's recommendation and issue search warrants and arrest warrants without requiring additional follow up. The state crime lab is described as being accommodating. Detectives feel they can submit physical evidence such as latent fingerprints and DNA samples without resistance from lab staff. Additionally, area police agencies routinely provide mutual aid to one another.

When asked if all officers within the department received the same case to investigate how similar would the results be, most of the officers interviewed felt that there would be a broad spectrum of levels of effort. They also felt that there was a minimum standard that was required and if an officer or detective did not meet that standard, the report would be sent back to the officer for further follow up. It is clear that individual work ethic is a factor in determining how much effort each officer puts into their investigations, however, it is also evident that officers and detectives have a shared understanding for the required standard of investigation that is consistent across the organization.

Kensington

The City of Kensington is located in the Midwestern United States. The city encompasses approximately 40 square miles and has a population of roughly 35,000 residents. It is situated on the outskirts of a large metropolitan area that has a total population of about 400,000 residents. Kensington can be characterized as a mix of residential housing, manufacturing, and medical care facilities. The local government has seen a significant decrease in revenue over the last several years, which has created some fiscal challenges for the city. From 2007 to 2013, the city decreased the total number of FTE's by 12 percent. The City's fund balance is roughly 16 percent of the total annual budget. The police budget is approximately 41 percent of the municipality's total general fund budget (Kensington CAFR, 2013). The city is governed by a council- manager form of government. According to the Kensington website, the city strives to attract new resource and development users, citing their excellent school system, among the highest rank in per capita income and education levels in the county, as well as several high quality new developments with a number of retail and entertainment offerings. The overall goal for the community is to achieve "unparalleled quality of life in the years to come" (Kensington Website, 2015). The school district maintains above average state proficiency test scores in both reading and mathematics (U.S. News, 2015).

The community is made up of mostly white residents (80.5%), followed by African American (11%), Hispanic or Latino (3%) with other groups comprising the remainder of the population (5.5%) (See Figure F). The Kensington police department has roughly 35 sworn police officers. The detective bureau has three permanently assigned detectives, a first line supervisor (sergeant), a middle manager (lieutenant), and an administrator (captain). The captain reports directly to the chief of police.



(U.S. Census, 2010)

The police department's staffing levels have significantly decreased over the last several years. From 2007 through 2013 they lost 21% of their FTE positions, while their total calls for service increased by 17% (Kensington CAFR, 2013). In 2007, they had a total of 48 officers including; four full-time detectives, two sergeants, and an additional detective during the summer months. The department also lost some civilian employee positions, which included a secretary for the detective bureau. Since the loss of that position, detectives have had to do a lot of their own clerical work, which obviously impedes their ability to investigate crime. This agency can be characterized as slightly understaffed, and therefore it is difficult for them to follow up on all cases to the fullest extent. Most of the officers that were interviewed said that they wished they had more time to investigate cases, and some said they felt overwhelmed with cases and therefore had to make difficult decisions on which cases get the most effort. Detectives estimate that they are assigned approximately 10-15 new cases per week and maintain an average

caseload of between 25-30 open cases. Officers are allowed to work overtime to follow up on serious cases.

Regarding relationships with other criminal justice agencies, officers and detectives indicated that they work well with the other police agencies in their area and frequently co-investigate cases that cross multiple jurisdictions. They also rely on the state police crime lab to process a lot of their physical evidence such as DNA and latent fingerprints. Though there is a significant delay in getting the results back from the lab (due to a state-wide backlog), the officers did not feel that there were limits on what they could submit for analysis. Officers also felt that they were able to lodge prisoners at the county jail without restrictions. In many urban counties, this is not the case due to overcrowding issues. The only criminal justice agency that inhibited their ability to solve crime was the local prosecutor's office. This is due to the fact that Kensington is in the same county as a city with a very high crime rate and few resources to prosecute offenders. The local prosecutor routinely deals with homicides, robberies, and sexual assaults from the neighboring jurisdiction, which commands most of their resources.

The interesting fact about Kensington P.D. is that the initial responding officer is required to process the crime scene the same way every time, regardless of circumstances surrounding the crime. For virtually every report, officers photographed the crime scene, dusted for latent finger prints, and conducted a neighborhood canvas. On the few occasions that this did not occur, the officer documented the reason in the report (no prints visible, camera was broken, too late to contact neighbors, etc.) These practices are consistent with prior research on tactics that improve clearance rates (Keel, 2008; Wellford et al., 1999). This is a good way to improve the chances of solving crime, however because officers do not have discretion for this part of the investigative process, there were less opportunities to find variations in investigative effort in the police

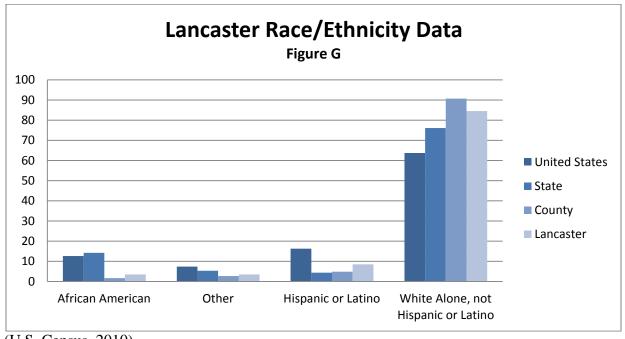
reports. Detectives seem to have more latitude in terms of how much investigative effort they put into cases, as there was some variation in how follow up investigation was typically conducted. As with the Jamison Police Department, officer and detectives had a shared understanding of what was considered an acceptable investigation and felt that all officers were required to meet that standard. Those interviewed also felt that if all officers within the department were given the same case to investigate, there would be broad variations in effort.

Lancaster

The City of Lancaster is located in the Great Lakes region of the Midwestern United States. It encompasses approximately ten square miles has a population of approximately 35,000 residents. It is the largest city in the county, which consists of approximately 110,000 residents and serves as the county seat. Lancaster can be characterized as a mix of residential, manufacturing, and commercial uses. The major employers in the area are a medical facility, county and local government, and the local school system (Lancaster CAFR, 2013). The city also serves as a major tourist destination during the summer months. The community hosts several festivals and cultural events. The racial and ethnic make-up of the community is primarily white (84.5%), followed by Hispanic (8.5%), and African American (3.5), with other groups making up the remainder of the population (See Figure G). This community is less diverse than the state and country; however, it is more diverse than the surrounding county.

Like Kensington, the local government is has seen a significant decrease in revenue over the last several years which has created some fiscal challenges for the city. From 2007 to 2013, the city decreased the total number of FTE's by 22 percent. For 2013, the City's undesignated fund balance was a very low two percent of the total annual budget. The Lancaster police budget is approximately 31 percent of the municipality's total general fund budget (Lancaster CAFR,

2013). Like the other two cities, Lancaster is governed by a council-manager form of government. The city is in the process of recovering from several years of financial challenges and therefore, their focus is on revitalizing the city, attracting new businesses, and improving the existing infrastructure (Lancaster Website, 2015).



(U.S. Census, 2010)

The Lancaster police department has roughly 51 sworn police officers. The detective bureau has three permanently assigned detectives, a first line supervisor (sergeant), and an administrator (captain) that is responsible for overseeing the detective bureau and the records bureau. The captain reports to the deputy chief of police (Lancaster website, 2015). There staffing levels have significantly decreases over the last several years. In 2004, the police department had 88 FTE's. From 2004 through 2013, the police department lost 31% of their FTE positions. During that same period their total calls for service decreased by 12% (Lancaster CAFR, 2013). This agency can be characterized as understaffed, and therefore, it is difficult for them to follow up on all cases to the fullest extent. Most of the officers that were interviewed said that they wished they had more time to investigate cases, and some said they felt

overwhelmed with cases and consequently had to make difficult decisions on which cases get the most effort. Detectives estimate that they get between 10-15 new cases to investigate each week. Investigators are called in on overtime to investigate serious cases; however, they are not allowed to work overtime to continue to investigate after the initial investigation is complete. The following table provides a summary of police agency characteristics.

Table 2: Police Department Comparison						
Fiscal Year 2013	Jamison	Kensington	Lancaster			
Sworn Officers ¹	45	35	51			
Ratio of Sworn Officers to Residents ¹	1:911	1:1071	1:686			
Detectives ¹	4	3	3			
Ratio of Detectives to Residents	1:10,250	1:12,500	1:11,667			
Reported Ave. New Cases/Week/Detective ¹	5	10-15	10-15			
Reported Ave. Open Cases Per Detective ¹	15-20	25-30	30-40			
Police Percentage of Total City Budget ²	18%	41%	31%			
City Undesignated Fund Balance ²	25%	16%	2%			

(Officer Interviews¹, CAFR²)

Overview

In an effort to provide a better understanding of the results of this study, the following three paragraphs provide a broad overview of the findings that were developed from the analysis of the police reports and interviews. As will become apparent, three major themes emerged from the data analysis regarding factors that affect investigative effort. First, consistent across all three departments, officers and detectives put forth the most effort for crimes that violate the norms of civilized behavior in their community. The types of crimes that fall into this category are; violent and heinous crimes, crimes where the victim is emotionally traumatized, crimes where the victim is particularly vulnerable, and serial crimes. For crimes that fall into this category, officers seem to feel a sense of duty and a responsibility to do all that they can to solve them. Therefore, they go to great lengths to investigate these cases even when the likelihood that they will not solve them is very high. They are more thorough in collecting evidence and use

investigative techniques that are more time consuming, require substantial resources, and/or have a low likelihood of producing positive results. Again, officers seem to feel responsible for ensuring that people maintain a certain level of respect for the law. If the threshold is breached, they feel compelled to do everything they can to solve the case and bring the suspect to justice not just for the victim, but for the community as a whole. These crimes will be labeled "intolerable crimes".

The second theme that materialized from the analysis is that a majority of crime incidents are considered ordinary events by officers and investigators. This was consistent across all three departments in both the interviews and police reports. Officers and detectives have dealt with the same types of incidents with such frequency that they have become ordinary and therefore, do not raise their level of concern. Investigators seem to accept that there will always be some crime and that not all crimes can be solved; therefore, less serious crimes are not something they get overly alarmed about or are personally invested in. For these cases, officers and detectives do what they can to solve them, but they do not have the resources to employ investigative techniques or methods that have a low probability of producing results. These types of cases are less of a priority and therefore, the investigation is sometimes delayed if an intolerable crime occurs. Effort is influenced by factors such as; the number and quality of leads available, when a gun is stolen, the amount of time available to investigate, local prosecutor policy, and the value of stolen property. In addition, community, political, and media pressure also plays a role in detective decision-making for investigators in one of the communities. The police reports and interviews also suggest that detectives and officers have developed preconceived notions about what occurs at certain crime events, which is consistent with the definition of normal crime.

The third concept that developed during data analysis was that some crimes can be described as stagnant crimes. Crimes that exist in in this category are those that cannot be resolved by the legal system. These include crimes where the victim will not cooperate, false reports, and crimes where illegal actions on the part of the victim make the case difficult to successfully prosecute. For these cases, investigators put forth the required level of effort, taking the case far enough to demonstrate that it cannot be adjudicated. Investigations for these types of crimes consist of collecting enough information to document that the case will not likely be prosecuted.

The Use of Extant Classification Schemes

The first hypothesis in this dissertation predicts that organizational limitations on specific case processing (the ratio between the number of crimes and number of detectives) will increase the likelihood that police detectives rely on extant classification schemes. In examining this data, it is evident that there are significant variations in caseload between Lancaster and the other two cities, yet all three departments use classification schemes for crimes that are not considered serious. (See Table 3) However, due to the small number of cases (n=3) this hypothesis cannot be effectively tested using the present data.

Table 3: Ratio between the Number of Crimes and Number of Detectives 2011-2013						
	Jamison	Kensington	Lancaster			
Mean Yearly Number of Crimes Against Persons	530	349	682			
Mean Yearly Number of Crimes Against Property	1339	998	1329			
Total Mean Yearly Crimes Against Persons and Property	1869	1347	2011			
Number of Detectives	4	3	3			
Ratio Between Number of Crimes and Detectives per Yr.	1:468	1:448	1:670			

State Police Incident Based Crime Data (2015)

The findings in this study do however provide ample evidence that investigators routinely use extant classification schemes. For example, one detective describes what he considers the circumstances for a normal burglary,

A lot of [neighboring] city residents come out to [Jamison], do their smash, and then take off back into the [neighboring] city. Not so much do we have a lot of [Jamison] residents that would do it, but we do have some low income housing apartments that they'll try to hide in there [...] but mainly it's, it's not just one area. It's spread out. It's kind of in an odd pattern. [Detective VanDeWouwer]

The detective also describes his characterization of a normal robbery,

Normally if they're doing one store out here, it's probably started in the [neighboring] city or [named city] or [named city], and they're on some crack binge.

Officers and detectives from all three departments also seem to have specific classification schemes for false reports. Furthermore, consistent with previous research, this determination is made by investigators based on a small set of facts (Sudnow, 1965; Waegel, 1981). The following excerpts provide several examples of this.

Who, whose the caller. Is it is it a drunk person that has been calling 911 all night and you've dealt with a hundred times. Is it someone that's a drug addict that you know is calling to say that their rent money got stolen for the fifth time? Is it just a report that you're gonna put on file because they wanna make their insurance company happy? Or is it a legit victim that you know is actually been burglarized. You know I, every department has their regulars that you know are just full of it. [Officer Pelico]

We know that a lot of home invasions are false complaints. Um, and see if there's been false complaints before, if there's some sort of issue with that.[...] Where you get, it's always a red flag to me when people identify it as they came in and stole my rent money. It's like, it was just money, really, but you know. Or they stole my rent money and my prescriptions. I'm like really? Yeah and then you run an [state-wide automated prescription check] on em and they have you know, they have four different doctors supplying them Vicodin. It's like, we got some big problems here. [Detective Shafer]

We get a few, quite a few of them around here where they are probably drug deals gone bad and the person's you know, claiming robbery, you know, four guys jumped me and took my money you know, and you got a victim saying yeah they were black males, they took off running that way. [Officer Bravo]

I guess, that's I call em a true victim [...] I mean a lot of our cases that we get that are you know, [...] the normal stolen car, [officer asks victim] what happened? , [victim's response] I was just at a party store and someone stole my car, you know, okay so you traded it [the car] for dope [officers reaction] and yeah, okay, and we close those out. Cuz, I mean, that's the problem, you can spend all your time on going, on cases that don't go nowhere so you have to be, you know, you have to make that decision. [Detective Jones]

As with the other examples, in the last narrative it is apparent that the investigator has a preconceived idea of what he thinks happened. He refers to this type of a crime incident as "the normal stolen car" and then proceeds to describe the predicted facts of the case. This type of incident has obviously happened enough times that the officer need not investigate any further. He is able to forecast the outcome of the investigation without further effort. This lends additional support to the theory of normal crime. Several police reports provide further insight to this phenomenon. In an example from Kensington, the victim claimed that someone entered his house through an unlocked window and stole his safe, which contained a video camera, regular camera, \$852.00 cash, and narcotic prescription medication. An XBOX system and some change were also stolen from another area in the house. The report contains the following statements by the initial responding officer:

Mr. Jones advised that a gray 12 inch by 12 inch safe was in his closet and the entire safe is missing (it was not bolted down, just placed in the closet)... He stated that his pit bull that is always left loose in the house was locked in the bathroom when he got home from the game [...] He advised that he does have an alarm system but he does not use it anymore because the dog was constantly setting it off.

Mr. Jones stated that everyone that knows him is aware that he takes the medication. He said that he has a head injury and takes approximately 12 oxycodones a day, 9 methadone a day, along with valium and his anti-depressant medication. (He is waiting for the report to be done so his doctor will re-fill his medication). He advised that everyone knows that he was going to his soccer game this evening because this is the first he could play in a very long time.

It should be noted that there have been two larcenies from this address with the last year. One was a larceny of vehicle parts and the other was a larceny from building. [Report 369]

The detective reading this report may have several questions about the facts of the case. For example, why wasn't the safe bolted down? How did the suspect get the pit-bull into the bathroom? Why is the victim taking so many narcotic pain pills per day? Is he addicted to his

medication? Why are their multiple thefts at this address? Additionally, the officer noted that the victim "is waiting for the report to be done so his doctor will re-fill his medication". This information is not required for the report. It would seem that if this incident did occur, the victim would have some idea who might have committed it since it appears that the suspect was aware that the victim was going to be gone, the suspect was familiar enough with the dog that he didn't get attacked, and was aware that the victim had a safe that contained valuables. It would also seem that the list of suspects would be fairly short, yet the only possible suspect the victim named was his brother, who was in jail at the time of the crime.

The initial responding officer conducted the standard crime scene investigation, (photos, dusted for prints, neighborhood canvass) and the detective followed up by submitting the finger prints to the crime lab. He called the victim to see if he had any new information and then closed the case a short time later. There were no follow up questions about possible suspects. This may be an example of where the detective is "reading between the lines" and does not believe the crime really happened. Interview statements also reflected pre-conceived notions regarding the facts certain cases.

We get em a few every year where it's kinda, it's like, they broke in my house, there's no signs of forced entry, and the only thing they stole are my pills. I'm like really? I mean like that, I'm not gonna put, nothing; obviously you can read between the lines of what's going on here, [officer's statement to the victim] okay come get your report for your doctor cuz you know we're not working on that too hard. [Officer Kelley]

This is another example of an extant classification scheme. The detective knows that when prescription medication is the only thing that is stolen then the report is likely false and the victim is filing the report so that they can get more medication than what is prescribed to them.

In an example from Lancaster, the victim contacted the police department to report that someone broke into her apartment and stole a safe that contained her narcotic medications. Like

most of these types of cases, the initial responding officer documented that the victim indicated she needed a police report so she could get her prescriptions filled again. He also noted that there was nothing else missing or out of place in the apartment and he was unable to find any signs of forced entry to the apartment. He stated "The door and door frame was not damaged and the locking mechanism and deadbolt did not appear to be tampered with". [Report 539] This case was also closed with no further follow up investigation.

The results of this study also suggest that officers and detectives have a typical method for investigating crimes. The following two examples discuss typical investigative practices.

[...] a lot of times we're ah given false information, you know, rent's due in a week so I just had \$300 cash stolen off the table, no suspects, that kind of thing. [...] You know, if there's absolutely no suspects and you talk to the neighbors, you do a little canvassing and, and you have nothing, then, obviously you're not gonna devote a lot of time to it unless something else adds to it but, so, that's what I would say. You know, if I think it's a true victim that you know is not trying to trick us, um, and hopefully we've got a little bit of something to go on with it. [Officer Mason]

Okay, most home invasions that come in, it's somebody broke into my house and I don't know who did it and that's it. And ah, those are, and so what we do on those, we do something on pretty much everyone. We at least search for the property in the pawn shops and if the property pops up, it may be nonspecific but we've gone and gotten the property from the pawn shop because they have to hold it [...] for 15 days and we'll bring it back and we'll show it to the victims where they'll describe it and on many occasions, that's not it, bring it back to the pawn shop, we've given it a shot. [Detective Rohn]

These comments suggest that investigators have a predetermined notion of the facts of the case and a preconceived way of investigating it. In the first interview, the officers use the words "a lot of times..." to describe a typical home invasion and "you talk to the neighbors, you do a little canvasing" to describe the follow up investigation. In the second interview, the detective says "so what we do on those [cases]..." and "we at least search for the property in the pawn shops". These statements seem to support that investigative processes become routine and perhaps are somewhat predictable.

As the above narratives suggest, all three agencies use classification schemes to categorize typical crimes regardless of caseload or resource availability. These crimes happen frequently enough in all three cities that the facts become somewhat redundant and therefore predictable. This allows investigators to develop a standard way of investigating these crimes, thus requiring less thought as to how to process the case (Waegel, 1981).

Typical Crimes and Investigative Effort

The fourth hypothesis predicts that crimes that are classified as typical by investigators will receive minimal investigative effort. The results of this dissertation are different in that they suggest that for typical cases, investigative effort is predicted by the likelihood that the case can be solved and successfully prosecuted. There are some variations in effort in accordance with the facts of the case and individual investigator work ethic however; most of the police reports and interviews provide corroboration to support this finding. The remainder of this chapter will further explore typical crimes and further illustrate this conclusion.

As was stated previously, most crime events can be described as ordinary or typical. For crimes that are not deemed serious or involve a unique set of circumstance, investigators will follow up on leads and seek justice for those that have been victimized; however, there is not the same sense of urgency and level of resolve as with intolerable crimes. Detectives still feel a responsibility to do what they can to solve these cases, but the approach is quite different. A particularly seasoned detective described it best when he said:

The more time we have [on the job], unfortunately, our views become different on how we handle things and what we do. It's not necessarily bad, but it's just a different view than when you first started out and got that shiny new badge pinned on your uniform and you were gonna slay the world, and then, after a period of time you realize, you can't and you just have to deal with it and do things the best you can and I tell people on the phone, this isn't CSI, I don't solve crimes in an hour and I may never solve your crime. [Detective Brown]

Further, though investigators care about these cases, there is not a sense of personal attachment to the outcome. Statements made during interviews suggest that these types of crimes do not evoke the emotional response that occurs with intolerable crimes. The words and phrases used do not display the same level of zeal. Rather, they are more matter-of-fact and business like. The following passages illustrate the mindset for these types of crimes.

[...] I'll get to those when I can, or when someone calls to check on it and then I'll give it some attention. [Detective Park]

If it was *just* one single burglary, and no pattern, I would say we'd concentrate of cases we had suspects for. [Detective Connelly]

If it's *just* a, run of the mill, commercial or residential burglary, I mean we pretty much all handle on our own. [Detective Brown]

Additionally, interviewee statements seem to suggest that investigators have resigned themselves to the fact that not all crimes can be solved and recognize that there are limits as to what they can do to solve crime.

You know, and I think that, regardless of what goes on as far as crime, there's only so much that obviously I can do. [Detective Horwood]

If there's no witnesses, no physical evidence, they don't know who broke in, um, the probability of solving it is way low. If we look at it and there's leads, we'll follow up on the leads regardless of what was stolen. If it's a solvable case we'll work it. I mean, if you just don't have anything, you don't have anything. [Detective Rohn]:

You know, do what you can do, you can only, we're only, our, our theory is we're only one person so you can only do what you can do I guess. [Officer Jones]

This lack of personal attachment to the outcome of the case and the realization that all crimes cannot be solved seems to encourage the routine processing of cases. Though most cases are processed in a routine manner, there are several variables that affect investigator effort for crimes that fall into this category. The two factors that influenced investigative effort across all three departments are; case solvability, and if a gun was stolen. This is consistent with previous

research that suggests that leads available and seriousness of the crime affects investigator effort (Greenwood, Chaiken, & Petersilia, 1977; Sanders, 1977. Also consistent with prior studies, time available to investigate was a factor that affected investigative effort for both Kensington and Lancaster (Brandl, 1993a; Waegel, 1981). Additionally, for Jamison, value of stolen property influenced investigative effort (Greenwood, Chaiken, & Petersilia, 1977). Further, in Kensington, prosecutor constraints adversely influenced effort. Each will be discussed in greater detail.

Case Solvability

One of the variables that was mentioned consistently throughout the interviews was that investigators consider the likelihood that a case can be solved in determining how much work they are going to put into it. They examine the physical evidence, witness accounts, potential suspects, or other clues that will help them solve the case. If there is little to go on or potential leads do not produce a suspect, investigators do not resort to extraordinary means to try to solve the case. They simply do not have the time and resources to investigate every case to the fullest extent possible. The more leads that are available, the more effort a case receives.

Interviewer: what do you consider when deciding how to investigate a case?

Find out when they were, how long the house was unattended, or figure out the timeframes that the crime happened. Find out what was taken. That's a huge thing now because we are hooked up with Leads Online [a web based service that allows law enforcement officers to search for property that has been sold to pawn shops, second hand stores, and scrap yards] so we can monitor pawn shops transaction based on specific items that we know were taken. [Officer Smith]

Here, the officer is looking for factors that might help him solve the case. For example, if he can find the stolen property on Leads Online, he can contact the pawn shop and determine who pawned the items and develop a suspect from there (pawn shops are required to report who they buy property from).

Investigators also expressed how a lack of leads impacts their ability to investigate.

You know I, we, we deal with quite a bit of property crime here and it's a very, I hate to use the word routine, frequent call, that we ah go on so, so many of those times, that doesn't go very far, we have no suspects, very little information to go on, so to investigate something like that can be very difficult and it can be very quick. [Officer Meier].

I think the amount of evidence is always gonna be somewhat of a factor... how much, resources we have to follow up on it and do we have video? Do we have any type of witnesses? Physical evidence? If we don't have those types of things, well what are you really gonna go on? [Sgt Wriggs]

It's depending on what the victim can make out of it or where it's located or what we have to go on. If it's in an alley, over in the business district, and he gets robbed, it's the luck of the draw unless he can really describe him or if we can catch him on a camera somewhere ... but if you really don't have much, you follow up with the victim... that report would just sit there. [Detective Vandewouwer]

If there's good evidence, if there's things to work with, I'll do what I can. If I don't have anything to work with, I don't have anything to work with. [Officer Pelico]

This approach was also documented in the police reports. For reports where the suspect is not readily apparent and there is not much to go on, officers collect the required information, look for finger prints or other obvious evidence, and then file the report. An excellent example of this can be seen in the police reports regarding a series of business burglaries at medical offices in Jamison [Reports 123 a-j]. In these crimes, very little was stolen and the victims were not present during the crime. Prior to determining the cases were related, officers obtained the standard information from the victim and did some scene processing. Initially, there were no suspects, no witnesses, and very little physical evidence to follow up on. In one of the incidents, the officer located a footprint in the mud just outside the building. He photographed the footprint and noted it in the report; however he did not make a stone impression of it.

I located a footwear impression in the mud below the window where the suspect made entry. The impression was not worthy of stone impression. I could determine that the shoe size of the suspect was at least 14 based on the length of the print. There is some small detail visible in the photos if it can be used for later comparison. [Report 127c]

When the suspect was caught in the act at a different location a few days later, the investigating detective realized that the cases were related and immediately sent an officer back to take the cast for that case.

I was requested by Det. McKean to return to the address for a known footwear impression that had been documented in this report. With a suspect under arrest reference several similar cases, Detective McKean requested I check for the impression to see if it may hold any value in suspect identification. [Report 127b]

The officer located the footprint and took an impression as requested. This series of events suggests that both the initial officer and the detective did not think the print was of enough value to collect when they thought it was a random crime, however, after it was determined that the suspect was responsible for multiple crimes and he was apprehended, it became worthy of processing because it served as a way to tie the suspect to that crime. Had there been inclement weather between the two events, the foot print could have been lost before the officer had the opportunity to go back and make a cast of it. Conversely, for serious crimes, investigators collect every possible piece of evidence at the time of the incident without knowing whether it will be needed to prove the crime.

Stolen Guns

Investigators seem to put forth more investigative effort when a gun is stolen because of the potential for future harm to the community and/or other police officers. Detective Brown summarized this by saying: We're more concerned about the gun that the idiot that left the gun in his car overnight. Several of the officers interviewed specifically mentioned guns being stolen as a reason to put forth more effort. Interestingly, in many of the burglary reports, the officer notes that there was a gun in the house at the time of the crime, however it was not stolen. Reports typically do not mention other valuables that were not stolen unless the circumstances

seem suspicious. This suggests that guns are a concern and as a result, create a heightened level of awareness of a gun's presence in general. The following excerpts discuss investigator concerns over the theft of guns.

Any time firearms are involved, I think the crime is always severe. Because at that point we don't, I mean, we already have enough information. This person's willing to go to the length to break into a home randomly, and to steal a gun, we don't know what the future intents will be. The intents or the future idea of this person, I would certain ah treat it high priority. [Officer Meier]

When somebody's guns are stolen from a residence, they end up on the street, that's the purpose of stealing guns. They, I don't think they hang on to them for very long, but they definitely probably don't pawn them because they're in the system somewhere, and, I think they just try to, obviously use them to commit more crimes. An officer might get shot, anywhere, an officer could be shot anywhere um in the country, wherever that gun travels, you know it might end up in Texas for all I know. [Officer Smith]

[When] somebody steals a watch, you're not gonna kill somebody with a watch. Somebody steals a gun, well now I got a bad guy with a gun in his hand. Not to say there isn't guns out there already, but home invasion happens, guns are missing, I got a problem. They could be in the hands of kids, you know, somebody's about to do a armed robbery, carjacking, but yeah, definitely, the severity gets bumped up. [Officer Kelley]

One particular police report from the City of Jamison serves as a good example of this [Report 101]. This case was originally reported as an unlawful entry when the victim's exboyfriend came to her apartment to get a television that she was storing for him. When the victim advised the suspect that she did not have the television, he forced his way into the apartment. The victim and her mother were able to push the suspect back out of the apartment while the victim's son called the police. The responding officer collected the necessary information for the unlawful entry report and took photographs of the entryway. There was no mention of the status of the television in question.

When the case went to trial, the victim testified that the television was actually a gun.

After the hearing concluded, the officer asked the victim if she still had the gun. When she stated she did, the officer asked her if she would consent to a search of her residence so that he

could recover the weapon. She agreed to the search. The officer then met the victim at her apartment. Prior to searching for the weapon, he asked her how the gun ended up in her possession. She stated that a few months prior, the suspect came to her apartment with the gun tucked into his waist band. He asked her if he could store it in her storage locker, which is located in the basement of the apartment building. He then wrapped the gun in a towel, placed it in a plastic bag and put it in the locker. The officer then retrieved the gun from the storage locker. When the officer checked the serial number of the gun, he determined that it been stolen from the ATF. The officer obviously put forth significantly more effort after he determined the item in question was a gun.

When a gun is stolen in Lancaster, it seems to create a bit more of a sense of urgency than in the other two communities. The response is perhaps not as strong as for a violent or egregious crime, but it does garner more attention than when another item of similar value is stolen. An incident that was documented in a police report serves as a good example: In June, 2011 there was a home invasion where four handguns were stolen. The victim was not sure of the exact date they were stolen because there was no sign of forced entry to the residence. The initial responding officer completed the necessary investigation and entered the guns as stolen into the Law Enforcement Information Network (LEIN) database. Approximately two months later another officer was assigned to follow up on the case. He re-interviewed the victim and witnesses and contacted the potential suspects. The officer followed up on the case as much as he could with the information available. [Report 459] In contrast, reports of thefts of items of similar value typically did not receive as much investigative action.

Many of the Lancaster officers that were interviewed also expressed a level of concern for stolen guns.

Ah, I think our department has always taken a different role, as well as a, officer wise, you know, when we have guns stolen, we put em up on our board in our squad room, you saw our squad room. Usually a gun or a car is always up, is put up on our board. But is \$1000 from so and so taken put up on the board? No, so I would say, when a gun's involved, yes, but that we're this, and ... Why is that important I mean?...Safety for the officers. [Officer Bravo]

Pursue any evidence that you can. Um, like a gun ramps things up a bit you know if someone loses cash, things like that, you wanna get it back for them. You wanna at least find out who did it. But you don't have the same potential for future problems that you would with a weapon. [Officer Pelico]

Time Available to Investigate

The amount of time available to investigate was a major factor in determining the level of investigative effort a case received for both Kensington and Lancaster detectives. As was mentioned earlier, both of these communities suffered significant personnel cuts in recent years. Most of the officers and detective that were interviewed expressed that because they had lost so many officers; their ability to adequately investigate cases had been diminished.

It's gotten, as time has gone on, with resources being less plentiful I guess you'd say, we do, we still do as much as we can but it's, you find sometimes you can't go as far as you normally would have um, referring back to those times when we had more resources. By resources I mean people. When you have fewer people than more people, then fewer people have to take more calls. [Officer Smith]

I think you always wish you had a little more time. I mean we've got to the point where I would almost say we're borderline swamped cuz of manpower. Um, we used to have four detectives. We had, we used to have four detectives. At one time we had four detectives, a secretary and actually had a floater, and they got rid of, cuz of manpower. [Detective Merchant]

I mean we really, this agency and a lot of people here have always really prided themselves on being um one of the premiere law enforcement agencies in the area and in [the] county. I can't really say that anymore. I can't really say that anymore because of the manpower issue that we have here, and our [lack of] ability to jump and dig into things. [Detective Horwood]

As a result of decreased staffing levels, both patrol officers and detectives stated that they could not always put in the effort they thought necessary and had to prioritize their cases depending on their call load or cases load.

Um, you know, we all expect excellence and we all want excellence, but unfortunately um, I look at it now like my old boss [...] said um, triage you know? I can a lot of times, I have to look at a case and I have to go, okay, I can't make the person whole but I can triage it, I can move it along. [Detective Horwood]

[I'm] Swamped...I mean, to do a fair and accurate job for every person, there's, you can't do it, it's impossible. [Detective Jones]

With only three people on the road, there's no way there's enough time to investigate everything and I just came from nights where we had, you know sometimes on a Friday and Saturday night, we'd have four people until 2 a.m. and then go down to 3, so there's certainly not enough time. [Officer Mason]

In reviewing the police reports it appears that both the initial responding officers and the detectives assigned to follow up struggle to follow up on all possible leads. There were many reports where it appeared that their caseload prevented them from doing more work. For example, in several of these cases the detective conducted some follow up investigation but the work was never completed and the cases were not closed. This indicates that perhaps there was more they wanted to do, but they did not have time to do it.

Value of Stolen Property

For officers in Jamison, a tremendous dollar loss to the victim also seems to affect the level of effort put forth by investigators. This is consistent with previous research (Bynum et al., 1982). This variable appeared to be relevant in both the police reports and during interviews. For example, in reports where there was an unsuccessful attempt to gain entry to a residence or business and therefore nothing stolen, officers wrote very short reports and made virtually no attempts to collect physical evidence. Also, for lower value items such as bicycles or lawnmowers, there was no scene processing and no follow up done. Conversely, for

circumstances where there was a significant financial loss, substantial scene processing, and follow up were done. For example, one officer stated "Due to the extensive burglary, I requested a C.S.I.". [Report 142] In another incident, several thousand dollars' worth of tools was stolen. Investigators collected latent prints, glass shards, bloody pieces of asphalt, and clothing fragments left by the suspect(s). They also took photographs and noted blood spatter patterns at the crime scene. [Report 139a] The importance of dollar value is also exemplified in interviews. When asked what factors they consider when deciding how much effort to put forth, Detective McKean said:

[...] the value of what was missing. ... are we talking \$15 out of petty cash or are we talking..., the safe was broken into and their \$400,000 deposit is missing, so I think that the value of the missing property is a big factor ... if it's kind of minor in comparison to others.

Prosecutor Constraints

Another trend that emerged from the Kensington data is that investigators would like to be able to prosecute more individuals for crimes they commit; however, because the county prosecutor deals with so many violent felonies from a neighboring city, they have limited resources to prosecute less serious cases. Some of those interviewed suggested that it was difficult to get the prosecutor to issue an arrest warrant unless they had a violent felony crime.

[...] in [this] county, personal crimes are the ones that matter. I mean, honestly, because we have so many murders and rapes and other stuff, if you don't bring down personal crimes to the prosecutor's office, a lot of the times they don't get looked at. [Detective Jones]

Several police reports support this statement. In one case, the suspect broke into the victim's home while she was away at a funeral and stole over \$20,000 worth of jewelry and watches. The suspect was identified and the case was submitted to the prosecutor's office requesting a home invasion charge. After four months, the warrant still had not been issued. The report states

"talked to the victim again, advised her to contact the prosecutor's office to see why this has not been written yet". [Report 309] It seems that both the victim and the officer were frustrated that the warrant had not been issued.

This sentiment was also expressed during interviews.

Interviewer: If you think the prosecutor likely will not issue a warrant on a particular case, does that affect the level of investigative effort you put into the case?

[...] we get cases like you know you do this long enough to where, you know, you know the prosecutors and you know, local or county prosecutors, you know what they're gonna do. [Detective Merchant]

One detective suggested that they often go to the local (city) prosecutor and get lesser misdemeanor charges for felony cases just so they can charge an offender with some crime (city prosecutors are limited to prosecuting minor misdemeanor offenses).

I tend to prioritize cases myself and number one level of importance and also um, you know, what [kind of a charge] can I get out of this. There's a lot of times that we're taking things that are felonies and we're taking local ordinance [charging the offender with a lesser misdemeanor offense through the city prosecutor's office] because I know what the standard is for the County Prosecutor's Office to prosecute something. [Detective Horwood]

A good illustration of under-charging an offender was a case where the victim's ex-boyfriend came to her house to visit their child in common. The victim would not allow the suspect into the house. The suspect broke the door to gain entry. While inside the residence, he also grabbed the victim's arm as they were fighting over the child and broke some furniture in the process. The officer requested a warrant for home invasion and domestic assault from the prosecutor's office. The police report indicates that the officer was told to take the case to the city attorney for an illegal entry charge instead.

There is also evidence to suggest that the prosecutor's office requires a high level of proof for prosecuting crimes. In some of the police reports, officers presented what seemed to be

good circumstantial cases and the prosecutor denied the warrant. In one case, the suspect broke into 14 different storage units. He was identified and arrested after he was seen on surveillance video leaving the storage facility with stolen property in the back of his pick-up truck. At the time of his arrest he had some of the stolen property and a pair of bolt cutters in his possession. The warrant request was denied by the prosecutor's office because they felt they could not meet the burden of proof to secure a conviction for the crime [Report 340]. This lends support to the notion that investigative effort may be somewhat predicated on the local prosecutor policy. This is consistent with previous research on limits to discretion and coupling (Feely, 1973; Flemming, 1990; Hagan, 1989; McCleary, 1978; Skolnick, 1994).

Stagnant Crimes

Another trend that emerged from the interviews and police reports was that in some cases the victim's actions make it unlikely that the case will be successfully prosecuted. As was stated previously, crimes that exist in this category are those that cannot be resolved by the legal system. These include crimes where the victim will not cooperate, false reports, and crimes where illegal actions on the part of the victim make the case difficult to successfully prosecute. For these cases, investigators put forth the required level of effort, investigating the case sufficiently enough to demonstrate that it cannot be adjudicated or they forward it to the prosecutor's office for the final determination.

Lack of Victim Cooperation

Investigators from all three jurisdictions conveyed that it is extremely difficult to successfully investigate a case if the victim does not wish to provide investigators with the information they need to further pursue the case. In cases where the victim did not cooperate with investigator, police reports consistently show that officers put less effort into these cases.

The motivation behind a lack of effort seems to be a combination of officers not wanting to devote their limited time to those that are not concerned enough to cooperate with the investigation and trepidation that the case cannot be successfully prosecuted if the victim is not willing to cooperate.

You know you gotta, you gotta, in my opinion, a lot of it had to have been, a lot of it decided on whether how hard you worked the case was how cooperative your victim is. [Officer Bravo]

If you don't care enough to get a hold of me, I would have to move on to the next one. [Officer Pelico]

Ah that makes it difficult. If, when we look at it from a prosecution stand point, if they're not being cooperative, it's gonna be difficult to get them into court to cooperate, so that significantly reduces the chances of a prosecution so those are given a little less priority. [Detective Rohn]

We just really can't spend our time [...] we're not gonna waste our time if it's something no one wants to do. I mean, we deal with so many domestics that just a complete waste of time [because the victim does not follow through with prosecution]. [Detective Jones]

Previous research indicates that the most important factor in determining whether a case gets solved is victim cooperation (Brown, 2001; Bennett, 1982; Greenwood, et al., 1975; Keel, 2008). Investigators often need victims to provide bank records, surveillance video, and contact information for known witnesses, or to simply return detectives' phone calls in order to answer follow up questions.

Interviews with officers also suggest that victim cooperation is an important factor.

Interviewer: What things do you want to know about that case before you decide what you are going to do to investigate it?

How willing they are to provide information, if they're gonna take ownership in their business and what has happened to them in order to, and I don't wanna say bend over backwards, but to supply us with you know, external documents and supportive documents, and video and stuff like that instead of us having to come to them, I think that shows that they have a willingness to, to want it to be investigated thoroughly, I'll give them that attention regardless of what it is. [Detective Park]

How cooperative is the victim, you know, are they willing to take some extra steps and get me some things that they have access to that I really would have to jump through a lot of hoops to get through. [Detective McKean]

These statements also imply that investigators have the discretion to decide what factors matter to them and what they will do to investigate a case. This is again consistent with prior research on discretionary decision making for criminal justice agents (Hagan, 1989; Skolnick, 1994, Sykes, 1958; Schinegold & Gresset, 1987).

The importance of victim cooperation is also evident in the police reports. In one case, the 21 year old victim had his house broken into. The suspects entered the victim's home, drank his beer, ate his potato chips and drew a heart in the dust on the Sony Play Station in his bedroom. Nothing else was taken or damaged. Based on the facts of the case, it appears that the victim may have known the identity of the offender(s). The officer asked the victim if he would be willing to prosecute if it was determined that he knew the suspects. The officer felt that it important enough to write in the report "the victim said if the suspect was one of his friends or family members he did not want to press charges". [Report 272]

In a Kensington case, a grocery store was burglarized and a large amount of cash was stolen. The event was captured on the store owner's video surveillance system. The initial responding officer viewed the video at the time of the report and asked the victim to make a copy for investigative purposes. The officer also took still photos of the suspects from the video surveillance system. When the detective contacted the victim regarding the video, he indicated that he did not save it and that it had since been recorded over. This was noted in the police report. The officer also noted "the victim is not interested in doing a reward anymore on this case". The case was closed five days after the crime occurred. [Report 342]

It is worthwhile to note that officers frequently documented in their police reports when victims did not return phone calls right away or provide requested information. This serves to justify closing the case without further action. The following excerpts provide good examples:

In a case where a man was robbed at gunpoint as he was leaving a local bar the detective wrote in the report:

"I made several telephone calls to [the victim] and left messages for him to call me. [the victim] never called me back. On 6/12/13 [two weeks after the date of the crime], I called [the victim] and left a message that I would be closing the complaint if he did not call me back. As of this report I have not received a return call from [the victim]. Disposition: Closed. [Report 405]

In another case where a man was robbed at gunpoint the police report stated:

Numerous attempts have been made to contact the victim in this case via telephone and in person without any call backs or answers at the door. Victim also did not show up or answer the door when [the State Police] attempted to make a sketch of the suspect. At this time, case is closed due to no cooperation from victim. [Report 15]

Had the victims cooperated, these cases likely would have received significantly more investigative effort.

False Reports

Another factor that seems to affect investigative effort is when an officer or detective thinks that the victim is making a false report or that the crime did not occur the way the victim described it. Based on the narrative information found in many of the police reports it seemed clear that the crimes probably did not happen and the victims were filing reports because either they owed someone money, they were trying to cover up other wrong-doing such as cheating on a spouse, or they were attempting to file a false insurance claim. Investigators put forth effort in these cases, but it is more focused on proving or disproving that the incident happened.

Additionally, with the exception of Lancaster, the police reports suggest that many times officers do not pursue charges for filing a false police report, likely because they cannot meet the burden

of proof required to obtain a conviction. Conversely, in Lancaster, officers and detectives seem to be more inclined to pursue charges for filing police reports. This may be because the prosecutor's office has the resources to go forward with prosecution and tends to take a more aggressive approach to prosecuting these crimes.

There were several regularities found in suspected false reports. First, the initial responding officer documented the facts of the case and noted unlikely circumstances or questionable behavior by the victim. For example, they may question the victim's account of the crime event or note that the victim did not seem scared or distressed. Additionally, investigators documented when there was a delay in reporting a serious crime and questioned the victim as to why they did not call sooner. Some reports noted discrepancies between the witness statements and physical evidence or highlighted a potential motive for filing the false report. Finally, the officers questioned the victim about inconsistencies in their statement.

This was also demonstrated regularly in the interviews. Most of the officers interviewed stated that they evaluate the validity of the complaint before proceeding. For example, detectives from two different agencies mentioned that one of the first things they consider is whether the crime actually happened.

I guess I'd want to know if I'd dealt with the business owner before, if I think it's a valid burglary report, and you know as well as I do that there's a lot of insurance claims... the attitude of the owner when I first make contact, are they like, "Oh my God this is the worst thing that's happened to me," or is, it's like, "You know, I just really need this for my insurance, I don't have any suspects," so. ... I've been doing this long enough to know that I can pretty much tell if its bull shit or if it's valid. [Detective Brown]

The biggest thing is, is it valid? I mean is it an insurance claim or is this a, a valid crime here. Does it relate to other home invasions? Do we have a suspect? What do I have to work with? Um, you know, those are all going to be factors into deciding how much time and effort I'm gonna put into this. [Officer Horwood]

Some investigators also stated that if they thought a report was a false insurance claim, they would attempt to prove that the victim was not telling the truth.

Is it that place that's every so often's making a report, is it that place that's gonna make the report just so they have a complaint number that they can document with their insurance company and then if we start developing a pattern there, then I'm gonna look at it from the other way and say, alright, well, let's exactly see what's going on. And then a lot of time you know, [the victim/owner will say] I think we'll be all set, [the victim/owner no longer wants to pursue charges] [Detective Park]

I try to do as much follow up as I can. I, I try to whether they cooperate or not because I've had cases where I do all the work, forward it to the prosecutor and they end up charging anyway or sometimes they charge the victim if it comes out that the victim was making a false police report, so to me it's worth it to put the effort into it. [Officer Murphy]

A first line supervisor (sergeant) confirmed this sentiment.

I think we're still very thorough in our investigations and if we can prove that or we can show that [insurance fraud], then that's what we wanna do so that maybe we, stop any further claims that they may have. I know one of my guys is working an insurance claim right now, pretty large one. It's an electrician in the area and he's [the detective] gone to great lengths to try and either prove or disprove this so we can stop this cuz this guy's made so many different claims to the point where the insurance company has come to us and said look, we don't believe this guy so hopefully we'll put that to rest and it'll discontinue. We [the insurance company] can't prove that he's actually being fraudulent. [Sgt. Wriggs]

Many of the police reports also reflected that officers were suspicious of the victim's truthfulness. In one example, the victim claimed that someone broke into her residence. Here the officer noted several inconsistencies in the facts of the case.

I did not see any sign of force to the victim's window. The only sign of force is to the bedroom window. It appears that the suspect broke open the window, reached in and unlocked it to gain access to the apartment. The screen however, on the window opposite the broken pane, was still on the window and was not damaged. In order to come through the window, they would have had to remove the screen and come in through that half of the window. [Report 267]

In another report, the victim claimed he was assaulted and robbed at gunpoint and by three African American Males while walking in the park. The officer wrote,

He stated that he had a red mark on his head. I could not find any marks on his head where he state that they were". I asked victim why he did not call or go to the police station right away and he state that he was scared. He also stated that he called the people he lived with and they accused him of buying lottery tickets. I then advised to victim that

his story really didn't make much sense and he stated that he understood that. [Report 404]

Under different circumstances this type of crime would have been considered a serious crime; however, because the officer did not believe the victim's story, there was no further follow up done on the case.

In an interesting case from Lancaster, officers were dispatched to an armed robbery complaint. The victim claimed that an acquaintance of his, known only by his nick name, came to his apartment, pointed a gun at his head, and demanded money. The victim told the suspect he had cash in his pocket that he was about to give his landlord for rent and his landlord would be coming over soon to pick up the money. The victim stated that the suspect took his rent money (\$560) and his cell phone. The initial responding officer did several things to investigate the case. First, he called the victim's cell phone number with no response. The officer also contacted the victim's neighbor, who stated she did not see or hear anything. Additionally, the officer attempted to identify the suspect by doing a search in the police computer system using the suspect's nick name. He was able to identify one person as a possible suspect and included that information in the report. Finally, another officer checked the surrounding area for the suspect shortly after the crime occurred; however, was not able to locate him. The officer put the following statements in the report:

The victim acknowledged the fact that he has a drug addiction, and advised that he does not currently owe anybody and money for his drug addiction...The victim made it a point to inform me that the money stolen was from his SSI check that he had recently cashed, and that he would need a report on file to make a claim with SSI. [Report 19]

When the detective was assigned to follow up on the case, he attempted to contact the victim several times via telephone and at his residence; however, was unsuccessful. The case was then closed. This case highlights that police officers and detectives still do an adequate investigation,

but perhaps because they do not believe the case actually happened, they do not go to extraordinary lengths to solve it.

In another interview, the officer offers some insight as to what he considers to determine truthfulness:

I had one here probably about a month ago and just the circumstances around it, led me to believe that it probably didn't happen. That the guy was trying to cover up a probably a domestic violence case where he didn't want to get his girlfriend in trouble and so he made up a bogus claim that he was robbed out in the parking lot of his apartment complex and a guy held a gun on him and just tried to rob him; he didn't have any money and the guy ended up taking off. So just the circumstances, it was suspicious and they didn't seem too concerned about it. Didn't have a whole lot of information like your typical person would have, and so, yeah, I would say something like that would get put on the back burner a little bit more because one, that doesn't happen very often out here and he just didn't seem too upset about it.

[the victim said] Yeah, it happened, but, you know my girlfriend didn't know much about it. You know, usually when that type of stuff happens, you're gonna tell your girlfriend exactly what happened, this and that; she didn't have a care in the world about it but it, for the most part, when something like that does happen out here, we're gonna look into it and any kind of crime like that against a person where a weapon was use, we're gonna look into it. [Officer Connelly]

Victim Involved in Illegal Activity

The final variable that seems to affect investigator effort for this class of crimes is when the victim is involved in an illegal activity which caused them to be the target of the crime or makes it difficult to prosecute the crime. Some examples might be where an individual who is selling drugs has a large amount of cash stolen from his or her house, or where a person is robbed by someone that he or she owes a drug debt to. For these types of cases, investigators in both Jamison and Kensington suggested that though the person was victimized, it is difficult to prosecute the offenses in court. These victims typically do not want to follow through with prosecution because their own criminal activity will be questioned. If they did make it to court, the defense attorney would certainly question their credibility.

Detective Shadduck explains the problems with these cases:

I think the big issue you're gonna run across in [this county] is the prosecutor's office ...How motivated they're gonna be to pursue that to the extent it should be....if it's something that I think isn't gonna go anywhere, I will consult them before I get way down the road into an investigation, before I waste time.

Interviewer: If the crime was the result of a case of retribution would that affect how you investigate the case?

[...] we'll just take it down to the prosecutor's office. I'll sit in front of the prosecutor. I'll say... I know [named assistant prosecutors] and [the crime happened] and this is why.... They're drug addicts, It was a drug that... what do you want to do, it's up to you?...I ID'd [identified] both, and they may issue [the arrest warrant], they may deny it. They may have both victims come in and talk to the prosecutor. So a lot of those, if, we'll go speak with the prosecutor, and they review it [before I do any work on it]. [Detective VanDeWouwer].

Robberies of individuals always seem are tied right back to the drug trade. Um, so that's gonna, that's gonna play a factor into it. I've got somebody that is doing an illegal act that becomes a victim. That doesn't mean that the crime is any less horrendous, but in the same sense, do I have a victim that's gonna come to court? Do I have a victim that's going to be cooperative? Um, are they even telling me the truth? [Detective Horwood]

You know you get the drug related robberies, course like those, I'm not gonna I'm not gonna spend much time on em. You know, Jim goes over Joe's house and you find out that it's a drug related crime. And we've charged them before but I mean the prosecutors hate to touch, hate touching, it's almost like your victims your suspect, your suspects your victim. You know you got em both in court and it's like, we've dealt with these guys so much it's like, he's a victim today and tomorrow he's a suspect. [Detective Merchant]

These statements are consistent with research that suggests the setting in which the crime occurred, victim lifestyle, and victim competence can affect investigative effort (Waegel, 1981).

This concept is similarly observable during other interviews. When asked "would you likely put more effort/less effort /normal effort into the case if it appears that the crime was committed as the result of some illegal activity on the part of the victim, such as a drug debt or retribution?", most detectives said they would still follow up on the case but most stated they likely would not put forth that little extra effort. In these cases, detectives seem to feel that it is

still part of their job to investigate, but concerns about the likelihood of successful prosecution made it difficult to justify utilizing time and resources to investigate.

Unlike Jamison and Kensington, the City of Lancaster Police Department actively investigates and prosecutes crimes where the victim is involved in illegal activity. Both in the interviews and in police reports it is evident that regardless of victim actions, suspects are prosecuted. There is no clear indication as to why this is different for Lancaster P.D. One possible explanation is that the local prosecutor's office will issue arrest warrants if probable cause exists, however, as one officer suggested these cases may be more readily pled down to a lesser offense.

It's still a crime. If somebody's robbing a drug house either a robbery or a home invasion, um, where it can become problematic, and we try to tell the victim, let us know everything. Even if you have unclean hands, it's still a crime, it doesn't justify the fact that they can do that because of that reason, um, but where it can hurt is if the story they're telling does not fit whatever the physical evidence is or the witness statements is so the credibility of the victim is gonna be in jeopardy. We still work the case but those are the cases that you, if they get solved, you'll see plea deals on some of those because there's risk in the victim because of their not being honest at the beginning. [Detective Rohn]

Those that were interviewed felt that the victim's involvement in crime did not make them any less of a victim and it was therefore important to investigate the case as they normally would. Additionally, none of the Lancaster officers that were interviewed indicated that they had concerns about the ability to successfully prosecute those cases, except for the fact that the victim usually was not completely honest about what happened in an attempt to hide or minimize their own criminal activity.

I put at the top of the list what I call the true victims. The and it's hard to impress upon some people, you can be the victim of a crime and you don't have, you have unclean hands for some reason, but I'm still okay that you're the victim of this crime and that we wanna work it, but a lot of time, we work against, or we have to fight against the misinformation they give us about the complaint. It's like just tell us what happened for real. Instead of you making it up, you know and, when you find out that they've

embellished or left parts out that are important to the elements of the crime, then it's disheartening. It's hard to, it's hard to work that case through because you work it with this set of facts and you find out something different. You know you find out the real set of facts later and opportunities have been missed you know, preservation requests that you could have done are gone, or evidence is destroyed or you could have done a search warrant and you, it's almost like you wanna tell them, look the best way to do this is to be 100% truthful you know, and I mean, there's so many times I talk to people about CSCs [criminal sexual conduct] and I tell em, this isn't a drug investigation. If you tell me something about drug stuff, I have to put in my brain or maybe tell my sergeant or whatever, but I'm talking about the CSC part, you know, that's what I'm interested in and but people have a hard time wrapping their brain around that and agreeing to that and so it makes it harder when they, when the victim or the witnesses are not on board. [Detective Shafer]

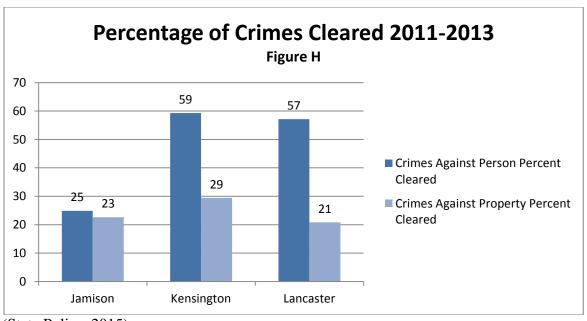
There were also several cases like these documented in Lancaster police reports where the victim was involved in some type of criminal activity, yet the case was still investigated and the prosecutor's office issued a warrant. In one example, the suspect lured the victim to a remote location under the guise that he wanted to buy illegal prescription narcotics from the victim. The suspect and his friend punched and kicked the victim and then sprayed him with pepper spray. They also stole narcotic prescription medication and a cell phone from the victim's pocket. The report was very detailed and contained several supplemental reports. Several officers worked to investigate this case and were able to identify and arrest the suspects the following day. Felony warrants were issued on both suspects.

In another case, the victim tried to trade his computer for drugs. The suspect took the computer but did not give the victim the drugs. The victim called the police and claimed that the suspect robbed him at gunpoint and tried to abduct his wife. The suspect was identified and charged with larceny by conversion. The victim was charged with filing a false report. Again, this was a detailed report where officers conducted a lot of follow up investigation to determine what actually happened and charges were ultimately issued for both crimes.

Solving Crime and Clearance Rates

The results of this study also offer several interesting conclusions about solving crime and clearance rates. First, the focus of this dissertation is to better understand the factors that influence detective decision-making with the ultimate goal of solving more crime. Police agencies are often evaluated on their ability to solve crime as measured by crime clearance rates; however, this is likely not a fair measure of their investigative ability. As has been concluded in multiple previous studies, reported crime clearance rates are quite possibly inaccurate (Loftin & McDowall, 2011). This may also be true for the agencies in this study as well. For example, State Police Incident Based Reporting records indicate that Kensington and Lancaster cleared an average of 59 and 57 percent of their personal crimes respectively while Jamison only cleared an average of 25 percent for 2011-2013 (see Figure H).

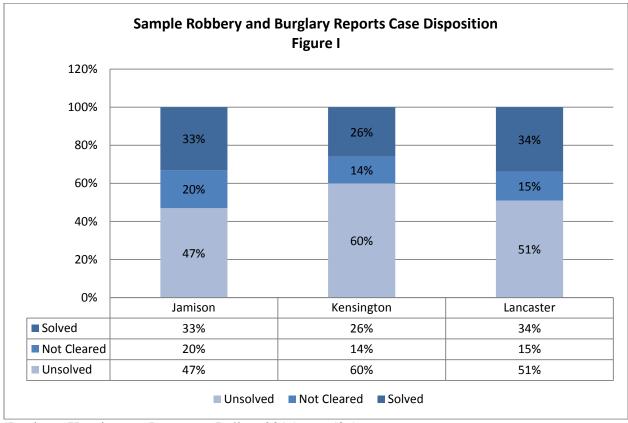
The national average for crime clearance for violent crimes was 49.8% in 2011, 50.3% in 2012 and 50.2% in 2013 (UCR, 2011-2013). Additionally, Jamison is similar to the other two communities in many ways and is in a better financial position than the other two. It is therefore unlikely that Jamison would have a significantly lower clearance rate for crimes against persons than the other two cities. To further support this assumption, Jamison cleared 68 percent of the robbery crime reports in this study. This compares with Kensington at 53 percent; and Lancaster at 52 percent respectively. Though this is not a direct comparison, it seems unlikely that Jamison would be significantly better at solving robbery crime; yet, significantly worse at solving all personal crime.



(State Police, 2015)

Another issue with examining clearance records is that the percentage of solved cases is misleading. In reviewing each police report from the sample and determining whether the crime would be considered cleared or not in accordance with the U.C. R. definition of a cleared crime, it is apparent that the clearance rate does not necessarily provide a full description of investigative success. For example, approximately 58 percent of the unsolved robberies from the sample of robbery reports were solved in the sense that the police either provided compelling evidence that the report was false or identified the suspect but issues outside the control of the police prevent them from being prosecuted (lack of victim cooperation, victim involved in crime, etc.). Additionally, in approximately 11 percent of the robbery reports, it is apparent that the victim knew the name of the suspect, however, was unwilling to provide that information to police. Interestingly, in 93 of the 506 police reports that were reviewed for this study it is evident that the reports are false based on the facts documented in the reports (See Figure I). These types of crimes could be describes as solved but not cleared. Therefore, even if crime clearance data is reported accurately to the State and FBI, researchers and policy makers should

consider that for a portion of the unsolved cases in every community, suspects may have been identified, yet circumstances beyond the control of the police prevent the crimes from being prosecuted. It is therefore important to understand the limitations of these data and consider alternative or complimentary sources of information when researching this important topic.



(Jamison, Kensington, Lancaster Police, 2015; n = 506)

Finally, in examining how crimes were solved in each of the 506 police reports, several interesting findings were discovered. First, though detectives play an important role in the investigative process, an overwhelming majority of the cases were not solved through follow up investigation. More than half of the cases were solved because either the suspect was apprehended at the scene of the crime (31%) or because they were named by the victim or witnesses (25%). Additionally, 13% were solved by patrol officers after the suspect's description was broadcast over the police radio or shared during briefing. Only eight percent

were solved by follow up investigation. (See Table 4) This shows how difficult it is to identify a suspect if they are not apprehended within a short period of time after the crime or their identity is not known by the victim or witnesses. This is also consistent with prior research that suggests that most crimes are solved within the first 48 hours of occurring (Greenwood, et al., 1977).

Table 4: How Crime is Solved								
Method for Solving Crime	Jamison		Kensington		Lancaster		Total	Percent
Count/Percent	#	%	#	%	#	%		
Suspect Apprehended at the Scene	21	36	8	20	20	33	49	31%
Suspect Named	10	17	12	29	18	30	40	25%
Suspect Description	7	12	3	7	11	18	21	13%
Apprehended by Security Officer	10	17	2	5	0	0	12	8%
Follow Up Investigation	7	12	2	5	3	5	12	8%
Exceptional Means	2	3	4	10	6	10	12	8%
Forensic Evidence	1	2	5	12	0	0	6	4%
Solved by Neighboring Jurisdiction	0	0	4	10	0	0	4	3%
Prosecuted for False report	0	0	1	2	2	3	3	2%
Total	58	100	41	100	60	100	159	100%

(Jamison, Kensington, Lancaster Robbery and Burglary Police Reports 2011-2013)

This also implies that detectives are not an important part of solving crime and therefore, case load should not affect clearance rates, however, this assumption is not correct. Though they may not solve most crimes, detectives play a major role in getting a case to the point where it can be classified as cleared in accordance with UCR standards. For example, though patrol officers may develop *probable cause* to make an arrest, detectives are responsible for raising the level of proof to *beyond a reasonable doubt* so that the case can be successfully prosecuted. Detectives are tasked with many things, including; interrogating suspects in an effort to get confessions, identifying additional suspects, locating and interviewing additional witnesses, exploring whether suspects have been involved in additional crimes, gathering and sharing intelligence information with patrol officers and officers in neighboring-jurisdictions, recovering and returning stolen property through search warrants or from pawn shops, and communicating with

prosecutors to ensure that cases are successfully prosecuted. If and when detectives lack the time and resources necessary to do these things, some cases do not make it from *probable cause* to *beyond a reasonable doubt* and therefore, cannot be successfully adjudicated. Investigative effort may not solve most crimes; however, investigative effort may improve the likelihood that a case can be defined as cleared for UCR reporting purposes.

Investigative Effort and Crime Clearance Rates

The findings of this chapter can be summarized as follows: First, the ratio between the number of crimes and number of detectives does not increase the likelihood that police detectives rely on extant classification schemes. There is evidence that all three agencies in this study routinely use classification schemes to manage their caseload. Additionally, for typical crimes, investigative effort can be predicted by the likelihood that the case can be solved and successfully prosecuted. Leads available, time available, and prosecutor policy are variables that guide officers in their determination of how much effort to put into a case. Further, when guns are stolen or when the value of the property stolen is significant, the case may receive more effort, but detectives are still ultimately constrained by the number and quality of leads available. Additionally, the rationale detectives use to determine the amount of effort that goes into investigating a stagnant crime is the same: If the investigator determines that the case cannot be prosecuted then investigative effort is limited to providing enough documentation to show that the report is false, the victim will not cooperate, or the prosecutor will not prosecute. Finally, raw crime clearance data does not always provide a complete picture of the complicated process of solving and clearing crime. These findings bring about an interesting conclusion. Contrary to the hypothesis that crimes that receive minimal investigative effort are less likely to be cleared than those that receive substantial investigative effort, it can be said that crimes that are less

likely to be cleared receive minimal investigative effort. The probability of a successful conclusion of a case is what drives the investigative process, not investigative effort.

CHAPTER 5

FINDINGS REGARDING CONTEXTUAL VARIABLES

Contextual Variables and Discretionary Decision-Making

Similar to Waegel (1981), the results of this dissertation provide partial support for the hypothesis that classification schemes vary across departments. That is, the factors that are unique to each community contribute to the development of specific classification schemes. For example, Jamison and Kensington are immediately adjacent to cities with much higher crime rates. As a result, offenders often extend their crime activities into these communities. In contrast, due to its location, Lancaster is more isolated from big city crime; however, drug use is more prevalent therefore, the prevailing motivation for committing home invasion crime in Lancaster seems to be to support a drug habit. Contextual variables therefore create different priorities and different standard operating procedures across communities.

Interestingly, unique to this study and contrary to the second hypothesis, some classification schemes are consistent across departments. For example, officers in both Kensington and Lancaster mentioned that when the victim claims that only rent money and/or prescription drugs are stolen and there is no sign of forced entry, the report is likely false. Additionally, all three departments describe issues with insurance fraud and reference similar clues that help them to determine when this might be the motive.

Pressure for City Officials/Media/Community Members

Contrary to the second hypothesis, the contextual variables of crime rates, political environment, and media/public scrutiny do not seem to affect classification schemes in two of the communities. Surprisingly, only Lancaster officers reported being influenced by these variables. Perhaps communities that lean more toward the crime control model are less

concerned with police procedures, and those that are more aligned with the due process model feel the need to scrutinize police actions (Packer, 1964). During interviews, Jamison officers described experiencing positive support from the community and did not feel pressured by the media or local government to solve high profile cases. The local media was described as being reasonable to work with. One supervisor that was interviewed stated that they were supportive but would *not let anything slide either*. [Sgt. Stephenson]. Local government officials did not seem to affect investigator effort. When asked if a council member calling to inquire about their neighbor's home invasion would change how they conducted the investigation, Sgt. Stephenson said,

No, you know and I just had one of em question me about a TX [telephone] harassment report, but you know you gotta treat em like everybody else and unless you want me to go over to Nigeria I can't do nothing about it.

Kensington officers had a similar response. In terms of relationships with the community, the city council, and the media, those that were interviewed said they sensed that they had strong community support and positive relationships with the media. Officers felt that the community had high expectations for the police department to provide a safe environment for residents, and because the police department was meeting those expectations, they received a lot of public support. Additionally, officers and detectives did not feel pressure from the media to do more or better work than they had been doing. A first line supervisor indicated that the media does call quite a bit for information regarding crime in general, but felt that the relationship was constructive and the reporting was fair and accurate. He also indicated that the media is often willing to air crime events that are captured on surveillance video which had helped to identify a fair number of suspects. Those interviewed also conveyed that individuals with higher status in

the community may get a little more effort; however, those cases were not something that investigators seemed to be overly concerned with.

I mean, honestly, I had one, and actually one of my, the guy from the Attorney General's office I know called me and said hey my buddy's house got broken into and you know I'm like, there's nothing there, there was, they didn't take anything and, and truly I believe it was, it's from has to do more with his kids than, some of his friends coming over, I mean they might get, I hate to say it, a little more attention but if it's not there, it's just not, you know, it's not there. [Detective Jones]

Unlike Jamison and Kensington, all of the officers in Lancaster that were interviewed mentioned that scrutiny from the media, city officials, and the community as a whole impacted the way they respond to and investigate crime. This may be in part because Jamison and Kensington are part of a much larger metropolitan area and therefore do not seem to draw the same level of scrutiny as Lancaster. Most Lancaster officers felt that the local media reporting was not balanced and often not accurate. They also revealed that the media had a tendency to sensationalize certain crimes which created community fear and therefore required investigators to increase their level of investigative effort. The following excerpts highlight this concern.

A lot of stuff that I've seen gone out in the field goes out incorrect. It's blown out of proportion and even when you said, I talked to that reporter, here's what I told him, where did he get this? And, how they spin the case kinda puts you either in a good light, rarely, or most of the time in a bad light. [Officer Ash]

I've seen where they've ah they have blasted us in the past for different things, it's their job and I don't have any ill feelings towards any of them, but, I think they could be a little more [...] neutral in things they're reporting. [Officer Dunlap]

I think the reporter put it in the paper or something and that, so that stepped it up a notch right there because now you have this scrutiny from the public about it and people get scared. [Officer Bravo]

Lancaster officers also expressed some level of frustration with local officials. Most officers felt that the local government was supportive, but at the same time, lacked an overall

understanding of their job and the challenges they face on a daily basis. Some officers also felt that local government pet projects often received priority over more serious crimes.

I think overall they [city government] are [supportive], but, they don't understand what policing is and so when someone calls and says you know, this is happening, they think we're, we can solve it like this you know and not realizing like I said, right now, there's three people assigned to take calls on the road. I mean, luckily it's been slow today. I, they don't understand what it is that we do and they think they can tell you from that outside perspective. [Officer Mason]

I feel they're supportive [city council], but we do feel a lot of pressure. A lot of minor issues that come through the top and you know, currently right now we're doing park checks. We have to have 10 park checks a day. Each officer. Every day. Every platoon. Because we've had a resident that contacted the right person and was upset with either drunk or people having sex in a local park in the dugout and, there's times when we just don't have the time to do it... some of it is, it seems frivolous and you know it's like, you know you get the guy that speeds, one car that speeds down a side street you know and 99% of the cars don't speed but yet the right person complains and we set up traffic details, we put the speed trailer out there, we blow it totally out of proportion. A lot of wasted resources in my opinion. But I can understand somewhat but there's gotta be that line to, you know, hey, we've got this, stay out of it. [Officer Pelico]

I think there's pressure put on certain types of cases when there's other things that should take precedence. You know the, we may be told to focus on a certain area of crime, or certain type of crime, like I want you to focus on graffiti when we're having a huge rash of LFA's [larceny from cars]. Well, I don't wanna spend time in the parks looking for graffiti artists when I could be out with my lights off finding somebody stealing property. I, I think that's a political thing, but I don't make those decisions. [Officer Murphy]

With the amount that we were having, the town was chattering about you know all these B&E's and there's pressure on you that hey, you know, we gotta solve this. [Officer Mason]

We've had about three separate incidents. Three different groups I guess just hitting areas in the neighborhoods and yes, when you, when you, because you know, okay, if they're doing a bunch, where're they gonna hit next. And it's not just a single, random odd out of the way type of incident. You know, chances are it's going to be, especially when you've got multiple, you've got multiple victims now. Things get into the media. Things get some attention to it. [Officer Ash]

I remember years ago we had a guy who was breaking into homes and we mobilized this little task force. We've done it several times for daytime B&E's is what it normally happens to be um, and I remember the one guy, he was breaking into houses and stealing purses and it I think the reporter put it in the paper or something and that, so that stepped it up a notch right there because now you have this scrutiny from the public about it and

people get scared that, I mean your home is your safe haven and, and, people will you want to, you're building this trust with the community, so when that sort of thing happens and there's this serial and its repeatedly, I think that changes how you mobilize what you do. You can't have a task force for every case. But you know you but together a little group for you know, night time car larcenies, you know and things like [that]. [Detective Shafer]

In summary, the results of this portion of the study suggest that community/media/political scrutiny does not affect investigative effort in communities that are supportive of the police department; however, lack of community/media support and increased local government interference into police activities decreases investigative discretion, thus increasing investigative effort. As prior research suggests, increased attention and scrutiny decreases discretion which generates more effort (McCleary, 1978; Skolnick, 1994; Shingold & Gressett, 1987). Nevertheless, these cases do not receive the same exceptional level of effort that intolerable crimes receive. Officers may try some additional investigative techniques or write a more detailed report, but there is not the same sense of commitment to these cases.

Characteristics of the Offense and Discretionary Decision-Making

It has been concluded by multiple scholars that investigators have little discretion for very serious cases; therefore these cases are investigated to the fullest extent possible (Castro, 2011; Litwin, 2004). While this may be true, the present research suggests that the motivation to investigate these cases is intrinsic and effort is therefore voluntary rather than related to less discretion. Consequently, contrary to the hypothesis that as the seriousness of the offense increases, investigator discretion decreases, investigator discretion or the possible lack thereof does not impact investigator effort because detectives willingly put forth a significant amount of effort for serious cases. This finding will be explored in further detail in the following paragraphs.

Intolerable Crimes

Consistent across all three departments, officers and detectives put forth the most effort for crimes that violate the norms of civilized behavior in their community. The types of crimes that fall into this category are; violent and heinous crimes, crimes where the victim is emotionally traumatized, crimes where the victim is particularly vulnerable, and serial crimes. For crimes that fall into this category, officers seem to feel a sense of duty and a responsibility to do all that they can to solve them. They therefore go to great lengths to investigate these cases even when the likelihood that they will not solve them is very high. They are more thorough in collecting evidence and use investigative techniques that are more time consuming, require substantial resources, and/or have a low likelihood of producing positive results. Again, officers seem to feel responsible for ensuring that people maintain a certain level of respect for the law. If the threshold is breached, they feel compelled to do everything they can to solve the case and bring the suspect to justice not just for the victim, but for the community as a whole.

Many of the officers interviewed made statements that suggest that they take some types of crimes personally and feel a sense of responsibility to solve them. The following words and phrases used by interviewees imply that intolerable crimes challenge their authority and their ability to maintain order in their community; therefore, they have a need to restore the balance by apprehending the offender(s).

We don't want you coming to our town thinking that you can just do whatever you want. This is our town. [Officer Mason]

But when you prey on the people who are vulnerable, that's ...It's very yeah, it's offensive to the community. [Detective Shafer]

When it becomes ah, a crime on a person, it definitely is more important to us and sometimes I think it's more important to us than it is the person that was robbed you know? [Officer Mason]

Violent or Heinous Crimes

When a violent crime is committed, factors such as lack of victim cooperation, victim involvement in other crime, and case solvability do not influence investigative effort. Officers investigate these cases to the fullest extent possible, regardless of the circumstances. Violent crimes not only affect the victim, but they also affect the sanctity and security of the community as a whole. As a result, investigators seem to feel compelled to solve these cases as quickly as possible without regard for the cost of the investigation. These cases are the top priority and the investigation of other crimes can be delayed or minimized as a result of a violent crime occurring.

The following statement best exemplifies this tendency.

A guy was selling some pills and two guys set him up and they robbed him [...]. Well, they shot him. They shot him in the back of his neck and it came out his mouth with all his teeth and they shot him in the back and, he didn't die. Here's a guy [the victim] that is doing an illegal act, but I also look at it like this, I don't want Kensington to be like the city of [neighboring city with a very high crime rate]. [...] this is a nice place to live. I'm not gonna put up with that. I'm not gonna put up with somebody doing something regardless of this guy [the victim]. Whether his [the victim's] criminal activities or not, I wanna send a message to people that you don't come into my community [...] and do horrific things and I'm gonna knock the city of [high crime city]. We're not the city of [high crime city]. You know, I'm not gonna put up with that. I'm gonna send a message and I'm gonna come at you. I'm gonna come at you hard. I'm gonna come at you strong. You brought a gun into this community and shot somebody. I'm not having it, I'm not having it. And I worked it, I worked it to death. I got it um, I got a cell phone number. I worked it. I tracked down both people and within 24 hours, they were under arrest and I got em and it was a great case [...] [Detective Horwood]

Police reports for these types of crimes were distinctly different than for less serious cases.

These reports were extremely detailed and contained intricate descriptions of the suspect, his or her actions, tone of voice, gestures, and specific words used. Additionally, for very serious crimes, many officers wrote supplemental reports, often times restating information that had already been documented by another officer.

The reports and interviews also suggest that detectives feel a sense of urgency to solve these cases and therefore immediately devote a significant amount of resources to them including; calling detectives in on overtime, utilizing the assistance of outside agencies, and assigning multiple investigators to work on the case. Detectives also documented follow up on leads that did not pan out. In less serious cases, one officer typically summarized everything that occurred by everyone involved. Additionally, officers took separate statements from each witness in more serious cases, whereas in other cases, the officer condensed statements from multiple witnesses into one account. In robberies where a weapon was not displayed, a basic description was given and only the initial responding officer would document police actions at the scene. Investigators used forensic evidence collection methods such as DNA collection, plaster shoe impression casting, and Super Glue fuming on cases that seemed to be particularly violent.

There were several good examples of these types of behaviors in the police reports that were reviewed for this study. The first example is from reports that document a series of bank robberies that occurred in the City of Jamison in early 2012. In each of the crimes, the suspect displayed a gun and demanded money. In some of the instances, the suspect jumped up on the counter and waived the gun around. In one of the cases, a shot was fired, and in another, the suspect put one of his arms around a teller with one hand, and pressed the gun against her side with the other. The reports for these cases were extremely thorough and descriptive. For example, the reports contained elaborate details regarding the suspect description:

The suspect is described as a black male, 19-25 years old, dark complected. He has prominent cheek bones, short but not shaved black hair. He wore a light blue or gray pull-over hoodie, a black facer-warmers style mask, light blue jeans, black gloves and black athletic shoes with thick white soles. The hoodie, pants and gloves were over-sized. He carried a light blue colored draw-string gym bag [Report 1f].

This can be compared to a robbery where a gun was indicated but not seen:

"Both witnesses described the suspect as a white male, approximately 5'9", thin build, unshaven, wearing a dark coat and a red beanie type hat." [Report 2b]

The suspect's actions were also detailed in the reports:

The suspect pulled out a pistol from under his jacket and brandished it in his right hand for all to see. The suspect also pulled out a pink backpack from under his coat and held it in his left hand. The suspect unzipped the bag with his right hand (pistol still in his hand). The teller unlocked her drawers (one lock) and placed the money in the bag as directed. ... The suspect carried the backpack like a sack under his shoulder, in his arm as he fled the scene. ... the suspect's voice was thick and his words were drawn-out as he spoke. [Report 1e]

More crime scene processing was also done. Officers took lifts of footwear impressions the suspect left in the dust on the tile floor and the counter of the bank, canine tracks were attempted, and officers conducted neighborhood canvases for these cases.

Another case that serves as a good example is an armed robbery of a gas station in the City of Kensington. In this incident, six officers responded to the initial call including one from a neighboring jurisdiction. Additionally, five supplemental reports were generated, with some containing redundant information. Further, each witness account was documented separately and the description of the suspect was extremely detailed. The officer described the suspect as follows:

The w/m looked to stand approximately 5'5" – 5'7" bald, with a large stomach, glasses, wearing a white t-shirt. The front of the shirt had what looked to be "Pilot Run" written in white surrounded in a black rectangle with "Invitational" or "International" written in black below "Pilot Run" and possibly 5 tennis balls surrounding the lettering on the front of the shirt. [...] he had brown eyes and short eye lashes. [Report 223]

This description provides such specific detail that there seems to be a higher likelihood that the suspect could later be identified by the description given. This case is in contrast with less serious cases where typically only one or two officers respond, one police report is generated, a basic description is provided and far less resources are put forth to investigate.

The third example is an armed robber of a gas station in Lancaster, where the threatened the victim with a gun. In this case the reports were again very detailed and contained information that may or may not be relevant to the investigation. The following is the officer's description of the suspect.

The suspect was described as a white male, medium build, approximately 5'11', approximately 25-35 years of age, wearing a black ski mask with the eye holes and mouth hole cut out, black gloves, light colored stone wash blue jeans, and white tennis shoes with a dark blue or black sole. The suspect also brandished a black semi-automatic mid-frame size handgun. The suspect pulled the gun out of his right coat pocket and put the gun back in his right coat pocket before he left. He pulled a white plastic grocery bag from his coat pocket and put the money inside. The suspect wore the gloves and ski mask the entire time. [Report 428]

Additionally, potential witnesses that were in the area at the time of the crime were interviewed and those interviews were documented even if they had nothing to report. Officers also checked for surveillance video in businesses adjacent to the area. They went to other local convenience stores and gas stations to see if someone matching the suspect's description had been in their store prior to the robbery. One officer located video from a convenience store in the vicinity that shows the suspect in the store while not wearing the mask. The officer collected the video and still photographs of the suspects. Detectives later took these photographs to several businesses in the area in an attempt to identify the suspect. The suspect was identified when he robbed another store about a week later in another jurisdiction. Detectives went to the neighboring jurisdiction and interviewed the suspect and his friend that was in the car with him at the time of the crime and obtained enough evidence to get an arrest warrant for the crime.

This case can be compared to a robbery at a fast food restaurant where no gun was used and the item stolen was a \$5.00 sandwich. In this case, the description was very brief:

White male, approximately 35 years old, 5'8" tall and 160 lbs. Short dark brown hair, no facial hair, White tank top with a long sleeve button up shirt red/purple in color. Blue jeans. [Report 402]

In terms of follow up investigation for this case, another officer looked for the suspect in the businesses in the immediate vicinity but was unable to locate him. There were no other supplemental reports generated other than one documenting attempts to contact the victim for a follow up interview. The contrast between these two reports indicates that investigators put forth significantly more effort for what officers perceive as more serious crimes.

Many of the detectives that were interviewed confirmed that violent and heinous acts are a major concern for them and therefore warrant more effort.

We had a home invasion down in my area. I know they knew one of the victims but still they entered the house, stripped em naked, bound em, raped the female with a gun then raped her, one of em did while the other stood, and took off. Well, obviously that brought everything down. You know we got both suspects. They wanted separate trials, so we had evidences, witnesses, we did video, we did a map layout for prosecution, yeah, that was over the top. [Detective VanDeWouwer]

I think if there's a weapon shows, it definitely kind of amps that up as being a little more serious than walking in with hand in pocket or just walking in and saying, "Give me all your money." I think once a weapon is seen, it, it totally changes the game. [Detective McKean]

If there's a known weapon or shots fired or something then it's a lot higher priority. And we treat all of our robberies as a high priority I mean because the potential there, I mean they're making contact with the victim, it's not like they're breaking into somebody's house that's in Florida, so, those are, we treat those all, whether it's armed, unarmed, obviously if, if there's an injury or shots fired, then it becomes a higher priority.

[Detective Brown]

Interviewer: What, what were the factors that made it a big case in your mind?

Um, it was, the one I'm thinking of it was an adopted child who was sexually assaulted by her adopted father and there were other children that were, that he had adopted that he had access to and I mean the facts of the case by themselves were heinous. I gotta do whatever I can to solve this case. [Detective Shafer]

Victim Emotional Trauma

The emotional impact the crime has on the victim is another variable that seems to play a major role in determining the level of investigative effort. In cases where the victim is

emotionally distraught as a result of the crime, it is apparent that officers feel empathy for the victim and have a high level of compassion for them. Officers that were interviewed expressed the desire to do what they could to solve the crime in an effort to give the victim some peace of mind. The following statement illustrates this sentiment:

I guess the home invasion, in and of itself, ..., even if nothing's stolen, a mere fact that a home gets broken into and somebody is in your residence or even in your garage for that matter, you, feel violated and there's a long last psychological issue with that that accompanies that, again, with our jurisdiction, we're able to provide that extra mile and we've had a couple really good successful investigations where we've had some day time B&E's [breaking & entering crimes],I went that extra mile. I got enough information where I was able to identify the suspects and able to put a tracker on his car and built a huge case and were able to issue warrants for CCE [Continuing Criminal Enterprise] as well as 27 other predicate crimes. [Detective Park]

This perception is supported by the observation that officers often document the victim's state of mind and level of concern or lack thereof in the police reports. This is interesting because, for most crimes, it is not an element of the crime and is therefore not necessary to include. The following excerpts from police reports demonstrate this.

I spoke with victim at his residence. He was extremely upset and visibly shaken. He was shaking and started crying several times while I spoke with him. [The victim said] "I had my gun on him but I just couldn't pull the trigger. I was in fear for my life, but I just couldn't do it. I have never been violated like that before. I was going to shoot him but I just couldn't." [...] Victim became very upset and began shaking. Victim continued to repeat in a whisper "he came into my home...I almost shot him". [Report 484]

Renee was extremely nervous about the situation and admittedly could not think clearly...she was visibly upset and was having a difficult time recalling what was in her jewelry box.... Upon discovering her computer missing, Renee began crying and could not tell me what make or model it was. [Report 50b]

The victim stated: "I was not going to call, but figured I better let you know." [Report 526]

The victim stated: "that's the only reason I am reporting it right now, because I am getting ready to leave again for a few days. [Report 453]

This thought is also supported in many of the interviews with investigators from all three departments. Some of the officers that were interviewed specifically mentioned their desire to help those victims that are emotionally devastated by a crime.

I just think that, when you see somebody that is ah, when you see someone that's injured or see someone that is very emotionally traumatized by something, it's, I look at it, this is not something these people see or deal with everyday where police officers, we do see and deal with a lot of that and I want them to know that, hey, we're gonna do what we can to help you. [Officer Dunlap]

When you can go and give the victim some type of closure and tell em at least what happened, and I think that's, that's the big thing and, like I said, it's personal, just personal crimes that you have a true victim, not just monetary but a, ah mental, someone that's been wronged or you know, harmed, mentally even more than just physically [Detective Jones]

How much is the victim affected by the crime? If you have somebody that just doesn't seem to be phased or bothered at all by the fact that their garage or car was broken into, as opposed to someone who seems to be mentally, like Oh My God, you know I can't believe this happened to me, I, I would almost put more of a priority into it and make it seem like, you know, hey, we need to help this person because they're struggling mentally and they're affected more by it than a person whose just like, yeah, they broke in my car, yeah they took my radio and my wallet, whatever. [Officer Ash]

Officers also conveyed a sense of personal responsibility to solve crimes where they sensed that the victim was emotionally traumatized by the event.

I think emotionally and for trauma reasons it makes it more serious, just because I think you have a victim now that is a little more traumatized, I just think the experience is different if they're home at the time than as opposed to them coming home and finding it. There's still some trauma involved, but I just think it puts a little more pressure knowing you have a victim who's got, the personal effect.... I think it does just by human nature push you to do a little more with it. [Detective McKean]

I think, I think ah home invasions are just one of the cases, you know, I've never had my house broken into but actually, how it makes people feel, sure, you know, and it, I guess home invasions really piss you off. I mean the suspects, the, I don't think they realize how violated people are. You know I think you'd agree, I think that's just such a violation. You talk to these people, it's just frustrating cuz you hate to lose, and it's like, it's like, man you just wish, I leave em open because, [a nearby city] had some people they arrested, so you go interviewing all these guys hoping somebody'll know something, but there's so many crews out here doing em. [Detective Merchant]

Many of the comments made by officers during interviews also suggest that a high level of investigative effort is voluntary and internally motivated.

Any time we have the, any victims, you know we're bringing out everybody [police officers] ...So if the victim is home, victim is harmed, scared, traumatized... I mean, that's when we're all called out. And we're, on it and they [the supervisors] allow us, we are on it until we finish it. [Detective VanDeWouwer]

Finally, statements made by interviewees indicate that they sometimes become emotionally invested in solving the crime and therefore put forth significantly more investigative effort.

I think personally I take that as more of a I guess a personal I don't know how to describe what I'm trying to say. Um, I, I certainly have been on cases where the victim was, was, it was something that I attached myself to and wanted to do a lot more work and wanted to get this person arrested, um, especially in a robbery scenario, you're concerned about future victims. [Officer Mason]

Where our residents are, are personally victimized. Ah, that would probably play a big role into my motivation into digging deeper. ...if you have a resident that's been victimized and there TV's gone, their computer's gone, their personal files are gone, you kind of have a little more incentive, a little more at least... inside feelings to figure out who did it for 'em. [Detective Shadduck]

I guess home invasions are one of those cases, it's almost like ah, when you get these larceny cases from cars but the home invasions I think are much worse obviously, break into someone's home. Um, you wanna solve em so bad; you hate to let em go. I mean there's just, like these ones I have right now, not, absolutely no breaks in em, nothing going [...] [Detective Merchant]

This detective went on to say that he was in the process of using a cell phone tower triangulation technique which involves collecting cell phone tower data from local cell phone carriers regarding all cell phone usage in the area of the crimes within the timeframes that the crimes were committed. All of the calls are uploaded into a software program that determines if any of the same cell phone numbers were used in the areas of multiple crime sites during the times of the crimes. If the same cell phone shows up at multiple crime scenes during the times the crimes were committed, officers can track down the owner of the phone as a potential suspect. The detective also said that some of the cell phone carriers were providing the information to him at

no cost; however, one carrier indicated the cost for this information would be approximately eight thousand dollars. This investigative technique is costly, time consuming, and has a low likelihood of success. This suggests that the detective feels that these cases are important enough to use exceptional means to solve them, even though they are less likely to produce positive results.

Victim Vulnerability

The information gleaned from this study also indicates that investigative effort is influenced by the vulnerability of the victim. Officers and detectives seemed to take a special interest in cases where the victim was elderly, very young, or had a disability that made them an easy target. In crimes where the victims were particularly defenseless, officers seemed compelled to do whatever they could to solve the case. Further, investigators displayed a strong sense of compassion for these victims. This seemed to elicit an emotional response to the case which, in turn, prompted them to voluntarily put forth more effort. Both the interviews and reports portray the sense that officers feel that it is their obligation to protect the community from those that have the audacity to prey on someone that is helpless. The following statements provide good examples of this line of thinking.

I think as police officers, you become an officer because you either wanna help people or you wanna fight the bad guy or a culmination thereof. And I think as police officers, we're drawn to protect the weak, the innocent, you know, children, old people, ah, anybody who hasn't got a chance on their own. [Officer Pelico]

I think that people in general and I think most police officers also agree and I agree that those are the people who least, they're more easily victimized, they're not as able to fend for themselves, like when we get, you now, the shaken babies and you get those like that and I mean they're totally helpless. And so that's that's a big factor for I guess it plays on your emotion or whatever, but these are, this is why we do this you know. [Detective Shafer]

Well, I think you still always have to put emotions aside when you're investigating a case, obviously ..., some guy goes in an robs an old lady and that's ... you're gonna be

somewhat emotional about that and you wanna discontinue his criminal pattern. [Sgt. Connelly]

Several police reports highlight the importance of victim vulnerability. In one example from the city of Jamison the victim was a 95 year old woman who was legally blind and hard-of-hearing. Two men came to her home and stated they needed to check the water pressure. Once in the house, they asked her if she could make change for a \$50 dollar bill. She checked to her purse, then in her closet for additional cash while in their presence. One of the two men then distracted her while the other took cash from her purse (\$300), her closet (\$400), and from a safe in her bedroom (\$4000). They even asked her to get them some tools for them, which they then used to pry open the safe. In this case, both the initial responding officers and the detectives who were assigned the case put forth significantly more effort than on other home invasion cases. [Report 117]

First, the report was very detailed. It contained much more specificity than other reports that were similar to this one. Additionally, the responding officer took numerous photos of the crime scene. The officer also requested assistance from two crime scene investigators to help locate physical evidence. The crime scene investigators collected several pieces of evidence from the victim's home, including latent finger prints and DNA samples. They also conducted a neighborhood canvas to see if they could locate additional witnesses. Further, the detective assigned to the case did extensive follow up, including interviewing a delivery driver that had been at the victim's home earlier in the day, and identifying individuals that had been involved in similar crimes in the past. These leads did not pan out.

The DNA sample that was submitted to the lab resulted in a match in the FBI's Combined DNA Index System (CODIS). After receiving the name from the DNA match, the detective contacted the agency that had the original DNA information and learned that the

suspect had multiple aliases, and was a suspect in similar incidents across the country. The detective was ultimately able to obtain an arrest warrant for the suspect. The level of effort that went into this case was well above what was done in other similar cases in the sample.

Increased investigative effort for vulnerable victims was corroborated by detectives during the interviews.

I got one right now at a group home, at an old folk home, where, I mean, another need in a haystack you're talking, stolen rings and there's no doubt it happened but you know there's 50 people at least probably have access to the room or other people walking the hallways, I mean so you wanna put a lot of resources in but you know, really, solving it's gonna be, damn near impossible unless somebody admits it and those are the hardest you know. [Detective Merchant]

They're [vulnerable victims] in, in my opinion, more in need of our assistance. You know, they've been swindled. I, I just had a hit and run [accident] with an elderly gentleman, 85 years old, and you know, I felt bad and I put a lot more effort into trying to help this guy just because it just seems like he ah, he wasn't able to do much himself, ah he seemed to be more affected by it than you know, maybe a 25, 30, 40 year old. [Officer Ash]

The victim ...the age of the victim, I think has a lot to do with it. I think you tend to take a little more interest if it's an elderly victim or someone who is a little more defenseless. [Detective McKean]

In another report, a family had been allowing a friend to live with them for several weeks.

The friend moved out and in doing so, stole several items belonging to the family. One of the items taken was electronic computer tablet. It is interesting to note that the officer wrote:

The victim stated that the theft of the iPad was especially difficult as the iPad is used with a language application by a three year old autistic daughter with limited speech capability. He stated that the suspect knows this but took the item anyways. [Report 168]

The information contained in excerpt suggests that the officer felt that it was important to document the particularly egregious acts of the suspect despite the fact that this not an element of the crime and would not assist with the follow up investigation. Perhaps this is an effort to notify detectives that the case deserves more attention.

In an example from Kensington, a 69 year old woman was the victim of an attempted armed robbery in a shopping center parking lot. The suspect was armed with a knife and he tried to pull the victim's purse away from her as she sat in her car. The victim stated that she thought the suspect was going to cut her throat with the knife. Again, multiple officers responded to the scene of the crime, the original report and three supplemental reports were generated; the report was very detailed, and included separate descriptions of the suspect from each witness.

Additionally, a detective was called in to work on overtime to interview the suspect. When compared with other cases where the victim is not particularly vulnerable, there is typically only one original report generated and one or two supplemental reports, a detective is not called in to investigate, and there is one general description of the suspect. [Report 224] A lieutenant confirms the importance of victim vulnerability as an investigative consideration in the following statement.

It rises to a new level I think, not legally, but morally and ethically, you know, we've had a few of those where people are taking advantage of the elderly. Obviously you feel sorry and a victim's a victim and we try and treat them all the same, but for sure, that would be something we would prioritize. [Lieutenant Ivey]

The final example is a case from Lancaster where both the elderly victim and suspect lived in a senior home. In this case, the suspect stole the victim's keys while she was working in the kitchen of the facility and then went in to the victim's room and stole \$40.00. The victim was particularly upset because the suspect was her "best friend". The officer who responded to this call went to great lengths to solve the case. After several conversations with the management staff of the facility and several trips to the facility, he was able to obtain surveillance video of the suspect taking the victims keys from the kitchen, concealing them and then going into the victim's apartment. The officer ultimately obtained a felony warrant for the suspect. [Report 450]

This is in contrast to many of the cases where the suspect is a friend, relative or acquaintance of the victim and steals something because they are familiar with the victim's habits, security measures, schedules, etc. Typically, the initial responding officer conducts a standard investigation and sends it to the detective bureau for follow up. The detective will follow up with what leads are available as time permits. For example, in a different case where the victim had her 57" television stolen, she named a friend of hers as a suspect. She also indicated that the friend/suspect had been telling people that he knew where he could get a television to sell and that he knew how to get into her house without a key. In this case the officer attempted to contact the suspect by phone several times, however never received an answer. At that point the case remained open, however there was no further follow up indicated in the report [Report 471]

Serial Crimes

The final variable that seems to cause investigators to consider a case to be worthy of substantial investigative effort is when a pattern of serial crimes is detected. This is interesting because, unlike victim trauma and victim vulnerability, the motivation behind the increased effort seems to come primarily from a concern that serial crimes threaten their ability to effectively police their community and maintain the standard of acceptable behavior. Police feel that their authority is being challenged and therefore take the crimes more personally. The following statements are reflective of this line of thinking:

And like I said, personally yeah, it's a little insulting to me as a police officer, that this is happening, we know it's happened at least a few times, and it's still going on, so it's kind of like a slap in our face. [Officer Dunlap]

You wanna look good as your police department in answering and responding to these things and we have a nice safe community here and we like to keep it that way. [Officer Ash]

Um, you get a rash of incidents where it appears to be the same people or person is responsible, you wanna stop that action if there's more victims you assume there will be more victims later and now I have this lady who has become a victim of this person and I need to do what I can, not only for her but for the victims that are coming down the line, cuz you know there's gonna be more. [Officer Pelico]

Additionally, as the following statement suggests; when all of the obvious leads have been examined and they are not able to identify a suspect, detectives are willing to attempt investigative techniques that have a low probability of producing results.

If we had a series, we just went through it again, we had a series of B&E's...We could never develop a suspect, so what we'd do, we just took a stab in the dark, we all went out and sat different hours [conducted surveillance]. Two of us, three of us at a time, we'd do down south and just sit dark and quiet and sit there for four or five hours hoping that you'd hear a window smashed or something. [Detective VanDeWouwer]

Detectives also seem to be more proactive in an attempt to prevent future crimes when it becomes apparent that there are serial crimes being committed.

If we think that same group is responsible for several other just business robberies, we have gone out and just drove around in our business districts repeatedly, worked on getting information out to the businesses ahead of time, so that's not really investigative, ... I think, we come together more, I think if we have a little bit more of a string of em, we tend to work together a little more and not just say, hey those three robberies are yours, it's more of a team effort I think ... and we gotta put a stop to this. [Detective McKean]

This sentiment is also apparent in some of the police reports. For example, in March-April, 2013 Jamison P.D. investigated a series of day-time home invasions that appeared to be related. In this series of cases, officers and detectives put in a sizable amount of work investigating the cases. At each of the crime scenes, fingerprints and sometimes plaster shoe impressions were taken. As it became apparent that the cases were related, more officers responded to the scene, detectives were called in right away, and canine tracks were attempted. Once the suspects were identified, Jamison P.D officers and detectives worked collectively to put the entire case together. They served multiple search warrants on four different houses and three

different vehicles. They interviewed many of the suspects' family members and acquaintances in an attempt to locate the previously stolen property. They also went to various pawn shops in the area to recover stolen property and were able to arrest additional suspects as a result of their investigation. Officers also spent a lot of time sorting out over 100 pieces of property so that it could be returned to the rightful owners. In these five cases, there were 15 different officers and detectives involved and 30 different supplemental reports were written to document various aspects of the investigation. After reading these reports it is evident that officers put a significant amount of effort into solving this case to ensure that there was ample evidence for prosecution. [Reports J99a-e] In contrast, other home invasion reports typically only involve the initial responding officer, a detective, and sometimes a crime scene investigator.

I think, if we have, start having a lot of them that we can put a pattern together, then...we all get together and do a [all] hands on deck, but if it's just a, run of the_mill, commercial or residential burglary, I mean we pretty much all handle on our own. [Detective Brown]

In another example, a patrol officer discussed his investigative efforts regarding the theft of several hundred thousand dollars' worth of copper wire from lamp posts that had been stolen from multiple residents in multiple jurisdictions over a period of time.

I mean they were just hitting everywhere, and finally, on third shift we've been watching them and watching them [conducting surveillance on lamp posts] and I found them and I felt really good because how much damage they were doing. You know hundreds of thousands of dollars, to all these people. They're doing it for heroine but that to me made a big deal because it impacted many different jurisdictions and how much damage they're doing. [Officer Kelley]

Conducting surveillance on random lamp posts throughout the city is very time consuming and has a low likelihood of success. It appears that these officers felt compelled to do what they could to solve these crimes even if it meant staring at a lamp post for hours on end.

The results of this study suggest that for serious crimes, investigative effort is internally motivated; therefore limits on discretion are irrelevant. The statement below shows that if officers were not internally motivated, limits on discretion would come into play.

Ah, we were getting B&E's, home invasions left and right. So that, prior to that we were having you know, 12 to15 of them where it was the same type of thing you know, so we were all, every home invasion or B&E that were getting we were going extra to try and find fingerprints and DNA and stuff, um, because that was the potential, we knew that was the potential, it was a shooting or something to happen because there were a couple where he had confronted the home owners and you know, that opens it up to a lot of things. [...] If I had taken one of those reports and come to the station and I didn't look for prints for what not, my sergeant woulda been saying, what, you know, what are you doing here? Get back out there. [Officer Mason]

The officer's statement reveals that his sergeant expected officers to do extra work on these particular cases because they became more important.

The common theme regarding intolerable crimes seems to be that officers feel passionate about solving these types of crimes. They feel a sense of obligation to not only the victim, but also to prevent future victimization, and to protect the community as a whole. They seem to feel it is their duty to protect the good people from the bad ones and maintain the standard for acceptable behavior. They get a feeling of personal satisfaction when they are able to solve a crime and feel a burden when they are unsuccessful. As a result, they are willing to go to great lengths to solve these cases. Consequently, limits on investigator discretion are not what produce extra effort for very serious cases.

Chapter 6

Discussion and Conclusion

The purpose of this dissertation is to explore the variables that affect investigative effort and how those variables impact the ability to solve crime both within and across jurisdictions. This chapter provides an overview of the extent to which the results of this study are consistent with the proposed hypotheses. It also explores other relevant findings and how they compare with previous research on investigative decision-making. Additionally, this chapter examines the policy implications of this dissertation as well as future research opportunities. Finally, the limitations of this study are discussed.

Summary of Findings

The first hypothesis in this dissertation predicts that organizational limitations on specific case processing (the ratio between the number of crimes and number of detectives) will increase the likelihood that police detectives rely on extant classification schemes. Though there are large variations in caseload between Lancaster and the other two cities, the findings in this study conclude that all three departments use classification schemes for crimes that are not considered intolerable. Despite the fact that crime rates in all three cities are relatively low, each may have sufficient numbers of incidents to make the use of classification schemes the most practical way for investigators to manage caseloads. Though this information is useful and can provide direction for future research, this hypothesis could not be tested due to the small number of cases in the sample. The findings in this study do however provide ample evidence that investigators routinely use short hand typifications, therefore offering support for the use of the theory of normal crime to explain investigative decision-making.

The second hypothesis suggests that classification schemes will vary across departments due to differences in crime rates, the political environment, and media/public scrutiny. There is partial support for this hypothesis. Officers in Jamison and Kensington did not feel constrained by the political environment, the media, or public scrutiny, however, Lancaster officers expressed frustration with the impact that these variables had on their investigative discretion. Classification schemes were also varied across agencies because of other unique contextual factors such as proximity to a metropolitan area and prevalence of drug use. Interestingly, contrary to this hypothesis, there were some classification schemes that were consistent across departments. For example, the characteristics of an insurance fraud case were similar across all three cities and the interpretation of false reports for theft of narcotic prescription medications was consistent in Kensington and Lancaster.

Hypothesis three predicts that discretionary decision-making and thus reliance on these schemes are most likely to be influenced by characteristics of the offense (i.e., seriousness of the offense – as the seriousness of the offense increases, investigator discretion decreases) and victim level of social capital (as victim social capital increases discretionary decision-making decreases). All else being equal, these variables were predicted to drive investigative processes compared to other potential influences. There is partial support for this hypothesis. Serious crimes receive a tremendous amount of investigative effort. Factors that make a crime serious include; violent/heinous crimes, crimes against victims that are particularly vulnerable, crimes where the victim is emotionally traumatized, and serial crimes. Further, the motivation to put forth exceptional effort is intrinsically motivated, rather than due to a lack of discretion. These types of crimes are perceived as a challenge to police authority and represent a blatant disregard for the law in the community. Therefore, officers feel that significant effort is necessary to

protect the standards of the community and strongly discourage these acts in the future. This theme was remarkably consistent across all three communities. Consequently, contrary to this hypothesis, investigator discretion or the possible lack thereof does not impact investigator effort because detectives willingly put forth a significant amount of effort for serious cases. Regarding victim level of social capital, this study did not detect differences in investigative effort due to this variable.

The fourth hypothesis forecasts that crimes that are classified as typical by investigators will receive minimal investigative effort and crimes that cannot be classified as typical will receive substantial investigative effort. This hypothesis is partially supported and partially refuted. As was stated above and consistent with the theory of normal crime, crimes that were not classified as typical (intolerable crimes) received a substantial amount of effort (Brandl, 1993a; Bynum, et al., 1982; Sundnow, 1965; Waegel, 1981). Both within and across organizations, officers consistently reported that these types of cases received significant investigative effort, regardless of time available to investigate or resources available. Contrary to the fourth hypothesis, this study found that for typical crimes, the level of investigative effort a case receives is influenced by the likelihood that the case can be solved and prosecuted.

Hypothesis five estimates that crimes that receive minimal investigative effort are less likely to be cleared than those that receive substantial investigative effort. Thus normal crimes are less likely to be cleared than other crimes. Alternatively, the results of this dissertation conclude that normal crimes that are less likely to be cleared receive minimal investigative effort. The officer's assessment of the probability of a successful conclusion to a case is what drives investigative effort. As with previous research, this study concluded that most crimes are

not solved by follow up investigation; therefore, investigative effort has a limited impact on solving crime (Greenwood, et al, 1975).

These findings suggest that the use of classification schemes is dependent on whether the facts of the crime are such that they cross the line of what is considered intolerable behavior for that community (See Table 5). Crimes that do not meet this threshold are classified as normal not only because they happen with some frequency, but also because they do not challenge the ability of the police to protect the community. These normal crimes are part of the job and become mundane and redundant, as with any other occupation, whereas intolerable crimes challenge the core function of why the police exist. This is consistent with the theory of normal crime and additional previous research on criminal justice line level employees. McCleary (1978) observed that parole officers used classification schemes to manage their caseload, and that a small fraction of those cases received special attention because parole officers get personal satisfaction out of helping sincere clients. Additionally, Maynard-Moody & Musheno (2003) found that police officers have routine cases and special cases. Normal clients are processed in an effective but routine way, while a very few worthy clients receive a substantial level of service. Similarly, Scheingold & Gressett (1987) suggest that prosecutors and judges give up their discretion for sensational cases so that they can exercise it for the majority of other cases.

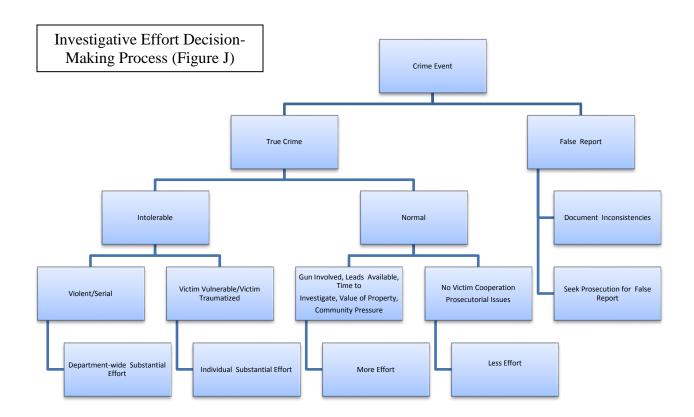
Table 5: Summary of the Variables that Affect Investigator Effort			
Variable	Jamison	Kensington	Lancaster
Violent/Heinous	X	Х	X
Emotional Trauma	X	Х	X
Victim Vulnerability	X	Х	X
Serial Crimes	X	Х	X
Leads Available	0	0	0
Gun Stolen	0	0	0
Time to Investigate		0	0
Value of Property	0		

Table 5 Continued			
Prosecutor Constraints		0	
External Pressure			0
Victim Cooperation	Z	Z	Z
False Report	Z	Z	0
Victim Criminal Acts	Z	Z	0
KEY:			
X= Substantial Effort			
O = Normal Effort			
Z = Less Effort			

This dissertation also offers several other unique findings that have significant implications for researchers and practitioners alike. First, this study provides significant support for the use of the theory of normal crime to frame research on investigative behavior. There is ample evidence that suggests investigators routinely use classification schemes to predict not only the facts of a case, but also the likelihood that the case can be solved and adjudicated. A majority of previous research on investigator decision-making uses Black's theory of law and has been unsuccessful at predicting investigative behavior. This study therefore advances the theory of normal crime and helps to better explain investigative decision-making.

Further, this study suggests that rather than classifying crimes as serious or normal, crimes can be classified along a continuum within these two categories. For example, the most violent crimes and serial crimes get the most effort and the most resources dedicated to solving them regardless of the circumstances, whereas the other two intolerable crimes receive a substantial amount of effort; however similar to Maynard-Moody & Musheno (2003) and McCleary (1978) it is more dependent on individual officer judgements of the worthiness of the crime victim. Additionally, within the category of normal crime, several factors influence investigative effort, including; the number of leads available, prosecutor constraints, and time available to investigate. This suggests that the use of classification schemes is much more

complex than previously thought. Figure J summarizes the most likely investigative decision-making process based on the analysis of the data in this study.



This study also offers a more refined understanding of the variables that affect investigative effort. Previous research suggests that crimes are defined as serious when there is severe injury or significant financial loss to the victim (Brandl, 1993a; Bynum et al., 1982; Waegel, 1981). This dissertation concludes that victim emotional trauma, victim vulnerability, and serial crimes also cause crimes to be defined as serious and therefore increase investigative effort. Further, stolen guns, false reports, and victim involvement in crime are newly identified variables that were found to affect investigator effort for crimes that are not deemed serious. These results provide new opportunities for future research and can help inform future studies on this important topic.

This dissertation also makes a significant contribution to an enhanced understanding of investigative processes. This study offers specific details on how investigations for serious crimes differ from investigations for typical crimes. Prior research describes the routine processing of cases yet there is little information on the investigative efforts of officers for serious crimes (Brandl, 1993a; Bynum et al., 1982; Waegel, 1981). Similarly, this dissertation identifies the factors that investigators consider to determine if a report is likely false, including; a delay in reporting, lack of concern on the part of the victim, when only narcotic prescription medication or rent money is stolen, when physical evidence does not support the victim's version of events, and discrepancies in victim and witness statements.

Importantly, this study also describes the obstacles that officers face that adversely affect their ability to successfully clear crime including; lack of victim cooperation, false reports, and prosecutor constraints. Though investigators are frequently able to solve cases, factors outside of their control often inhibit their ability to successfully adjudicate them. Further, official crime data should be reviewed with skepticism. Crime statistics may not effectively reflect investigative success due to the fact that a fair number of cases cannot be resolved by the legal system.

Furthermore, this study provides a detailed look at how crime is solved and the role that detectives play in the investigative process. Most crimes are not solved by follow up investigation; however, follow up investigation is essential for the successful prosecution and clearance of cases. Additionally, the results of this study suggest that even the highest levels of investigative effort cannot solve crimes if there are not sufficient leads to identify the offenders. Rather, the presence of clues is the primary predictor of whether a crime gets solved, not investigative effort.

Another important contribution that this dissertation makes to the body of knowledge on investigative decision-making is regarding the role of discretion. Previous research on the use of discretion by criminal justice agents consistently suggests that as the seriousness of the offense increases, discretionary decision-making decreases (Hagan, 1989; Skolnick, 1994; Sudnow, 1965; Sykes, 1958; Schinegold & Gresset, 1987). However, this dissertation concludes that investigative effort for serious crimes is internally motivated rather than due to lack of discretion. That is, for very serious crimes, investigators willingly put forth a tremendous amount of effort to solve these cases; therefore, limits on discretion are not relevant.

Implications

These findings provide a better understanding of the investigative process and investigative decision-making for researchers and policymakers alike. First, because follow up investigators are internally motivated to solve serious crimes, administrators can better serve them by focusing on providing investigators with the resources they need to conduct a thorough investigation. This might include; overtime, support staff, specialized equipment and training, third party services, access to regional and state assets, and specialization options. As a former police chief, it has been my experience that officers and detectives feel a sense of personal responsibility to keep the community that they serve safe from egregious criminal acts, therefore police administrators are best served by giving line level employees the discretion and resources necessary to investigate these very serious cases as they deem appropriate. Excessive levels of supervision and limitations on spending only serve to frustrate officers and ultimately inhibit intrinsic motivation. Regardless of the size of the agency, major cases that shock the conscience of the community deserve a substantial amount of effort, not only to bring the offender to justice,

but also to provide the community with peace of mind and a feeling of security. A dollar value cannot be placed on limiting wide-spread fear in a community.

Similarly, because investigating most crimes is routine and the investigative methods are ordinary, line level employees should have less discretion for these types of cases. For example, administrators should consider instituting a mandatory investigative protocol for routine crimes. These might include; dusting for fingerprints, conducting a neighborhood canvass, and taking photographs of the crime scene. This will reduce the level of discretion and promote a more consistent and thorough investigation. The level of investigation a case receives should not be dependent on individual work ethic therefore investigators may need more guidance for these types of cases. Interestingly, Kensington mandates that patrol officers attempt to collect fingerprints at every crime scene. Perhaps not coincidentally, Kensington solved five of their 41 cases in this study through forensic evidence, whereas Jamison solved one and Lancaster did not solve any crimes through this process (See Table 4, p. 84). These findings are consistent with previous research that suggests collecting and examining forensic evidence increases clearance rates (Bloch & Bell, 1975; Eck, 1984; Greenwood & Petersilia, 1975; Keel, 2008; Peterson, Sommers, Baskin, & Johnson, 2010; Wellford et al., 1999).

Additionally, police agencies should consider hiring more civilian employees such as additional clerical staff and crime analysts. It seems that a lot of investigator time is spent on routine tasks such as checking the online pawn shop reporting services, attempting to find contact information for witnesses and suspects, and filling out paperwork. Civilian employees can do this work at a less expensive rate; they are usually better trained, and perhaps might be more interested in this type of work than sworn officers. Furthermore, police agencies could enhance investigative capacity by using crime analysts to monitor social media sites and other

second hand on-line sales sites such as Craigslist and EBay to locate stolen property or identify suspects and witnesses. This could ultimately lead to increasing clearance rates if follow up investigation can be done more efficiently.

It might also be helpful to rotate officers in and out of the detective bureau after three to five years rather than making the assignment permanent. This would help keep investigators from getting bored with redundant investigations and would give more officers the opportunity to learn about detective work. Prior research suggests that investigative specialization leads to monotony (Maguire, 1997). Further, job characteristics theory postulates that designing jobs that provide a variety of work can increase intrinsic work motivation (Hackman & Oldham, 1980). Additionally, because local government officials can influence investigative decision-making, police administrators might consider educating local elected officials and community members on what the police department is and is not capable of so that resources are used in accordance with an overall strategy rather than being unduly influenced by individual demands.

Furthermore, because a lot of valuable time is wasted investigating false reports, administrators should consider prosecuting more of these cases in an effort to discourage future false reporting. Greater effort to discourage this practice could increase departmental efficiencies in the long run. Similarly, state and federal policy makers should continue to try to improve crime statistic data collection so that it is more reflective of what is actually occurring. The significant variation in serious crime clearance rates across jurisdictions suggests that data reporting is not consistent. Moreover, state and federal policy makers should take a closer look at the number of suspected false reports across agencies and how they affect crime data. By developing a better understanding of investigative decision making and how it affects clearance

rates, agencies can improve the percentage of crimes they solve and therefore inhibit further victimization.

Limitations

There are several limitations to this study. First, the police agencies that were examined may not adequately portray the processes that this study seeks to address. Each police department has its own culture, idiosyncrasies, and set of values, so limiting research to three agencies may not provide a clear picture of the phenomenon. Additionally, because the study focuses on agencies that serve a population of less than 50,000, it may be omitting important contextual aspects of investigative effort. Agencies in larger communities may employ different investigative strategies due to issues related to volume of crimes, organizational structure, or other unknown variables. Likewise, because all three police agencies are located in the same state there may also be regional or cultural biases that are not detected. Law enforcement agencies in other areas of the country may utilize different investigative strategies due to variations in political influence, popular opinion, or interpretations of the law. The sample of officers from this study did include a wide range of investigative experience, including both new detectives and seasoned investigators.

Also, because of the small sample size and lack of randomly selected participants, the conclusions drawn from this study should not be generalized to all police agencies. The purpose of this study was not to generalize to a larger population; rather it was intended to explore investigative decision-making in an effort to better understand the entirety of this complex process. Another potential limitation is that most of the officers that were interviewed for this study were white males. Females and/or males from different racial and ethnic backgrounds may have responded differently to questions and may have different perspectives on their role in the

investigative process. Conversely, if investigative practices are learned, gender, race, and ethnicity may not be as relevant.

Additionally, my biases, opinions, and experiences may also place limitations on the research. Due to my background in law enforcement and preconceptions about the investigative process, there may be important themes that I overlooked. There may also be assumptions that I made based on my views and prior experiences that are different from others perceptions.

Another potential issue is that the police reports that were reviewed for this study may not paint a complete picture of investigative effort. It is difficult to know if investigators documented all of their efforts in supplemental reports, especially if they were unsuccessful. It is also difficult to determine what influence supervisors or other officials had on the police reports. This secondary data source was created with the intent of serving as a record of a crime event. There are likely aspects of the report writing process that are not accounted for in the present analysis.

Future Research

This study elicits several opportunities for future research. One of the most interesting findings of this dissertation is that investigators are internally motivated to solve certain crimes. Previous studies assume that increased investigative effort is due to lack of discretion (McCleary, 1978; Skolnick, 1994; Shingold & Gressett, 1987). While this might also be true, it does not provide a complete understanding regarding this process. Specifically, it would be interesting to further explore the idea that the motivation for solving serious crime is partially because police officers feel that these types of crimes are a threat to the civility of the community and therefore challenge their authority. Anecdotally, many police officers refer to this as *the thin blue line* or the perception that the police are the only obstacle that stands between good and bad in society. Future research can explore this concept to determine if it is consistent across jurisdictions and

attempt to better understand why it is different than for other criminal justice line level employees. Researchers could also further explore and refine the variables that have been identified as defining a crime as serious, including victim vulnerability, victim emotional trauma, and serial crimes.

It would also be important to expand the present research to include larger police agencies in an effort to determine if the results are consistent across population groups. The three agencies that were used in this study had relatively low serious crime rates, thus it might be expected that officers in these agencies would have a lower level of tolerance and a higher level of concern for violent crime than officers from agencies that deal with these same types of crime on a more frequent basis. It may be the case that the motivation to solve serious crime in larger agencies is not internal and is instead due to a lack of discretion.

Another interesting finding of this study is that some classification schemes are consistent across departments. Prospective research can further refine these specific classification schemes and perhaps use quantitative research methods to apply these scenarios to a larger, more generalizable sample. It would be fascinating to give officers the same crime scenario across jurisdictions to see if they have the same perceptions of the most likely facts of the case. The burglary involving only rent money or prescription narcotics would be a good example.

Additionally, future work on investigative decision-making can utilize the theory of normal crime to guide the research. As was mentioned previously, there has been very little exploration on investigative decision-making, and that which does exist has been ineffective at predicting behavior. The applicability of the theory of normal crime shows promise not only due to the results of this study but also because it has been used to successfully predict the behavior of other criminal justice line level employees. Future research would be especially meaningfully

if the theory could be utilized in a quantitative study that could be generalized to a broad population of investigators.

Potential research can also further examine the percentage of cases that are solved but do not meet the UCR definition of cleared. These would include false reports and incidents where there is sufficient evidence to prosecute the case, but because of factors beyond the control of the police, these cases are closed without prosecution. This would consist of crimes where the victim's involvement in criminal activity make the case difficult to prosecute or cases where the prosecutor does not have the resources to go forward with every incident due to case load or other constraints.

Conclusion

Solving crime is obviously a very important function for police agencies. The cost to victims, their families, and to communities has both financial and emotional implications. By better understanding the factors that affect investigator decision-making and the motivation to solve crime, researchers and practitioners can perhaps utilize this information to solve more crimes and decrease victimization. Police agencies can also use this knowledge to more efficiently and effectively solve crime. This dissertation supports the findings from previous research and advances the knowledge on the theory of normal crime and detective decision-making.

APPENDICIES

Appendix A: Tables and Figures

Table 6: Complete List of Interviewees		
Pseudonym	Current Position	Department
Detective VanDeWouwer	Detective	Jamison
Detective Shadduck	Crime Prevention	Jamison
Detective Brown	Detective	Jamison
Detective Park	Crime Prevention	Jamison
Detective Connelly	Patrol	Jamison
Detective McKean	Detective	Jamison
Sergeant Stephenson	Detective / Sergeant	Jamison
Sergeant Wriggs	Crime Prevention Supervisor	Jamison
Officer Smith	Patrol	Kensington
Detective Jones	Detective	Kensington
Detective Horwood	Detective	Kensington
Detective Merchant	Detective	Kensington
Lieutenant Ivey	Detective / Lieutenant	Kensington
Officer Howell	Patrol	Kensington
Officer Kelley	Patrol	Kensington
Officer Meier	Patrol	Kensington
Officer Ash	Patrol	Lancaster
Officer Bravo	Patrol	Lancaster
Officer Pelico	Patrol	Lancaster

Table 6 Continued		
Officer Murphy	Patrol	Lancaster
Officer Dunlap	Patrol	Lancaster
Officer Mason	Patrol	Lancaster
Detective Rohn	Detective	Lancaster
Detective Shafer	Detective	Lancaster

Appendix B: Consent Forms and Interview Instrument

Research Participant Information and Consent Form

You are being asked to participate in a research study. Researchers are required to provide a consent form to inform you about the research study, to convey that participation is voluntary, to explain risks and benefits of participation, and to empower you to make an informed decision. You should feel free to ask the researchers any questions you may have.

Study Title: The Use of Classification Schemes by Police Investigators Researcher and Title: Juli Liebler, Graduate Student Department and Institution: Criminal Justice, Michigan State University Address and Contact Information: 409 Park Lane, East Lansing, MI 48823 517.712.5450, lieblerj@msu.edu

1. PURPOSE OF RESEARCH

- You are being asked to participate in a research study of police investigative decisionmaking.
- You have been selected as a possible participant in this study because you are a police officer at a small Mid-Michigan Police Department.
- From this study, the researchers hope to learn what factors detectives consider when deciding how much investigative effort to put into each case and how it helps to solve crime.
- Your participation in this study will take about one hour.

2. WHAT YOU WILL DO

- Participate in an audio-taped interview regarding what factors you consider when determining how much investigative effort you put into each case.
- This research project will be available for review upon completion.

3. POTENTIAL BENEFITS

There are no direct benefits to you for taking part in the study. However, your participation in
this study will provide greater insight about what factors detectives consider and how these
decisions help solve crime. Researchers, police, and society in general would benefit
greatly in trying to better understand this process.

4. POTENTIAL RISKS

• There are no foreseeable risks associated with participation in this study.

5. PRIVACY AND CONFIDENTIALITY

- The data for this project will be kept confidential.
 - o Only general neutral identifiers will be used to describe you.
 - o All information will be secured in a locked office and/or password protected.
- Information about you will be kept confidential to the maximum extent allowable by law
- Only the following individuals will have access to the data:
 - Myself and Dr. Steven Chermak.
 - o Institutional Review Board (IRB).
- The results of this study may be published or presented at professional meetings, but the identities of all research participants will remain anonymous.

6. YOUR RIGHTS TO PARTICIPATE, SAY NO, OR WITHDRAW

- Participation is voluntary. Refusal to participate will involve no penalty or loss of benefits to
 which you are otherwise entitled. You may discontinue participation at any time without
 penalty or loss of benefits to which you are otherwise entitled.
- You have the right to say no.
- You may change your mind at any time and withdraw.
- You may choose not to answer specific questions or to stop participating at any time.

7. COSTS AND COMPENSATION FOR BEING IN THE STUDY

- There will be no cost to you to participate
- You will not receive money or any other form of compensation for participating in this study.

8. CONTACT INFORMATION

If you have concerns or questions about this study, such as scientific issues, how to do any part of it, or to report an injury, please contact the researcher (Juli Liebler, 409 Park Lane East Lansing MI 48823 517-712-5450, lieblerj@msu.edu).

If you have questions or concerns about your role and rights as a research participant, would like to obtain information or offer input, or would like to register a complaint about this study, you may contact, anonymously if you wish, the Michigan State University's Human Research Protection Program at 517-355-2180, Fax 517-432-4503, or e-mail irb@msu.edu or regular mail at 408 West Circle Drive, Olds Hall Room 207, MSU, East Lansing, MI 48824.

12. DOCUMENTATION OF INFORMED CONSENT.

Your signature below means that you voluntarily agree to participa	ate in this research study.
Signature	Date
You will be given a copy of this form to keep.	
■ I agree to allow audio taping of the interview. ☐ Yes ☐ No Initials	
The audio tapes will be stored on a password-protected digital aud	dio recorder and kept for three

years after the completion of the research project. At that time they will be erased.

Appendix C: Interview Instrument for Police Officers and Investigators

THE USE OF CLASSIFICATION SCHEMES BY POLICE INVESTIGATORS

Interview Instrument

The goal of this interview is to develop an understanding of what investigators consider when deciding how much effort to put into each case. Modern day caseloads and resource limitations make it impossible to investigate every case to the fullest extent – process every piece of evidence, talk to every witness, follow up on all possible leads. Investigators therefore have to decide how much effort to put into each case. This study will focus on what factors investigators consider when they make these decisions. The focus will mostly on robberies and burglaries because investigators tend to have more discretion on how to investigate these types of cases than for very serious crimes.

There are no right or wrong answer, rather, I will be looking for themes or reoccurring ideas. To the extent possible the department and individuals will be anonymous. Pseudonyms will be used for those interviewed and for the department. Additionally, I am not going to report back to your chief or supervisor. I will also be conducting the same interviews at two other police departments, again looking for themes, similarities, and differences regarding factors that influence investigative effort.

Department Interview Questions

- 1. Name/years of service/years as a detective
- 2. How many new cases do you get each week?
- 3. How many on average do you have open at any given time?
- 4. Do you investigate specific types of cases?
- 5. Generally, do you feel like you have enough time to investigate most of your cases/wish you had more/swamped most of the time?

Imagine a typical **burglary of a business or home invasion** in this jurisdiction.

Consider the location- area of the city/time of day/type of business /method of entry/what is taken/value of property/motive.

- 6. What additional facts would you want to know before you decide how you will proceed with the investigation?
- 7. Which factors are most important?
- 8. What factors would make the case serious? More of a priority? More effort?

9. What factors would make the case less of a priority?

Think about a typical **robbery of a business or a person**?

Consider the typical location- area of the Twp. /time of day/most likely type of business/M/O/what is taken/value of property/motive.

- 10. What facts would you want to know before you decide how you will proceed with the investigation?
- 11. Which factors are most important?
- 12. What factors would make the case serious? More of a priority/more effort.
- 13. What factors would make the case less of a priority?

Think about your last two or three cases that were big cases, you put a lot of effort into;

- 14. What was it about those cases that made you put forth extra effort?
- 15. What kinds of investigative techniques did you employ in those special cases that you wouldn't normally employ?

Questions about your Detective Bureau

16. Do you feel like there is a typical way to investigate cases – if each detective were given the same facts would the investigation be pretty much the same or would it vary?

Vignette questions - would you likely put more effort/less effort into the case/normal effort

- 17. What if the victim doesn't want to cooperate won't return calls?
- 18. What if the victim knows the offender? Ex husband/wife
- 19. What if the suspect does something that is particularly offensive? Steals wheel chair and sells it for scrap/robs an 80 yr. old lady/ steals or damages something of sentimental value that can't be replaced can you think of any specific examples?
- 20. What if you determine that multiple previous offenses are connected and the case hasn't been solved yet—same M/O serial robber/burglar?
- 21. What if it appears that the crime was committed as the result of some illegal activity on the part of the victim- drug debt/retribution?

- 22. What if the victim is a member of the City Council?
- 23. What if the media is calling about the case?
- 24. What if you know the prosecutor won't prosecute the case?
- 25. What questions do you have for me?

Appendix D: Police Report Sample Identifiers

Table 7: Police Report Identifiers		
Report Numbers	Type of Crime	Jurisdiction
1-27	Robbery	Jamison
50-183	Burglary	Jamison
200-226	Robbery	Kensington
250-374	Burglary	Kensington
400-430	Robbery	Lancaster
450-574	Burglary	Lancaster

REFERENCES

References

- Addintion, L.A., (2006). Using National Incident Based Reporting System Murder Data to Evaluate Clearance Predictors: A Research Note. Homicide Studies 10 (2) p. 140-152.
- Bayley, D.H. (1994). Policing the Future. New York: Oxford University Press.
- Bennett, R. (1982). The effects of police personnel levels on crime clearance rates: A cross national analysis. International Journal of Comparative and Applied Criminal Justice. Vol. 6, No. 2. P. 177-193.
- Bernard, T.J. and Shepard Engel, R.S., (2001). Conceptualizing Criminal Justice Theory. Justice Quarterly, 18(1): 1-30.
- Bittner, E. (1974) Florence Nightingale in pursuit of Willie Sutton: A theory of the police, in Jacob H., The potential for reform of criminal justice, 17-43. Beverly Hills: Sage.
- Black, D. (1976). The Behavior of Law. New York, NY: Academic Press.
- Bloch, P. B., & Bell, J. (1976). Managing Investigations: The Rochester System. Washington, DC: Police Foundation.
- Bloomberg, L.D & Volpe, M. (2012) Completing Your Qualitative Dissertation: A Roadmap from Beginning to End. California: Sage.
- Blumberg, A. S. (1967). The practice of law as confidence game: organizational cooptation of a profession. Law and society review, 15-39.
- Borg, M.J. and Parker, K.F. (2001). Mobilizing Law in Urban Areas: The social structure of homicide clearance rates. Law and Society Review, Vol. 35, No. 2; p. 435-446.
- Brandl, S. (1993a). The follow-up investigation as a decision making process: An observational and protocol analysis. Journal of Police and Criminal Psychology, 9 (2) p. 20-32.
- Brandl, S. (1993b). The impact of case characteristics on detectives' decision making. Justice Quarterly 10(3), 395-415.
- Brandl, S. G., & Frank, J. (1994). Relationship between Evidence, Detective Effort, and the Disposition of Burglary and Robbery Investigations, The. Am. J. Police, 13, 149.
- Briggs. S. and Opsal, T. (2012). The influence of victim ethnicity on arrest in violent crimes. Criminal Justices Studies: A Critical Journal of Crime, Law and Society, 25:2, 177-189.
- Brown, M.F. (2001). Criminal Investigation: Law and Practice. Woburn, MA: Butterworth-Heinemann.

- Brown, M. K. (1981). Working the street: Police discretion and the dilemmas of reform. Russell Sage Foundation.
- Bynum, T., Cordner, G. and Greene, J. (1982). Victim and Offense Characteristics: Impact on Police Investigative Decision-Making. Criminology, Vol. 20, No. 3-4 p. 301-318.
- Castro, E. L. (2011). Homicide clearance rates: An examination of extralegal and evidentiary factors as influences to homicide solvability. The University of Texas at San Antonio.
- Cloninger, D. O., & Sartorius, L. C. (1979). Crime Rates, Clearance Rates and Enforcement Effort: The Case of Houston, Texas*. American Journal of Economics and Sociology, 38(4), 389-402.
- Cordner, G.W. (1989). Police agency size and investigative effectiveness. Journal of Criminal Justice. Vol. 17, No. 3; p. 145-155.
- Creswell, J. W. (2007). Qualitative inquiry and research design: Choosing among five approaches. Thousand Oaks, CA: Sage.
- Creswell, J. W. & Clark, V.L.P. (2007) Designing Mixed Methods Research. California: Sage.
- Davies, H. J. (2007). Understanding Variations in Murder Clearance Rates The Influence of the Political Environment. Homicide Studies, 11(2), 133-150.
- Decker, S. (1981). Citizen attitudes toward the Police a review of past findings and suggestions for future policy. Journal of Police Science and Administration, Vol. 9, No. 1, p. 80-87.
- Drebin A. and Brannon, M. (1992) Police Department Programs: Service Efforts and Accomplishments Reporting, its Time Has Come. Norwalk, CT: Governmental Accounting Standards Board.
- Eck, J. (1983). Solving Crimes: The Investigation of Burglary and Robbery. Washington, D.C.: PERF.
- Eck, J., & National Institute of Justice/NCJRS. (1984). Solving crimes. NIJ Reports: A Selective Notification of Information on Programs of the National Institute of Justice, p. 4-8.
- Eitle, D, Stoltzenberg, S., D'Alessio, S. (2005). Police organizational factors, the racial composition of police and probability of arrest. Justice Quarterly 22 (1): 30-57.
- Ericson, R.V. (1981). Making Crime: A Study of Detective Work. Toronto: Butterworths.
- Feeley, M.M. (1973). Two models of the criminal justice system: An organizational perspective." Law and Society Review, 407-425.

- Flanagan, T.J. and Vaughn, M.S. (1996). Public Opinion and Police Abuse and Force. In Police Violence, edited by W.A. Gelban and H. Toch. New Haven: Yale University Press.
- Flemming, R. B. (1990). The Political Styles and Organizational Strategies of American Prosecutors: Examples from Nine Courthouse Communities*. Law & Policy, 12(1), 25-50.
- Garicano, L. and Heaton, P. (2006). Computing Crime: Information Technology, Police Effectiveness, and the Organization of Policing: p. 1-42.
- Goltz, J.W. (2007). The effects of population density on crime clearance in the State of Florida. The Law Enforcement Executive Forum. Financial Management and Police Administration: p. 49-57.
- Goodpaster, G. (1987). On the theory of American adversary criminal trial. The Journal of Criminal Law and Criminology, 78 (1): 118-154.
- Greenburg, I. and Wasserman, R. (1979). Managing Criminal Investigations. U.S. Department of Justice. Law Enforcement Assistance Administration.
- Greenwood, P.W. and Petersilla, J. (1975). The Criminal Investigation Process. Volume I. Summary and Policy Implications. Santa Monica, CA: The Rand Corporation.
- Greenwood, P. W., Chaiken, J.M.; Petersilia, M.; Prusoff, L. (1975). The Criminal Investigation Process. Volume III: Observations and Analysis. Santa Monica, CA: The Rand Corporation.
- Hackman, J. R., & Oldham, G. R. (1980). Work redesign. Reading, MA: Addison-Wesley.
- Hagan, J. (1989). Why is there so little criminal justice theory? Neglected macro-and micro-level links between organization and power. Journal of Research in Crime and Delinquency, 26(2), 116-135.
- Hatry, H.P. (1999). Performance Measurement Getting Results. Washington, DC: The Urban Institute Press.
- Huang, W.S., and Vaughn, M.S. (1996). Support and Confidence: Public Attitudes toward the Police. In Police Violence, W.A. Gleban and H. Toch (Eds.). New Haven: Yale University Press.
- IACP. International Association of Chiefs of Police (2003). Consolidating Police Services Examined by New IACP. Retrieved on 9/10/13 from:
 http://www.theiacp.org/PublicationsGuides/ContentbyTopic/tabid/216/Default.aspx?id=1">http://www.theiacp.org/PublicationsGuides/ContentbyTopic/tabid/216/Default.aspx?id=1">http://www.theiacp.org/PublicationsGuides/ContentbyTopic/tabid/216/Default.aspx?id=1">http://www.theiacp.org/PublicationsGuides/ContentbyTopic/tabid/216/Default.aspx?id=1">http://www.theiacp.org/PublicationsGuides/ContentbyTopic/tabid/216/Default.aspx?id=1">http://www.theiacp.org/PublicationsGuides/ContentbyTopic/tabid/216/Default.aspx?id=1">http://www.theiacp.org/PublicationsGuides/ContentbyTopic/tabid/216/Default.aspx?id=1">http://www.theiacp.org/PublicationsGuides/ContentbyTopic/tabid/216/Default.aspx?id=1">http://www.theiacp.org/PublicationsGuides/ContentbyTopic/tabid/216/Default.aspx?id=1">http://www.theiacp.org/PublicationsGuides/ContentbyTopic/tabid/216/Default.aspx?id=1">http://www.theiacp.org/PublicationsGuides/ContentbyTopic/tabid/216/Default.aspx?id=1">http://www.theiacp.org/PublicationsGuides/ContentbyTopic/tabid/216/Default.aspx?id=1">http://www.theiacp.org/PublicationsGuides/ContentbyTopic/tabid/216/Default.aspx?id=1">http://www.theiacp.org/PublicationsGuides/ContentbyTopic/tabid/216/Default.aspx?id=1">http://www.theiacp.org/PublicationsGuides/ContentbyTopic/tabid/216/Default.aspx?id=1">http://www.theiacp.org/PublicationsGuides/ContentbyTopic/tabid/216/Default.aspx?id=1">http://www.theiacp.org/PublicationsGuides/ContentbyTopic/tabid/216/Default.aspx?id=1">http://www.theiacp.org/PublicationsGuides/ContentbyTopic/tabid/216/Default.aspx?id=1">http://www.theiacp.org/PublicationsGuides/ContentbyTopic/tabid/216/Default.aspx?id=1">http://www.theiacp.org/PublicationsGuides/ContentbyTopic/tabid/216/Default.aspx?id=1">http://www.theiacp.org/PublicationsGuides/ContentbyTopic/tabid/216/Default.aspx?id=1">http:/
- Jacob, Herbert. (1997). The governance of trial judges. Law and Society Review, 31 (1): 3-30.

- Jacobs, J. B. (1978). Stateville: The penitentiary in mass society. University of Chicago Press.
- Jesilow, P., Meyer, J., Namazzi, N. (1995). Public attitudes toward the police. American Journal of the Police Vol. 14, No. 2. P. 67-88.
- Keel, T. G. (2008). Homicide Investigations: Identifying Best Practice. FBI Law Enforcement Bulletin. Vol. 77, No. 2: 1-9.
- Keel, T, Jarvis, J., and Muirhead, Y. (2009). An exploratory analysis of factors affecting homicide investigations: Examining the dynamics of murder clearance rates. Homicide Studies, Vol. 13, No. 1, p. 50-68.
- Kennedy, W. G. (2009). The impact of police agency size on crime clearance rates (Doctoral dissertation, The University of North Carolina at Charlotte).
- Kraska, P. B., & Brent, J. J. (2004). Theorizing criminal justice: Eight essential orientations. Long Grove, IL: Waveland Press.
- Loftin, C. & McDowall, D. (2010). The use of official records to measure crime and delinquency. Journal of Quantitative Criminology V. 26, (4), pp 527-532.
- Lee, C. (2005). The value of life and death: Multiple regression and event history analyses of homicide clearance in Los Angeles County. Journal of Criminal Justice, 33, 527-534.
- Lipsky, M. 1980. Street-Level Bureaucracy: Dilemmas of the Individual in Public Services. New York: Russell Sage. Isbn: 081545268.
- Litwin, K.J. (2004). A multilevel analysis of factors affecting homicide clearance. Journal of Research in Crime & Delinquency, 41, 327-351.
- Litwin, K. J., & Xu, Y. (2007). The Dynamic Nature of Homicide Clearances A Multilevel Model Comparison of Three Time Periods. Homicide Studies, 11(2), 94-114.
- McCleary, R. (1978) Dangerous Men: The Sociology of Parole, 2nd Edition. Beverly Hills CA: Sage Publications.
- Maguire, E.W. (1997). Structural change in large municipal police organizations during the community policing era. Justice Quarterly 14-3:547-576.
- Maxwell, J. (1996). Qualitative Research Design. Applied Social Research Methods Series, Vol. 41. Sage: California.
- Maynard-Moody, S. & Musheno, M. (2003). Cops, Teachers, Counselors: Stories from the Front Lines of Public Service. Michigan: University of Michigan Press.

- Moore, M.H., and Braga, A.A. (2003). Measuring and Improving Police Performance: The Lessons of Compstat and its Progeny. Policing: An International Journal of Police Strategies and Management Vol. 6, No. 3; p. 439-453.
- Muir, W.K. (1977). Police: Street corner politicians. Chicago: University of Chicago Press.
- Ousey, G. and Lee, M. (2010). To know the unknown; The Decline in Homicide Clearance Rates, 1980-2000. Criminal Justice Review. Vol. 35, No. 2, p. 141-158.
- Packer, H. (1964). "Two Models of the Criminal Process." In: Examining the Process: A reader, James Inciardi (ed.): 113-123.
- Paoline, E. A. (2003). Taking stock: Toward a richer understanding of police culture. Journal of Criminal Justice, 31 (3): p. 199-214.
- Pare, P., Felson, R. and Ouimet, M. (2007). Community variation in crime clearance: A multilevel analysis with comments on assessing police performance. Journal of Quantitative Criminology. Vol. 23, p. 243-258.
- Peek, C.W., Lowe, G.D., and Alston, J. P. (1981). Race and attitudes toward local police: Another look. Journal of Black Studies, Vol. 11, No. 3, p. 361-374.
- Peterson, J., Sommers, I., Baskin, D., & Johnson, D. (2010). The role and impact of forensic evidence in the criminal justice process. *National Institute of Justice*.
- Pucket, J.L. and Lundman. R.J. (2003). Factors affecting clearance rates: Multivariate Analysis of a more complete conceptual framework. Journal of Research in Crime and Delinquency. Vol. 40, No. 2: p. 171-193.
- Regoeczi, W. Jarvis, J. and Riedel, M. (2009). Journal of Research in Crime and Delinquency, 45(2), 142-162.
- Richardson, D. A., & Kosa, R. (2001). An examination of homicide clearance rates: Foundation for the development of a homicide clearance model. In Washington, DC: Police Executive Research Forum.
- Roberts, A. (2007). Predictors of homicide clearance by arrest: An event history analysis of National Incident Based Reporting System (NIBRS) incidents. Homicide Studies, 11, 82-93.
- Roberts, A. (2008). The influences of incident and contextual characteristics on crime clearance of nonlethal violence: A multilevel event history analysis. Journal of Criminal Justice. Vol. 36; p. 61-71.
- Rydberg, J., & Pizarro, J. M. (2014). Victim Lifestyle as a Correlate of Homicide Clearance. Homicide Studies, 1088767914521813.

- Sanders, W. (1977). Detective Work: a Study of Criminal Investigations. New York: The Free Press.
- Schaemmann, P.S. and Kalish, J. (1972). The Challenge of Productivity Diversity: Improving Local Government Productivity Measurement and Evaluation, Part 3. Washington, D.C.: The National Commission on Productivity and The Urban Institute.
- Scheingold, SA and Gressett, LA, (1987). On the theory of American adversary criminal trial. The Journal of Criminal Law and Criminology. 78 (1): 118-154.
- Seidman, I. (1998). Interviewing as qualitative research: A guide for researchers in education and social sciences. (2nd ed.). New York: Teachers College Press.
- Shenton, A. (2004). Strategies for ensuring trustworthiness in qualitative research projects. Education in information. 22: 63-75.
- Skogan, W.G. (1976). Efficiency and Effectiveness in Big-City Police Departments. Public Administration Review: 278-286.
- Skolnick, J.H. (1994). Justice Without Trial: Law Enforcement in Democratic Society. New York: Macmillian.
- State Police (2015). [State Incident Crime Reporting, Crime at a glance] Unpublished raw data.
- Sudnow, D. (1965). Normal Crimes: Sociological features of the penal code in a public defender's office. Social Problems, 12: 255-276.
- Sullivan, P.S. (1985). Determinants of Crime and Clearance Rates for Seven Index Crimes (Ph.D. Dissertation, Vanderbilt University, Nashville, TN.
- Swanson, C. (1978). The influence of organization and environment on arrest policies in major US cities. Policy Studies Journal, 7(s1), 390-398.
- Sykes, G. (1959). The society of captives: A study of maximum security prisons. Princeton, NJ: Princeton University Press. Isbn: 0691028141.
- U.S. Bureau of labor Statistics. (2010). Databases, Tables, and Calculators by Subject, 2005-2015. Retrieved from http://www.bls.gov/databases.
- U.S. Census Bureau (2010) U.S. State & county Quickfacts: Jamison, Kensington, Lancaster Cities Retrieved from http://quickfacts.census.gov.
- United States Department of Justice, Federal Bureau of Investigation. (2011). Crime in the United States, 2011. Retrieved from https://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2011/crime-in-the-u.s.-2011/tables/table_25

- United States Department of Justice, Federal Bureau of Investigation. (2012). Crime in the United States, 2012. Retrieved from https://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s-2012/tables/table_25
- United States Department of Justice, Federal Bureau of Investigation. (2013). Crime in the United States, 2013. Retrieved from https://www.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s.-2012/tables/table_25
- U.S. News and World Report (2015) Best High Schools, 2015. Retrieved from http://www.usnews.com/education/best-high-schools.
- Van Maanen, J. (1978). "the asshole". In PK Manning and John Van Mannen (eds). Policing: A view from the Street. New York: Random House.
- Waddington, P. A., & Braddock, Q. (1991). 'Guardians' or 'Bullies'?: Perceptions of the Police amongst adolescent black, white and Asian boys. Policing and Society: An International Journal, 2(1), 31-45.
- Wadman R. and DeLadurantey, J.C. (1984). Overcoming limitations to police productivity measurement: The Omaha Experience. Public Productivity Review, Vol. 8, No. 3; P. 225-235.
- Waegel, W.B. (1981). Case routinization in investigative police work. Social Problems, Vol.28, No. 3; p. 263-275.
- Wellford, C., Cronin, J., Brandl, S., Bynum, T., Eversen, T., & Galeria, S. (1999). An analysis of variables affecting the clearance of homicides: A multistate study. Washington, DC: Justice Research and Statistics Association, 37
- Willman, M. T., and Snortum, J.R. (1984). Detective work: The criminal investigation process in a medium-size police department. Criminal Justice Review. 9, p. 33-38.
- Wilson, J. (2006). Community Policing in America. Routledge Press.
- Wolf, R., Korosec, R. and Goltz, J. (2008). An analysis of factors affecting the implementation of small municipal police agencies: An Open-Systems approach. American Journal of Criminal Justice, 33 (2): 177-193.
- Worden, R. E. (1989). Situational and attitudinal explanations of police behavior: A theoretical reappraisal and empirical assessment. Law and Society Review, 667-711.
- Wycoff, M. A., & Cosgrove, C. (2001, July). Investigations in the community policing context. Police Executive Research Forum.