INVESTIGATIVE DECISION-MAKING:

WHAT FACTORS CONTRIBUTE TO DETECTIVES' DECISIONS TO ARREST?

THESIS

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Stephanie J. Engeling, B.A.

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INVESTIGATIVE DECISION-MAKING:

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Committee Members Approved:

_____

J. Pete Blair, Chair

_____

Kim Rossmo

_____

Brian L. Withrow

Approved:

_____

J. Michael Willoughby
Dean of the Graduate College

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CHAPTER I

INTRODUCTION

The decision making of police officers has been the focus of a substantial amount of research in the past four decades. To a large extent, the research has focused on important and recurring decisions made by patrol officers, such as: decisions to stop, arrest, and determine charges (Fridell & Binder, 1992; Schafer & Mastrofski, 2005; Sutphen, Kurtz, & Giddings, 1993; Terrill & Paoline, 2007). Furthermore, the focus has been on key factors or key variables influencing patrol officer decisions (Brown, Novak, & Frank, 2009; Hall, 2005; Kane, 1999), including examination of: demographic characteristics of the offender, victim, and officer (Brown, Novak, & Frank, 2009; Hall, 2005; Kane, 1999); time and place of the offense (Hall, 2005); nature of the offense (Kane, 1999); mood of the officer (Dror, 2007); attitude of the offender and/or victim towards the officer (Allen, 2005); and the victim's preference for action (Kane, 1999).

Although much has already been learned about police officer decision-making, there is an important piece missing in the literature on investigative (detectives') decision-making. So far, research related to detectives' decision-making has addressed questions such as: how case characteristics affect the amount of time investigators choose to spend on follow-up (Brandl, 1993; Bynum, Cordner, & Greene, 1982); and how the nature of the case being investigated affects investigative actions taken (Corsianos, 2003). One investigative decision that researchers have not yet addressed is the decision to arrest.

The question of how an individual becomes an investigative suspect, and what factors lead to the arrest of that suspect are a missing link in the investigative decision-making process. Knowledge of these factors may serve to improve the solvability of cases by highlighting which factors are more likely to lead to an arrest. Finally, detectives may be able to incorporate this information into future investigations by focusing on the key factors when approaching the case. The intention of this study is to add to the literature on police decision-making by exploring what factors may guide a detective's decision to arrest. What follows is a sample of the literature that develops a framework for investigations, describes overall police discretion, and examines the decision to arrest.

CHAPTER II

LITERATURE

A Framework for Investigations

It is important to take a look at the nature of investigations, how cases are forwarded to investigators from the patrol officers, how they are generally carried out, and what tools investigators use when pursuing a case. What follows is a general discussion on solvability factors, the role of information and evidence in police investigations, and how the information or evidence may impact cases given to investigators.

Solvability Factors

Solvability factors are pieces of information gathered about a case that assist in the resolution of that case (Hirschy, 2003). According to Horvath, Meesig and Lee (2001), roughly 50% of police departments and law enforcement agencies make use of a screening function to identify which cases are more likely to be solved. The screening function identifies how many "solvability factors" are present in the case, and assists in determining whether or not the case will be followed-up by investigators.

According to Eck (1983), cases can be placed into three categories: cases that will remain unsolved regardless of investigative attention; already concluded cases that only require loose ends to be tied; and cases that have the potential to be solved if investigators put forth some effort. In general, cases that fit into the second and third category are passed on to investigators. The use of this screening process and the identifiable factors

used varies from one department to another. The process primarily considers witnesses, suspect identification and information, seriousness of the crime, and physical evidence (Eck, 1983; Hirschy, 2003).

Investigations

While a great deal of the research on investigations is dated, it provides a good starting point for identifying more about the investigative process. According to Eck (1983), one of the primary functions of the investigator in a follow-up investigation is to work cases more so than offenders. Rather than keeping track of offenders who are involved in crime on a regular basis, investigations shifted to focusing on cases and gathering information to determine the identity of offenders. Once a case has made it to investigations, investigators only work for approximately four hours on any given case, and that time is usually spread out over several days. In addition, most cases are closed for lack of leads within two days. Eck stated that both patrol officers and investigators focus too much on victim information rather than using other forms of evidence such as past reports, witnesses, or informants. Eck further noted that information from past reports, witnesses, and informants are more likely to lead to an arrest than information from victims.

Information Gathering and the Impact on Case Outcome

Gathering, analyzing and sharing information is required for a successful investigation (Eck, 1983). The issue is that in some cases this leads to a lot of misleading or unhelpful information that can weigh the investigation down. Investigators must be careful about what information they pursue (Rossmo, 2000). Kuykendall (1982) identified three sources of information available to investigators: information systems;

physical evidence; and people. Information system databases are available to police when they are seeking information on crimes or people involved with crimes. There are five general categories of activities that police can use to develop information: interviewing (speaking to suspects, victims, informants and/or witnesses about particular cases or activities); monitoring (using surveillance in the form of audio, video, or stake-outs); pattern analysis (linking crimes, suspects, or modus operandi); role playing (going undercover); and scientific analysis (becoming familiar with the proper collection and use of physical evidence).

The second source of information, according to Kuykendall (1982), is physical evidence which refers to all property, tools, proceeds, recordings, or biological information left at a crime scene or discovered during the investigation of a crime. Horvath and Meesig (1996) state that physical evidence has the potential to play an important role in individual cases. While most physical evidence is not collected or analyzed, it can play a key role in the conviction process, and also the arrest decision in cases that do not typically have high clearance rates.

The third source of information available to police is people, including: victims (those who had a crime committed against them); suspects (those who may have committed the crimes); and witnesses. There are three types of witnesses: primary (those who witnessed the actual crime either by seeing it or hearing it occur); secondary (those who saw strange activity either before or after a crime had occurred); and location witnesses (those who may know of the whereabouts of a given suspect). One of the most important potential outcomes of using people as a source of information is a confession made by a suspect. A suspect that gives incriminating information or a confession to an

investigator is more likely to be charged, convicted, and receive longer sentences (Cassell & Hayman, 1996; Leo, 1996).

The investigation of cases relies heavily on information of all forms, (people/physical evidence/databases) and the collection and appropriate interpretation of the information allows investigators to make informed decisions on the outcome of a case. The investigator uses what information and evidence he or she has to decide on the possibility of a suspect's guilt, which can potentially lead to arrests and convictions (Blair & Rossmo, 2010).

Police Discretion

The Definition of Discretion

Discretion is an important aspect in the study of criminal justice with particular focus on policing (Nickels, 2007). Discretion is defined as "the power or right to decide or act according to one's own judgment; freedom of judgment or choice" (Dictionary.com, n.d.). Patrol officers and investigators alike are restricted in their work by time, resources, and inability to know all the laws at all times. Due to these restrictions, police are afforded a level of discretion when handling cases that come to their attention. Furthermore, police work is often done on an individual basis and seldom overseen, allowing each officer or investigator to apply his or her own working rules onto a case (within the boundaries of the law and their knowledge of it: Corsianos, 2003). Below is research that deals with the definition of police discretion as a variable, and the use of discretion, at the patrol level, in ambiguous scenarios, the formation of suspicion, the decision to stop or sanction, and the use of discretion at the investigative level in high-profile cases.

Defining Discretion as a Variable

Nickels (2007) believed that discretion was used only as a constant in most research, and that there was a need to define discretion as a measurable entity. Nickels attempted to define parameters for discretion as a variable and developed organizational and operational constructs for the measurement of discretion. The organizational construct included means discretion (how one works on tasks), routine discretion (what order tasks are completed in), schedule discretion (when to work on tasks), task discretion (what tasks to work on or not), and time discretion (when to complete tasks).

Nickels' (2007) operational construct included coercion discretion (use of force or threatened force to achieve compliance), record discretion (which activities will be documented, criminal or otherwise), response discretion (how and when to respond to requests for service), seizure discretion (how and when to search and/or take private property), and surveillance discretion (ability to be present and monitor the public). By addressing discretion as a variable, Nickels hoped that future researchers would be afforded the ability to directly see the impact that discretion or perceived autonomy has upon officers. This not only aids in the defining of discretion for the purposes of research, it also illustrates the many ways in which police can use their discretion in any given circumstance.

Discretion at the Patrol Level

Ambiguous situations. Finckenauer (1976) asked how police officers use discretion by presenting officers with a questionnaire that detailed five fabricated scenarios that called for no clear set of actions. The topics included prostitution, gambling, welfare fraud, public intoxication, and a juvenile offense. The intention was to

determine how officers chose to respond either by official sanction, no action at all, or choosing to intervene in another non-official capacity.

The results of Finckenauer's (1976) study showed that in all scenarios except the gambling scenario, police chose to intervene in a non-official manner. For example, in the public intoxication scenario, most officers reasoned that the person was technically breaking the law, but he or she was not harming himself or others or causing a disturbance and was walking home. Finckenauer noted that most of the officers' reasoning behind their choices was influenced by their perceptions of how the public would view the situation.

The formation of suspicion. Dunham, Alpert, Stroshine, and Bennett (2005) looked at how police form suspicion and what cues drive their decision to stop a citizen. Observational data from Savannah, Georgia, was used, and the cues officers gave for the formation of suspicion were location and time, behavior of the citizen, appearance of the citizen, and information already brought to their attention by other officers or citizens. The results showed that the behavior of the citizen was more often than not the primary reason for the officer to form suspicion, and the other cues were rarely the cause of police suspicion.

The decision to intervene. Schafer and Mastrofski (2005) addressed the decision to stop and sanction by patrol officers. Students from Michigan rode along with police officers making observations; interviews with the officers were conducted afterwards. The students witnessed 151 stops with a total of 195 offenses observed over 288 hours. The results showed that officers were primarily lenient in regards to traffic violations, and seldom chose to officially sanction citizens. The results also indicated that the choices

made by officers were based off cues and structure information, and their decisions were not solely bound to statutes and policies. In addition, officers made choices according to their own social norms as well as the public's perception of police.

Discretion at the Investigative Level

High-profile cases. Corsianos (2003) looked at what factors most influence an investigator's decision-making process in high profile cases. The results indicated that when cases were forwarded on to investigators, they were typically investigated in a very mechanical manner and the method and approaches did not differ widely. However, media attention, public reaction, seriousness of the crime, the level of scrutiny the investigator and/or department was under, and the social status of the suspect or victim can cause a case to become high-priority which changes the approach an investigator may take. In these instances, investigators will spend much more time and energy on the case and the department will sink more resources into its solution. When public scrutiny is high, cases may even be elevated to superior officers within the department.

Police discretion as shown above is an important part of police work. Police are often afforded a measure of autonomy in handling situations between citizens or calls for service (Corsianos, 2003; Nickels, 2007). Research has attempted to identify how discretion can be defined as a variable (Nickels, 2007), how it is used in ambiguous situations that do not call for a specific course of action (Finckenauer, 1976), how it is used in the formation of suspicion (Dunham et al., 2005), how police use it to determine how or when to intercept a citizen during traffic encounters (Schafer & Mastrofski, 2005), and how it impacts high-profile investigations (Corsianos, 2003).

It is understood that police discretion is a vital part of police work and policing research. What follows is a literature review dealing with the requirements for an arrest in Texas and the definition of clearance.

Texas Requirements for Arrest

In Texas, a peace officer may arrest an individual if he or she possesses a warrant for that person's arrest. A warrant can be obtained when a peace officer has probable cause to seek an arrest and can provide proof of probable cause to a magistrate (Texas Constitution and Statutes, 2011). A peace officer may make an arrest without a warrant when certain conditions are met. If a peace officer or magistrate witnesses an offense, if a peace officer has probable cause to believe a crime has occurred, or has probable cause to believe a felony has occurred and the suspect may escape, he or she is authorized to make an arrest (Law and Legal Research, 2007).

In addition, if a peace officer has reasonable suspicion that a crime has occurred, he or she is permitted to detain the suspect for further investigation which could yield probable cause and give the officer the right to arrest. Probable cause is defined by The Free Dictionary's Legal Browser (2013) as having enough evidence or information to convince a reasonable person that a crime has been committed.

Defining Clearance

The term clearance refers to a case which has been resolved. According to the Federal Bureau of Investigation (2009), cases are either cleared by an arrest or by exceptional means. Cleared by arrest occurs when three specific requirements are met: A person has been arrested, charged, and prosecuted. In order to be cleared by exceptional means, a case must have an identified offender, enough evidence to seek an arrest and

prosecution, a known location for the identified offender, and a circumstance that prevents the arrest, charging, and prosecution of the offender. Examples of circumstances that prevent a peace officer from making an arrest, charge or prosecution are; offenders that have died, a lack of cooperation on the part of a victim and/or witness, or denial of extradition from another jurisdiction.

There are strict rules that govern a police officer's right to detain and arrest an individual, and one of the primary definitions of clearance is to make an arrest. Below is a brief review of the tools that police use in the decision to arrest at both the patrol and investigative levels of policing.

The Decision to Arrest at the Patrol Level

Research examining the decision to arrest has been largely focused on at the patrol level of policing. However, patrol officers and investigators exist in a symbiotic relationship in the investigation of criminal activity, and determining which factors or cues drive a patrol officer's decision to arrest is relevant to studying the investigative decision to arrest. The following research studies address the decision to arrest at the patrol and investigative level. They focus on physical evidence, offense seriousness, demographic characteristics, and the cooperation of the victim.

Physical Evidence

Terrill and Paoline (2007) took a different approach to the arrest decision made by patrol officers and looked at the non-arrest decision made by police. Observational data was collected from St. Petersburg, Florida, and Indianapolis, Indiana. While officers overall were more likely not to make an arrest, the results indicated that as the amount of physical evidence increased the arrest rate also slightly increased. Brown et al. (2009)

also addressed the influence of physical evidence on the arrest decisions and found a higher arrest rate associated with the presence of quality physical evidence.

Offense Seriousness

Smith (1987) looked at responding officers' decision to arrest, separate or mediate assault or domestic violence encounters between citizens. The results showed that violent disputes that involve a weapon of some kind are more likely end in arrest, and those encounters without weapons are more likely to end in mediation or separation.

Kane (1999) looked at data on domestic violence cases from two districts in Boston, Massachusetts, from 1993 to determine what factors patrol officers most used when deciding to make an arrest. Kane found that when there was a high level or risk to the victim, the police officer was more likely to make an arrest, and did not consider any other case characteristics beyond the living situation of the victim and offender. However, when the risk to the victim was lower, the officer felt they had more discretionary power and took other case characteristics under consideration, such as injury to the victim, violation of retraining orders, and past offenses committed by the offender.

Hall (2005) took data from incident reports of domestic violence in three New York cities to determine if having a suspect on scene or characteristics of the case influenced an officer's decision to arrest. The results showed that victim injury, seriousness of the attack, and seriousness of the offense were more likely to increase the odds of arrest in two of the three cities. In addition, having a suspect on scene was more likely to end in arrest in two of the cities. Despite the mandatory arrest policy in New

York at the time, the research indicated that the seriousness of the offense had an influence on an officer's arrest decision.

Demographic Characteristics

Novak, Frank, Smith, and Engel (2002) looked at the difference between community and beat officers' decisions to arrest over the course of one year (April, 1997 - April 1998) in Cincinnati, Ohio. The particular assignment of an officer as a beat or community officer did not in itself have a direct effect on the decision to arrest. However, the factors that officers used when deciding to arrest did differ between the different types of officers. Beat officers were more likely to arrest males more than females, those who appeared to be intoxicated, and those who were noncompliant.

Novak et al. (2002) also noted that community officers differed in that they were more likely to arrest juveniles or attempt order maintenance and refrained from arresting those who complied with order maintenance. Community officers also made more arrests when an offense was committed in front of an officer.

Brown et al. (2009) examined the difference between encounters with juveniles and encounters with adults in the decision to arrest. The research showed that juveniles, especially black juveniles, were more likely to be arrested, and the arrest was more likely to occur in distressed neighborhoods, whereas adults were more likely to be arrested in less-distressed areas. Furthermore, adult females were less likely than adult males to be arrested, but this distinction was not true for juvenile males and females.

Smith (1987) found that assaults between two white citizens are more likely to end in arrest and assaults between non-whites are more likely to end in separation.

Furthermore, encounters between two men are more likely to end in arrest, while encounters between a male and a female are more likely to end in separation.

Victim Cooperation

Felson and Ackerman (2001) looked at the relationship between suspect and victim in physical assault cases, and how that relationship impacted the decision to arrest. They used data from the National Crime Victimization survey from 1992 to 1998. Their results showed that the police were less likely to arrest an intimate partner than a stranger who had been identified by some means. They also found that suspects who were simply known by the victim enjoyed more leniency than suspects who were intimate partners. Felson and Ackerman stated that suspects who are intimate partners avoid arrest due to lack of witnesses and unwillingness of the victim to file a complaint.

In corroboration, Smith's (1987) earlier work found the response of police relied most heavily on the wishes or cooperation of the victim when deciding whether to separate or mediate the involved parties. Novak et al. (2002) also found that both beat and community officers made arrests at the request of a witness or victim, but community officers were more likely to do so than beat officers.

The Decision to Arrest at the Investigative Level

There is a lack of research on the nature of investigative arrests. Questions about arrest decisions and what information or evidence is useful in making those decisions is largely limited to policing at the patrol level. Information at the patrol level of policing is valuable, but policing does not always end there. A deeper understanding of investigative arrests would fill a large gap in the understanding of policing as a whole.

Demographic Characteristics

Alderden and Ullman (2012) asked whether gender differences between detectives increased the chance of arrest in sexual assault cases where the victim was an adult female. Data was obtained in 2003 from a large mid western police department. The study controlled for victim, suspect, and case characteristics to determine arrest differences between male and female investigators. The results showed that female investigators are, despite popular assumption, less likely to make an arrest in a sexual assault case than male investigators.

The above work presents a unique opportunity to not only consider those factors that have already been addressed by past research (offense seriousness, physical evidence, demographic characteristics, and victim cooperation), but also broaden them to a more general understanding of the decision to arrest, specifically by investigators.

Research Question

In summary, the decision to arrest at the patrol level is influenced by several different factors. Research has found that more serious offenses are more likely to end in arrest and offenses with quality physical evidence are also more likely to end in arrest. Furthermore, the age and race of the suspects involved can influence the arrest decision, and the cooperation of the victim also influences an officer's decision to arrest.

Investigators focus on victims, witnesses, suspects, physical evidence, information systems, and confessions to aid them in the outcome of an investigation. While some literature has provided general insight into what tools and processes investigators use to go through an investigation, little is known about what actually leads an investigator to decide an arrest is needed. The purpose of this study is to start filling

this gap in the investigative literature by identifying what factors influence investigator's decisions to arrest.

While there may be similarities between the factors that lead to an investigative arrest and the patrol decision to arrest, there will likely be some notable differences between the two groups because of differences in their functions.

CHAPTER III

METHOD

<u>Data</u>

Data were collected from the San Marcos Police Department (SMPD) in Texas.

The sampling frame consisted of all 2,242 cases assigned to 13 investigators in 2007. The

number of cases worked by each investigator ranged from 1 to 80 and they were

combined for analysis. It was determined that 1,700 of the cases given to investigators

did not contain an investigative supplement. This meant that these cases were either

screened out by sergeants before being assigned to investigators, or the investigator did

not provide written documentation of their process, information, or case conclusions;

therefore, these cases were excluded (see Figure 1).

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┌─────────────────────────────────────┐
│                                     │
│    Overall Cases Given to Investigators │
│                2,242                │
│                                     │
│                  ↓                  │
│                                     │
│        Cases With Supplement        │
│                 542                 │
│                                     │
│                  ↓                  │
│                                     │
│            Coded Cases              │
│                 501                 │
│                                     │
│                  ↓                  │
│                                     │
│       Cases with A Named Suspect    │
│                 408                 │
│                                     │
│                  ↓                  │
│                                     │
│       Cases With A Known Name       │
│                 383                 │
└─────────────────────────────────────┘
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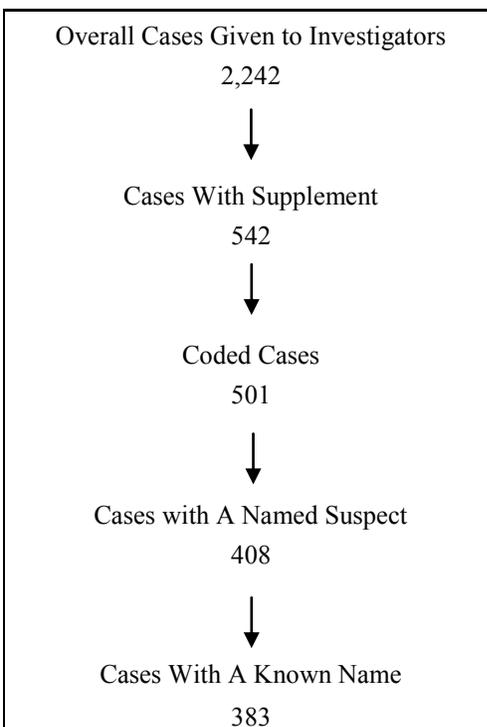
Figure 1: Overall Summary of Cases

Of the 542 cases remaining, 41 were excluded for various reasons. Cases that

originated outside of the San Marcos Police Department and its jurisdiction that were

given to investigators for the purpose of assistance were excluded (2). Cases which did

not indicate the commission of a crime such as missing person cases (4), cases that were

deemed to be civil in nature by the investigator and no longer pursued (5), cases of

unattended death or suicide (16), cases regarding a sex offender's failure to register (4),

or cases marked as "information" (10) were also excluded due to lack of a suspect or

victim. Cases marked as "information" consisted of mere knowledge ranging from tips on

a crime that may occur in the future to cases that were initially picked up but later

determined to be lacking in criminal activity.

The remaining 501 cases included written documentation by both patrol officers

and investigators detailing witness and victim statements and demographics, as well as

suspect demographics, information, and processes regarding the case and its outcome.

Because the focus of this research was to look at the decision to make an arrest, only

cases that included a person (suspect) whom the investigator might arrest were included.

A suspect was named in 408 cases. The investigator was able to successfully identify

who the named person was in 383 cases, and these remaining 383 cases were used in the

analysis to follow below (Figure 1).

<u>Coding</u>

One coder coded all of the cases and a second coder coded a randomly selected

20% of the cases to assess reliability. Using witness, victim, and offender characteristics,

as well as officer and investigator narratives, the researchers coded 20 variables using 19

nominal measures and one ordinal measure. The ordinal measure was the designated case

number assigned to the case by the SMPD. Sixteen of the nominal variables were no (0),

yes (1), and the remaining 3 were: Investigator Number - Investigator (1) through

Investigator (13); Offence - Crime (1) through Crime (60); and Suspect Gender - male

(0), female (1) (see Appendix A). Appendix B shows detailed descriptions of the variable

definitions. Coder agreement for these variables ranged from 74.6% (Witness

Identified/Confirmed the suspect) to 98.4% (Victim Identified/Confirmed the suspect).

This was above the 70% agreement that is generally considered acceptable in social

science.

<u>Descriptive Data</u>

Overall Summary Data

Overall, there were 383 cases, handled by 13 different investigators, that had a

"known name" suspect. The presence of the suspect was indicated in the police report,

either in the general list of suspect, victim, and witness addresses and demographics

section at the beginning of the report, or in the body of the documentation provided by

patrol officers and investigators. There were an overall total of 481 victims, 580

witnesses, and 467 suspects (see Table 1).

Table 1: Descriptive Statistics and Suspect Demographics

Overall Summary Data	Count
Total number of "known name" cases	383
Total number of investigators	13
Total number of victims	481
Total number of witnesses	580
Total number of suspects	467
Crime Data	
Total number of crimes	445
Felony cases	181
Misdemeanor cases	202
Total number of cases with only one crime	321
Total number of cases with two crimes	51
Total number of cases with three or more crimes	11
Overall Suspect Demographics	
Age	
Adult	375
Juvenile	3
Unknown	5
Gender	
Male	298
Female	84
Unknown	1
Ethnicity	
White	132
Hispanic	172
Black	50
Unknown	29

Crime Data

A total of 445 crimes were committed. There were 181 felonies committed and

202 misdemeanors committed. There were 321 cases that involved only a single crime

across the 383 "known name" cases. A total of 51 cases had two crimes, and 11 cases had three or more crimes (Table 1). For purposes of this research, the most serious crime was used to code crime seriousness. Appendix C shows the individual offenses categorized into seven seriousness categories; First Degree Felony, Second Degree Felony, Third Degree Felony, State Jail Felony, Class A Misdemeanor, Class B Misdemeanor, and Class C Misdemeanor.

Suspect Data

Overall suspect demographics. A total of 298 males, 84 females and 1 unknown gender made up the 383 "known name" suspects. Of the 383 suspects, 132 were white, 172 were Hispanic, 50 were black, and 29 were of an unknown ethnicity (Table 1). Of the 298 male suspects, 102 were white, 128 were Hispanic, 45 were black, and 23 were unknown. Of the 84 female suspects, 30 were white, 44 were Hispanic, 5 were black, and 5 were unknown.

The overall mean age for all suspects was 29.4 years. The mean age for male suspects was 29.5 years, and the mean age for female suspects was 29.2 years. There were 21 unknown ages in the data set. Of the 383 "known name" suspects, 3 of them were juveniles (2 males and 1 female) and 375 were adults (292 males and 83 females) with 5 suspects classified as unknown (Table 1).

Variable Descriptions

Below is a description of all variables used in this analysis as well. Table 2 shows the categorical occurrences of all the variables and the percent in each category for cases that have a "known name" suspect.

Table 2: Category Frequencies

Variable	Number	Percentage	Missing Information	Percentage
Dependent Variable				
Arrest Decision	215	56.1%		
Seriousness				
Felony Crime	181	47.5%		
Misdemeanor Crime	202	52.5%		
Evidence				
Suspect Caught	28	7.3%		
Admission/Confession	58	15.1%	1	0.3%
Victim Identify/Confirm	248	64.8%		
Witness Identify/Confirm	200	52.2%		
Evidence Identify/Confirm	82	21.4%		
Demographics				
Suspect Ethnicity				
Hispanic	172	44.9%	29	7.6%
Black	50	13.1%	29	7.6%
White	132	34.5%	29	7.6%
Male	298	77.8%	1	0.3%
Adult	375	97.9%	5	1.3%
Other				
Solved Case Follow-Up	73	19.1%		
Victim/Witness Cooperation	59	15.4%		

Arrest Decision

The dependent variable was coded as a nominal variable; did the investigator initiate a warrant or make an arrest?

Felony Crime

There were 60 different offenses in the data which were recorded into a variable for crime seriousness. This was based upon the legal penalty for the crime as taken from Texas Penal Code. In general, felonies in Texas are punishable with more than a year of incarceration.

Suspect Caught

This variable indicated whether or not the suspect was caught in the act by an

officer, or whether he was caught with incriminating evidence such as tools typically used in the commission of a crime, or proceeds from a crime such as stolen money or items.

Admission/Confession

This variable indicated whether or not the suspect admitted to some involvement or knowledge of the crime (or confessed to committing the crime) to an investigator either during a phone conversation or interview/interrogation.

Victim Identify/Confirm

This variable indicated whether the victim identified or confirmed the suspect. Identifying a suspect was defined as providing the police with a name, an address, or a phone number or any other identifying factor about the suspect that would allow an investigator to narrow their search. Confirming a suspect was defined as corroborating a name or other identifying factor provided by another source such as a witness or physical evidence.

Witness Identify/Confirm

This variable indicated whether or not the witness identified or confirmed the suspect. Identifying a suspect was defined as providing the police with a name, an address, or a phone number or any other identifying factor about the suspect that would allow an investigator to narrow their search. Confirming a suspect was defined as corroborating a name or other identifying factor provided by another source such as a victim or physical evidence.

Evidence Identify/Confirm

This variable indicated whether or not the evidence identified or confirmed the

suspect. Identifying a suspect was defined as providing the police with a name, an address, or a phone number or any other identifying factor about the suspect that would allow an investigator to narrow their search. Confirming a suspect was defined as corroborating a name or other identifying factor provided by another source such as a victim or witness.

Suspect Ethnicity

Suspect Hispanic. This variable referred to whether or not the suspect was Hispanic.

Suspect black. This variable referred to whether or not the suspect was black or not.

Suspect white. This variable referred to whether or not the suspect was white or not. However, suspect white acted as the reference variable against which the other two suspect ethnicity variables were compared to in the analysis, so this variable was not entered into the regression model.

Suspect Female

This variable referred to the gender of the suspects encountered in the data.

Juvenile Suspect

This variable referred to whether or not the suspect was a juvenile.

Solved Case Follow-Up

This variable indicated whether or not the investigator was simply tying up the loose ends of a case that was otherwise already solved.

Victim/Witness Cooperation

This variable indicated whether or not the victim and or witness chose to close the case, or simply refused to assist the police in their investigation of the offense.

CHAPTER IV

RESULTS

Analysis

      The analysis begins with crosstabs (discussed below). Due to the dichotomous nature of the dependent variable and the need to simultaneously control for several variables (detailed below), binary logistic regression was used. It is expected that the binary logistic regression will identify which factors best predict the investigative decision to arrest.

Crosstabs

      Table 3 shows the results of crosstabs that were performed examining the relationship of the dependent variable with the 11 independent variables to determine the level of association they have with the decision to arrest. The collected data in this research represents an entire population of cases given to investigators in 2007 at a mid-sized police department that included investigative supplements and a "known name" suspect. Therefore, reporting on significance in this particular study is meaningless here. Instead, it was decided to focus on effect size in the form of the contingency coefficient which is an association measure that is chi-square based and falls between 0 and 1.

      Three of the independent variables have an effect size that falls below the 0.1 commonly considered to be a small effect (Cohen, 1988), and therefore show no notable association with the decision to arrest. Five of the independent variables have a small to medium effect size (0.1 - 0.3) as defined by Cohen (1988): Suspect Caught (C = 0.2);

Admission/Confession (C = 0.1); Victim Identify/Confirm (C = 0.2); Witness

Identify/Confirm (C = 0.1); and Suspect Race (C = 0.1). Finally, the remaining three

independent variables show a medium to large association with the dependent variable

(0.3 - 0.5) as defined by Cohen (1988): Evidence Identify/Confirm (C = 0.3); Solved

Case Follow-Up (C = 0.3); and Victim/Witness Cooperation (C = 0.4).

Table 3: Association of the Arrest Decision with Investigation Characteristics

	X^2	C	N	Arrest Decision No	Arrest Decision Yes
Seriousness					
Felony Crime	0.1	0.0			
No			202	43.1%	56.9%
Yes			181	44.8%	55.2%
Evidence					
Suspect Caught	16.5	0.2			
No			355	46.8%	53.2%
Yes			28	7.1%	92.9%
Admission/Confession	6.0	0.1			
No			324	46.6%	53.4%
Yes			58	29.3%	70.7%
Victim Identify/Confirm	10.8	0.2			
No			135	32.6%	67.4%
Yes			248	50.0%	50.0%
Witness Identify/Confirm	5.9	0.1			
No			183	50.3%	49.7%
Yes			200	38.0%	62.0%
Evidence Identify/Confirm	39.3	0.3			
No			301	52.2%	47.8%
Yes			82	13.4%	86.6%
Demographics					
Suspect Ethnicity	3.2	0.1			
Hispanic			172	39.0%	61.0%
Black			50	34.0%	66.0%
White			132	47.0%	53.0%
Suspect Gender	0.0	0.0			
Male			298	44.0%	56.0%
Female			84	44.0%	56.0%
Juvenile Suspect	0.7	0.0			
Adult			375	43.2%	56.8%
Juvenile			3	66.7%	33.3%
Other					
Solved Case Follow-Up	46.5	0.3			
No			310	52.3%	47.7%
Yes			73	8.2%	91.8%
Victim/Witness Cooperation	73.8	0.4			
No			324	34.6%	65.4%
Yes			59	94.9%	5.1%

<u>Binary Logistic Regression</u>

Table 4 presents the results of a binary logistic regression of 11 predictor variables on the decision to arrest. The results suggest that the variables that most strongly impacted the arrest decision are: Victim/Witness Cooperation; Solved Case Follow-Up; Suspect Caught; Evidence Identify/Confirm; and Admission/Confession. When a victim and/or witness refused to cooperate, then investigators were 20.0 times less likely to seek or make an arrest. When an investigator was simply doing a standard follow-up in an otherwise solved case, the investigator was 13.2 times more likely to seek or make an arrest. When a suspect was caught with tools such as housebreaking tools or proceeds such as stolen money, investigators were 8.5 times more likely to seek or make an arrest. When physical evidence produced or confirmed a suspect, investigators were 5.53 times more like to seek an arrest. When a suspect made an admission or a confession, investigators were 3.1 times more likely to seek or make an arrest. A ratio of less than 3:1 is generally not considered large, and the remaining variables fall below this mark.

Table 4: Binary Logistic Regression

Variable	B	SE B	EXP(B)
Seriousness			
Felony Crime	0.2	0.3	1.2
Evidence			
Suspect Caught	2.2	0.8	8.5
Admission/Confession	1.1	0.4	3.1
Victim Identify/Confirm	-0.5	0.3	0.6
Witness Identify/Confirm	0.1	0.3	1.1
Evidence Identify/Confirm	1.7	0.4	5.5
Demographics			
Hispanic	0.5	0.3	1.6
Black	0.9	0.5	2.4
Gender	-0.2	0.3	0.8
Other			
Solved Case Follow-Up	2.6	0.5	13.2
Victim/Witness Cooperation	-3.1	0.7	0.1

Nagelkerke's R^2 of 0.51 indicated that approximately 51.0% of the variance was explained by the variables in the model. The model correctly predicted 78.2% of the cases as arrest/no arrest overall with 71.9% correctly predicted in the no arrest decision category and 82.7% correctly classified in the arrest category. This was a 19.4% improvement over simply guessing the modal arrest value of yes.

CHAPTER V

CONCLUSION

Research on investigative decision making is scarce, and research on the investigative decision to arrest has, until now, never been explored in great detail. Alderden and Ullman (2012) looked at the arrest decision at the investigative level but only in regards to gender differences between investigators in sexual assault cases. This is a very targeted question and does not address the larger picture of the arrest decision at the investigative level. Policing does not end at the patrol level and meaningful information about all levels of policing can only enrich the literature and potentially aid in policy decisions and targeted approaches to policing.

Unfortunately, most research on police decisions revolves around the patrol level of policing. This part of the literature is very thorough and informative, and has looked at all manner of decisions ranging from the forming of suspicion to the decision to charge. Without identifying important aspects of the investigative counterpart, however, the research is incomplete. This study is intended to act as a starting place for research on investigative decision making, in particular the decision to arrest. It was expected at the start of this research that there would be similarities between the findings at the patrol level of policing and the investigative level but there would also be some notable differences. This research showed this expectation to be accurate.

The results showed some similarities between the arrest decision at the patrol level and the investigative level. For instance, physical evidence and the cooperation of the victim and/or witness were contributing factors at both levels of policing. Terrill and Paoline (2007) and Brown et al. (2009) found that as the amount of quality physical evidence increased, so did the likelihood of an arrest decision at the patrol level of policing, and the current study found that when physical evidence produces or confirms a suspect, investigators are almost five and a half times more likely to seek an arrest. Felson and Ackerman (2001) and Smith (1987) noted that victim or witnesses willingness to cooperate had a notable impact on a patrol officer's arrest decision, while the current study found an investigator to be 20 times less likely to seek an arrest when there is lack of cooperation from a victim or witness.

In addition, the results mostly corroborate past research which indicates that investigators focus on confessions, physical evidence and victim/witness information (Eck, 1983; Kuykendall, 1982). This could be due to a need for corroboration within investigations. When an investigator has information from a victim or witness that corroborates information from physical evidence or a suspect confession, it most likely strengthens the investigation for both the investigator trying to decide how to move forward and possibly later when it comes to court and sentencing decisions. On the other hand, if an investigator cannot find corroboration or even finds conflicting information it could alter how the investigator chooses to approach the case or the final outcome of the case.

There were, however, some differences between the patrol decisions to arrest and the investigative decisions to arrest. For instance, no association was found between the

gender and age of the suspect and the arrest decision, and only a small association (C = 0.1) was found between ethnicity and the arrest decision, whereas previous research at the patrol level has suggested a relationship between the demographic characteristics of the suspect and the decision to arrest. Another curious difference between the patrol level and investigative level of policing was the level of seriousness of the crime. Crime severity at the patrol level of policing has been found to influence the arrest decision (Hall, 2005; Kane, 1999; Smith, 1987), whereas at the investigative level it did not offer a significant contribution to the arrest decision. This could be one of the major differences between the two levels of policing that reflects their different functions in the policing world. Cases are often screened by sergeants before being offered to detectives for further investigation. The purpose of this screening is to determine which cases have a stronger likelihood of being cleared or resolved (Horvath, Meesig, & Lee, 2001). At this point, sergeants have already decided which cases are most important and it is the job of the investigator to pursue it regardless of how serious the crime may be. The seriousness of the crime may impact the sergeants' decisions to forward cases to investigators, and perhaps that is another area for future researchers to explore.

<u>Limitations</u>

While this study offers a beginning point for research into the decision to arrest at the investigative level, there were several limitations to the amount and quality of data that were collected. One of the demographic variables (age) could not be used in the regression analysis because the distribution of juveniles versus adults was so heavily weighted in favor of adults. There were five other variables that were uneven in their distribution, but a relationship was discovered nevertheless. The unbalance in the

responses may not provide an accurate picture of the impact that the independent variables have upon the dependent variables.

There was also some missing information involved in the data, though it is impossible to say how much of an impact the missing information had on the results. There was also a lack of information on individual investigators, their working rules, preferences, and memories of the case which could have enhanced the study. Finally, data on suspects' criminal background histories, which may have played a role in the investigative decision to arrest, were not available.

Also, this particular data set was taken from one year at a single mid-sized police department, and it may not be representative of all mid-sized police departments. The results may be of use to the San Marcos Police Department, and may be helpful to other researchers who choose to pursue this line of research, but it cannot be generalized with any confidence to any other police departments.

<u>Future Research</u>

This research was an attempt to explore the investigative decision to arrest, an area of policing research that was almost non-existent. Hopefully, this work will act as a suitable starting point for future research by providing an initial body of work to be corroborated or challenged and expanded. It would be beneficial to not limit the data to one year at one police department, but include several police departments of varying sizes as well as several years of investigative cases in order to provide a much larger and possibly more stable and representative sample.

Also, future researchers who endeavor to replicate and expand upon this study should try to gather case information that is as recent as possible. In this study, the

information was six years old which meant the researchers did not have access to all of the information on the cases since they had been discarded to make room for more recent material. The lack of criminal background information, videotaped interrogations, and written information from investigators and patrol officers may serve to limit the findings. In addition, more recent or current cases may afford researchers an opportunity to meet with investigators working the cases in order to hear their thoughts, working rules and patterns.

Despite the missing information and the need for better samples, this research served as a beginning into the understanding of investigative arrest decisions on a more broad and inclusive level than that found in past research, which has been highly specific. The results of this study were both expected and unexpected and it is the hope of the researcher that this work will be carried on to provide a more complete picture of policing.

APPENDIX A

Variable Names, Their Measures and Values

Variable Name	Ordinal	Nominal	Vales and Value Names
Case Number	Yes		
Investigator Number		Yes	Investigator (1) - Investigator (13)
Crimes		Yes	Crime (1) - Crime (60)
Felony Crime		Yes	No (0), Yes (1)
Misdemeanor Crime		Yes	No (0), Yes (1)
Suspect Ethnicity			
Hispanic		Yes	No (0), Yes (1)
Black		Yes	No (0), Yes (1)
White		Yes	No (0), Yes (1)
Suspect Gender		Yes	Male (0), Female (1)
Juvenile Suspect		Yes	No (0), Yes (1)
Suspect Named		Yes	No (0), Yes (1)
Known Name		Yes	No (0), Yes (1)
Suspect Caught		Yes	No (0), Yes (1)
Admission/Confession		Yes	No (0), Yes (1)
Victim Identify/Confirm		Yes	No (0), Yes (1)
Witness Identify/Confirm		Yes	No (0), Yes (1)
Evidence Identify/Confirm		Yes	No (0), Yes (1)
Solved Case Follow-Up		Yes	No (0), Yes (1)
Victim/Witness Cooperation		Yes	No (0), Yes (1)
Arrest Decision		Yes	No (0), Yes (1)

APPENDIX B

Variable Names and Definitions/Descriptions

Variable Name	Definitions/Descriptions
Felony Crime	Was the crime a felony level crime?
Suspect Ethnicity	
Hispanic	Was the suspect Hispanic?
Black	Was the suspect black?
White	Was the suspect white?
Suspect Gender	Designation of the suspect's gender
Juvenile Suspect	Was the suspect a juvenile?
Suspect Caught	Was the suspect caught with tools and/or proceeds?
Admission/Confession	Did the suspect made an admission or a confession?
Victim Identify/Confirm	Did the victim identify a suspect or confirm an already identified suspect?
Witness Identify/Confirm	Did the witness identify a suspect or confirm an already identified suspect?
Evidence Identify/Confirm	Did physical evidence identify a suspect or confirm an already identified suspect?
Solved Case Follow-Up	Was the investigator dotting the Is and crossing the Ts in an already decided case?
Victim/Witness Cooperation	Was the case closed due to lack of cooperation on the part of the victim or witness?
Arrest Decision	Did investigators decide to arrest either by issuing a warrant or by making an arrest?

APPENDIX C

Offenses by Seriousness

Offense	N	Offense	N
First Degree Felonies	**26**	**State Jail Felonies Continued**	
Aggravated Assault with a Deadly Weapon	18	Hindering Secured Creditors >$1,500<$20,000	4
Aggravated Sexual Assault	1	**Class A Misdemeanors**	**152**
Aggravated Robbery	4	Assault Bodily Injury	73
Aggravated Sexual Assault of a Child	3	Theft of Service >$500<$1,500	1
Second Degree Felonies	**43**	Theft of Property >$500<$1,500	16
Aggravated Assault Serious Bodily Injury	10	Burglary of a Vehicle	8
Sexual Assault	11	Burglary of a Coin Operated Machine	1
Burglary of a Habitation	7	Criminal Mischief >$500<$1,500	7
Indecency with a Child - Sexual Contact	8	Injury to a Child/Elderly	5
Sexual Assault of a Child	2	Forgery of a Financial Instrument	18
Possession of Child Pornography	1	Forgery of a Government Instrument	3
Fraud Financial Statement Forged	1	Interference with an Emergency Call	3
Robbery	3	Violation of a Protective Order	4
Third Degree Felonies	**22**	Terroristic Threat of a Family/House	5
Aggravated Assault Family Violence	5	Terroristic Threat	5
Theft of Property >$20,000<$100,000	1	Criminal Trespass	2
Indecency with a Child - Exposure	1	Cruelty to Animals	1
Interference with Child Custody	5	**Class B Misdemeanors**	**44**
Kidnapping	1	Indecent Exposure	1
Obstruct Retaliation	1	Theft of Service >$20<$500	2
Impersonating a Public Servant	3	Theft of Property >$50<$500	19
Stalking	5	Criminal Mischief >$50<$500	4
State Jail Felonies	**90**	Discharging Firearms	1
Unauthorized Use of a Motor Vehicle	7	Harassment	14
Theft of Vehicle	1	Possession of Marijuana	2
Theft of Service >$1,500<$20,000	2	Graffiti Pecuniary Loss <$500	1
Theft of Property >$1,500<$20,000	25	**Class C Misdemeanors**	**6**
Burglary of a Building	18	Assault Physical Contact	1
Criminal Mischief >$1,500<$20,000	3	Theft from a Person	1
Credit/Debit Card Abuse	23	Theft <$50	3
Fraudulent Use and Possession of Identifying Information	7	Duty on Striking Fixture	1

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VITA

Stephanie J. Engeling attended Austin Community College off and on from 1997 until 2006. She then attended Texas State University-San Marcos where she received a Bachelor of Arts in Psychology with a Forensic Psychology minor in 2009. During her undergraduate studies she worked as a teaching assistant under the supervision of Dr. Crystal Oberle for a Research Methods class. Ms. Engeling began her masters in Criminal Justice in Fall 2009. During her time in the masters program she was employed as a Research Fellow under Dr. Pete Blair.

Permanent Email: stephanie.engeling@gmail.com

This thesis was typed by Stephanie J. Engeling.