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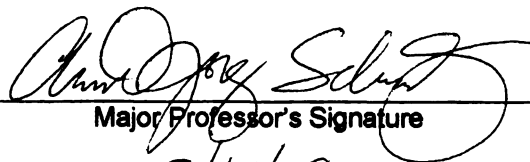
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**POLICE HANDLING OF SEXUAL ASSAULT CASES:
THE FIRST FORMAL DECISION**

By

Kathleen D. Kelley

A THESIS

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

MASTERS OF SCIENCE

Criminal Justice

2008

Dr. Christina DeJong

ABSTRACT

POLICE HANDLING OF SEXUAL ASSAULT CASES: THE FIRST FORMAL DECISION

By

Kathleen D. Kelley

Past research has indicated that many factors affect police decision making in sexual assault cases. Because of the high attrition rate, the first formal decision made by police in the criminal justice system was chosen as the focal point for this study. Law enforcement case records were collected from three separate departments in one Midwestern county with an operating Sexual Assault Nurse Examiner (SANE) program over a six year period. Control variables, demographic information, assault and case characteristics were used in the analyses; stepwise multinomial regression was utilized to determine what factors affect case attrition. Case outcome was categorized in terms of victim withdrawal, police dropping the case and law enforcement referral to the prosecution. Results indicate that assault and case characteristics predict law enforcement decision making in sexual assault cases, particularly suspect interviews and law enforcement effort.

For my parents, who have always been the example of what I aspire to become.

And for the survivors.

ACKNOWLEDGEMENTS

On the trails of life, there are always those who are there to offer support in times of need, guidance when the journey gets difficult and a hand to help pick ourselves up after we have fallen. I am lucky enough to have many such people in my life that have inspired, mentored and encouraged me to do my best and follow my dreams. Firstly, I'd like to thank Fr. John Day, who has shown me what true faith is. He has been a mentor and, over the years, become a best and honest friend. Dr. Mengie Parker has always been a believer in my abilities (even before I was); I am inspired by his enthusiasm for research, along with his genuine and caring personality. Dr. Christopher Maxwell has provided meticulous attention to detail and displayed a passion for research that has helped me to broaden the way I approach new topics.

The women of the Women's Research Group, who welcomed me with open arms and provided a work environment full of compassion, honest conversation and playful trickery, have been absolutely amazing. I thank Megan Greeson and Marissa Beeble who are always willing to help in a pinch when my skills fall short of my analysis capability. Giannina Cabral, for the entertaining conversation and witty banter. Shannon Kobes, my shared brain and fellow coder, who was instrumental in bringing me over to the dark side. Meredith Blackman, for bringing her style and sass paired with deadpan humor that made us all double over in laughter. Emily Dworkin, for sharing the joy that is Paloma (Llama) and bringing out the ridiculous side of me, as well as helping me to laugh at myself, especially in the times when I was at my coding breaking point. Debra Patterson, part

mentor, part friend, part conspirator; I will sorely miss your company and conversation as you move onto bigger and better endeavors.

Finally, I wish to thank my academic advisors and mentors, Drs. Christina DeJong and Rebecca Campbell. To Christina, who helped me to realize goals and help me attain them, taking my passion for gender related issues and guiding me to figure out where I want my academic career to go: your guidance has been immensely helpful over my years at MSU. To Becki, the keeper of the data, who helped me focus my passion, and through whose direction has helped me to discover my passion for research on Violence Against Women to become a more sensitive person and a better feminist. You made me realize that research can be truly fulfilling and worthwhile, especially in the company of intelligent and wonderful women.

To all of the friends and family that provided welcome and needed distractions through this long and arduous process, as well as polite questions concerning my thesis topic, I appreciated every bit of it. Specifically deserving mention, my loving and supportive parents, Drs. Barbara Radecki and Patrick Kelley, who have always told me I can do anything I put my mind to; my grandmothers, the matriarchs of my family who continue to amaze me with their strength, Donata Radecki and Anne Sellers; my siblings, Alicia, Michael and Deirdre Kelley, and Jenna Pagel; and my in-laws, Lori and DeWayne Hellenga, John and Darla Pagel and Dave and Anne Brockway. Lastly, but of the most importance, is my amazing husband, Matt Pagel, who reminds me not to settle for less than excellence and challenges me every day to be a better person.

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Sexual assault is a pervasive social problem that has been linked to multiple long-term negative outcomes, such as psychological distress, repeated sexual victimization, physical health problems, and difficulties in life functioning (Koss, Bailey, Yuan, Herrera, & Lichter, 2003). Epidemiological data suggest that at least 17% of women will be sexually assaulted in their adult lifetime (Tjaden & Thoennes, 1998, 2006); however, most survivors do not report to law enforcement (Campbell, Wasco, Ahrens, Sefl, & Barnes, 2001). Conservative estimates indicate that only 5 to 30 percent of sexual assaults are reported to the police (Binder, 1981), which makes it one of the most underreported crimes (Lopez, 1992; Wright, 1984). Even when victims contact the police, previous studies indicate that only 18 to 44 percent of all reported incidents are referred to prosecutors (Campbell et al., 2001; Chandler & Torney, 1981; Frazier & Haney, 1996; Galvin & Polk, 1983; LaFree, 1980b; Spohn & Horney, 1993). Of those referred reports, prosecutors issue warrants in 46 to 72 percent of the cases, and overall, only 14% to 18% of all reported sexual assaults are prosecuted (Campbell et al., 2001; Chandler & Torney, 1981; Frazier & Haney, 1996; Galvin & Polk, 1983; LaFree, 1980; Sinclair & Bourne, 1998; Spohn & Horney, 1993). For a reported case to be prosecuted, it must first be approved by law enforcement. However, because the prosecution rate of sexual assault cases has been studied, it is important to focus on why cases may *not* be forwarded to the prosecutor, because only a fraction of cases make it through the crucial law enforcement screening stage without being dropped.

The primary purpose of this paper is to examine the formal decision made by law enforcement after a victim has reported: the decision to drop a report of sexual assault or forward it to the prosecutor. I have chosen to focus exclusively on the decision of law

enforcement to drop a case of sexual assault because they are the first formal filter in the criminal justice system. The police have the power and the resources to collect evidence and interview witnesses--in other words, they hold the responsibility to conduct a thorough investigation into each complaint. However, as the byproduct of a discretion-based system, cases do not receive equal treatment. At the level of law enforcement, there are three possible outcomes for a case: a victim may withdraw her participation, law enforcement may decide to drop the case, and police may refer the case to the prosecutor. By focusing on the factors that lead detectives to drop a case, we may gain insight into how and why some cases progress through the criminal justice system and are ultimately prosecuted while others are not.

The literature review will begin with an overview of rape case processing and definitions of key terms. Following this foundational information, the literature that has investigated the factors that predict police action in reported sexual assault cases is explored. Finally, the findings of this study are discussed to examine how case characteristics (e.g. victim use of drugs or alcohol, relationship between the victim and offender, methods of control used by the suspect, victim resistance) and case characteristics (e.g. whether the suspect was interviewed, whether a forensic exam was performed whether the detective took the case seriously) predict which of the three possible outcomes occurred for each case.

LITERATURE REVIEW

Sexual Assault: Definitions and Background

Modern legal definitions of sexual assault typically contain three elements: "(1) any vaginal, anal, or oral penetration by a penis, object or other body part; (2) lack of

consent, communicated with verbal or physical signs of resistance, or if the victim is unable to consent by means of incapacitation because of age, disability, or alcohol or drug intoxication; and (3) threat of or actual use of force” (Giardino, Datner & Asher, 2003: 211). Michigan was one of the first states to pass rape reform laws and remains a progressive state in terms of its law concerning sexual assault.

Michigan has four degrees of Criminal Sexual Conduct (CSC). As can be seen in Table 1, force and coercion are interchangeable; additionally, there is no need for corroboration of the victim’s testimony or proof of resistance, and a person can be charged by their spouse and convicted of criminal sexual conduct. Rape laws were reformed during the 1960s and 70s to protect the privacy of victims of sexual assault and eliminate the requirements for corroboration of evidence and witness testimony (Berger, Searles, & Neuman, 1988). Despite the fact that the definition of “force” has been expanded to include such tactics as coercion, threats of force and incapacitation due to drug or alcohol use, rape myths (e.g. “no” mean “yes”; victims provoke rape; and if the victim to sex the first time, she has consented to have sex again [Brownmiller, 1975; Burt, 1980]) are still believed by many people (Burt, 1980), including police, judges, lawyers and juries (Buddy & Miller, 2001; Campbell & Johnson, 1997; Frohman, 1991; Jordan, 2004; Rose & Randall 1982). Although the law is politically correct to support and validate victims of sexual assault, there is no guarantee that those in charge of carrying out justice will do so fairly and without bias, because

“even when [the police and] prosecutors believe defendants are guilty, they are still concerned about how the characteristics of the case are likely to influence juries or judges. Thus, rape typifications ... not only affect their willingness to believe that a case is in fact rape, but also their willingness to ... fully [invest their time and energy]” (Lafree, 1980b: 843).

Table 1. Michigan Criminal Sexual Conduct Law*

CSC Degree	Classification	Requirements	Maximum Penalty
CSC 1	Felony	A sexual act involving penetration (sexual intercourse, anal intercourse, cunnilingus, fellatio, intrusion into any other body part or object in genital or anal openings) and any of the following: victim is under 13 years old victim is 13-15 years old and is a blood affiliation to the defendant, lives in the defendant's household, or the defendant is in an authority position to the victim multiple actors are involved and force/coercion was used to accomplish the sexual penetration <i>or</i> the victim is incapacitated (physically helpless, mentally incapacitated or mentally defective) weapon involved personal injury + force/coercion personal injury + victim incapacitated defendant/actor is in the process of committing another felony	life or any term of years; AIDS, HIV, STD testing; mandatory Sex Offender registration
CSC 2	Felony	Sexual contact with the genital area, groin, inner thigh, buttock or breast, AND any of the circumstances listed for 1st Degree CSC.	up to 15 years; AIDS, HIV, STD testing; mandatory Sex Offender registration
CSC 3	Felony	Sexual penetration and any of the following: victim is 13-15 years old force or coercion victim incapacitated	up to 15 years; AIDS, HIV, STD testing; mandatory Sex Offender registration
CSC 4	Misdemeanor	Sexual contact and any of the following: force or coercion victim incapacity defendant works for the Department of Corrections and the victim is an inmate	up to 2 years in prison and/or \$500.00 fine; AIDS, HIV, STD testing; mandatory Sex Offender registration

*Michigan Penal Code 750 § 520. Criminal Sexual Conduct Act 328 of 1931.

Sexual Assault Case Outcome at the level of Law Enforcement

There are a number of routes that a case can take after a survivor reports (see Figure 1). During the first stage, the responding officer takes a report, gathers evidence, refers the victim to a Sexual Assault Nurse Examiner (SANE) if the report is within a 72 or 96 hour time frame, and forwards the case to a detective. The detective reviews the

information, contacts the survivor and establishes whether the case will move forward. The three immediate possibilities during this stage are: 1) the victim withdraws participation, 2) the police deem the case unfounded or drop the case and 3) the police refer the case to the prosecutor.

The first case outcome option is that the *victim may withdraw participation*. This outcome has not been widely studied, so it is unknown how many cases fall out of the system because the victim has decided to drop the report and/or not cooperate with law enforcement personnel (Bryden & Lengnick, 1997). Furthermore, it is not known why victims may withdraw after initially filing a report, and a victim who does not wish to continue participation in the case will likely not be a willing contributor to the subsequent investigation, such as follow-up interviews and testimony in court (Buzawa & Austin, 1993; Cretney and Davis, 1997; Hoyle & Sanders, 2000). Lafree (1980b) noted that “By the time a case reaches criminal court, the victim's credibility has been challenged several times” (p. 842). Because victims’ credibility is tested repeatedly during the investigation process, some victims may perceive that they are not being believed, and therefore, may be less likely to cooperate fully with the investigation. In addition, studies have found that some survivors are actively discouraged by law enforcement personnel from pursuing their cases (Campbell 2005, 2006; Jordan, 2004; Schuller & Stewart, 2000). There has also been discussion about why victims may feel pressure to withdraw the case. Based on a study conducted by Williams (1984), Campbell and Raja (1999) coined the term “secondary victimization” to explain judgmental behaviors, actions or attitudes, whether perceived or actual, that alienates and discourages victims from proceeding with their case. This potentially devastating treatment is an example of unresponsive case

processing (Campbell & Raja, 1999; Rose & Randal, 1982). Other factors that may influence a victim's decision to withdraw her participation from a case include: threat of retaliation from the offender, non-supportive reactions from family or friends and self-blame for the assault (Jordan, 2004).

The second possible case outcome is that *law enforcement may drop the case*. A typical way to do this is to declare it “unfounded,” but not all cases are dropped by un-founding. “Unfounding” is defined by the Federal Bureau of Investigation as “Classification of reported crimes that are found to be false or baseless” (Federal Bureau of Investigation, 2006). Anywhere from 8% (Lawrence & Greenfeld, 1997) to 20% (LeGrand, 1973) of all rape cases are considered unfounded at the case conclusion. Complaints that are seen as unfounded (whether labeled “Unfounded” or not) typically have (1) evidence showing that the victim was intoxicated; (2) time delay in the victim reporting; (3) lack of physical evidence; (4) the victim refusing to submit to a medical examination; and (5) a weapon used in the assault without visible injury to the victim (Gregory & Lees, 1996; LeGrand, 1973). These factors do not support whether a rape has been committed, but they do impact the credibility of the victim and the chances of obtaining a conviction of the offender (LaFree, 1980b; Rose & Randall, 1982; Spohn & Spears, 1996).

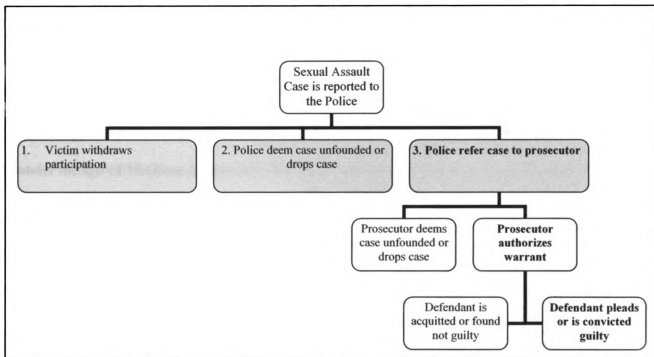
Third, *the case may be forwarded to the prosecutor*. There is no consensus on why police choose to forward a case of sexual assault, but Campbell (1998) found that cases were significantly more likely to progress through the system if the wishes to forward the case by the victim and law enforcement were “matched”. Cases were only matched when both the victim and the police wanted the same outcome, for example

prosecution. An example of an unmatched case would be if a victim wished to forward the case to the prosecutor while law enforcement wanted to drop the case. However, Campbell also found that some cases were dropped against the wishes of the victim, which would suggest that there are more reasons that law enforcement refer than just a desire to prosecute. Rose and Randall (1982) found that in order for police to want to investigate and pursue a case, the victim had to have characteristics of a “real” rape, including victim legitimacy, injuries sustained, and believability in terms of non-consent and resistance. Similar to Campbell’s matching, if a victim was adamant about prosecution but her case did not reflect a “real rape,” the police would be more likely to neglect the case, thus making warrant authorization or prosecution less likely.

Once the case has been sent to the prosecutors, it may be dropped (for reasons ranging from insufficient evidence to unlikelihood that the case will be successfully prosecuted) or a warrant may be authorized for the suspect to be arrested (if they are not already in custody) and subsequent prosecution. Typically, prosecutors authorize warrants for anywhere between half and three-quarters of cases referred by the police (Chandler & Torney, 1981; Frazier & Haney, 1996; Galvin & Polk, 1982; LaFree, 1980b; Spears, Beichner, and Davis-Frenzel, 2001). After a warrant is authorized, the suspect will either plead guilty or not guilty. When a suspect pleads not guilty, they are entitled to a bench trial (judge only) or jury trial, where they will be either convicted, acquitted, or found not guilty. On average, 88 percent of cases that are prosecuted end in a plea bargain or conviction (Chandler & Torney, 1981; Frazier & Haney, 1996; Galvin & Polk, 1982; LaFree, 1980b; Spears et al., 2001). Overall, when taking all reported cases into account, it is typical for 16 percent of reported sexual assaults to be successfully

prosecuted (Chandler & Torney, 1981; Frazier & Haney, 1996; Galvin & Polk, 1982; LaFree, 1980b).

Figure 1. Case Progression in the Criminal Justice System



Factors that Predict Police Action in Sexual Assault Cases

A simple diagram of the basic options of sexual assault outcomes is displayed in Figure 1. This study will focus only on the gray boxes, which display the three basic outcomes possible at the level of law enforcement, 1) victim withdrawal, 2) police drop case, or 3) police forward case. The next portion of the literature review will examine previous research on the factors that predict police action in sexual assault cases. The factors that will be examined will include control variables, demographics, assault characteristics (e.g. victim resistance, relationship to the offender) and case characteristics (e.g. number of suspects interviewed, forensic examination). However, prior research has focused on what factors predict a case moving *forward*, as opposed to the focus of this study, which is examining why cases *do not* move forward. Past studies

have not clearly distinguished between a case moving forward versus not moving forward. They have focused specifically on the third gray box and subsequent prosecutorial decisions, which is why the research question in this study that is specifically examining the factors that predict a case not moving forward is in need of distinction.

Control and Demographic Characteristics. There has been some support that victim age affects case outcome, but a portion of that literature is focused on victims under the age of 18 (Rose & Randall, 1982; Spears & Spohn, 1996, 1997), which was not a focus of the current study. However, Rose and Randall (1982) mentioned that, along with adolescent victims of sexual assault, younger women (over 18) were also more likely to have their case dismissed because they were viewed as more suspicious and more likely to report a false rape to hide consensual activity in comparison to children and elderly victims. Studies focusing on adult survivors have found that age does play a role in case outcome (Chandler & Torney, 1981; DuMont & Myhr, 2000). Chandler and Torney (1981) conducted a study exploring case outcome and found that victims ranging in age of 20 to 29 had their cases warranted in 53% of cases, while older victims, ranging in age from 30 to 39 had a warranting rate of 42%. Similarly, DuMont and Myhr (2000) found that cases involving older women were less likely to result in the prosecutor authorizing a warrant.

Suspect age has not been the focal point of many studies typically for reasons of non-documentation; the most common reason this piece of information is not recorded is when a suspect is not identified by police or the survivor. Suspect age is mentioned in two contexts: average age and significance as a predictor. The average age of suspects is

normally higher than that of victims (Bouffard, 2000; LaFree, 1980b; McCormick, Maric, Seto & Barbaree, 1998; Spohn & Holleran, 2001; Spears & Spohn, 1996; Spohn & Spears, 1996). In studies where a suspect's age was documented and used as an independent variable, age was not significant (Bradmilller & Walters, 1985; LaFree, 1980b; McCormick et al., 1998; Spohn & Holleran, 2001), except for two studies (Spears & Spohn, 1996; Spohn & Spears, 1996), where offender age affected the likelihood of conviction. However, both studies showing significance of offender age were from the same dataset and research project.

Literature on victim race has shown that cases where victims are of a racial minority are taken less seriously than cases of a Caucasian victim. Many studies have focused on the race of the perpetrator or on the race of both the offender and the victim. Some studies have found that race has played a role in case outcome (LaFree, 1980a, 1981; Chandler & Torney, 1981; Rose & Randall, 1982; Bradmilller & Walters, 1985; Frohmann, 1997; Spears et al, 2001). LaFree (1980a) found that cases with Caucasian victims and African American suspects were more likely to be warranted. Similarly, Chandler and Torney (1981) found that cases including a Caucasian survivor and a non-Caucasian offender were also more likely to be warranted. Other studies have found no significant impact of race on case outcome (Kerstetter, 1990; Frazier & Haney, 1996; Spears & Spohn, 1996, 1997; Bouffard, 2000). In a more general sense, Frazier and Haney (1996) found no significant relationship between the race of the victim or offender and case referral. Bouffard (2000) examined specifically the relationship of African American offender and Caucasian victim and case outcome, which also yielded no significance.

Although Campbell, Patterson and Lichty (2005) found that SANE programs were effective in handling and helping to process sexual assault cases, no other research has been conducted specifically on SANE program effectiveness. In the current study, all cases were investigated while a SANE program was in place with the degree of law enforcement participation varying, which has not been examined. Two other control factors that are not found in prior research include the presence of a SANE trained detective and department site of collection. Although they exist nationwide, SANE programs may or may not have the access to train their local police departments, and the number of detectives and road patrol officers is even more unknown. Department site of collection is a variable unique to this study, but since local police agencies are autonomous, they will each have their own procedures, infrastructure and training concerning sexual assault cases, which is why it was such an important variable to include in the analyses.

Assault Characteristics. Characteristics of what occurred in the assault itself may influence police action in a case. Assault characteristics include victim/offender relationship, control tactics used by the suspect, victim resistance and substance use. The relationship between the victim and the offender can play a role in case outcome because, for many years, the law protected husbands from being charged with rape by their wives (Brownmiller, 1975; Gelles, 1977; Martin, Taft & Resick, 2007). Even now, studies show that sexual assault cases are less likely to progress through the criminal justice system if the victim and offender have been married or had a prior sexual relationship or acquaintanceship (LaFree, 1980b; Chandler & Torney, 1981; Rose & Randall, 1982; Kerstetter, 1990), but these studies are not conclusive. Other studies show no effect

(Spohn, & Horney 1993; Spohn & Spears, 1996; Spohn & Spears, 1997; Bachman, 1998) or a reverse effect, where stranger cases are more likely to be dropped (Spears, et al., 2001).

Control tactics used in sexual assault have been studied in three broad categories: weapon use, use of force and use of threats. Weapon use as a control tactic has been the most widely studied; research states that assaults in which the perpetrator used a weapon have a higher rate of progression through the criminal justice system (Campbell, et al., 2001; Chandler & Torney, 1981; Kerstetter, 1990; LaFree, 1981; Rose & Randal, 1982). Violence resulting in injury (use of force) to control a victim of sexual assault has a higher rate of progression because it is a visible way to demonstrate non-consent (Bradmillier & Walters, 1985; McGregor, Le, Marion, & Wiebe, 1999; McGregor, Wiebe, Marion & Livingstone, 2000; Rose & Randall, 1982; Slaughter, Brown, Crowley & Peck, 1997). The third control mechanism is the least studied, verbal threats. These threats can be threats against the victim or her family/loved ones. Only one study has examined the role of threats on law enforcement decision making; Frazier and Haney (1996) found that cases involving verbal threats were more likely to be referred to the prosecutor.

Victim resistance is not a requirement for an allegation of sexual assault to be substantiated, but if it is absent from a case, the victim may appear less credible to the police (Rose & Randall, 1982). Studies have found that resistance in some form is common in cases of sexual assault (Siegel, Sorenson, Golding, Burnam & Stein, 1989; Zoucha-Jensen & Coyne, 1993). Zoucha-Jensen & Coyne used a sample of 150 female survivors from Omaha, Nebraska to assess the relationship between resistance and avoidance of a sexual assault. The authors found a positive relationship between physical

resistance and avoidance of an assault. Siegel, et al. (1989) conducted phone interviews of men and women in the Los Angeles area and found that three-quarters of the sample had resisted, either physically or verbally. The authors went on to analyze whether resistance played a role in the outcome of the assault (categorized as: none, attempted, contact only, intercourse or something else) but the relationship was significant at the bivariate level, not in the multivariate analyses.

Substance use during the assault (drugs or alcohol) has been shown to have a direct effect between intoxication and negative perception of the victim (Schuller & Stewart, 2000). The authors found that the more intoxicated the victim was at the time of the assault, the more negatively she was viewed. However, the study found that only victim credibility and the perception of the likelihood that the offender would be found guilty in court significantly affected the decision to charge the suspect, which would subsequently lead to an arrest, suspect interview and the referral of the case to the prosecutor's office. If intoxication plays a role in the credibility of the victim, and the credibility plays a role in how the case is handled, then intoxication may ultimately have a negative effect on the case outcome.

Case Characteristics. Characteristics of how the case was investigated and the context of the case may also influence police action in a case. The effort put forth by the investigator is a decision in any criminal case that is determined by the veracity of the complaint and the credibility of the victim. In a series of qualitative interviews with sexual assault survivors, Patterson (2008) found that survivors were treated more compassionately by law enforcement in cases that were ultimately prosecuted than cases that were not prosecuted. Survivors with cases that were not prosecuted reported harsher

treatment by law enforcement, which may have been linked to the survivors' credibility. Veracity and credibility, in turn, establish how likely the case is to be prosecuted, which determines the resources, or effort, that will be allocated to that particular case (LaFree, 1980b; Rose & Randall, 1982). Effort exercised by the investigator can make a difference in terms of amount of evidence collected and number of witness or suspect interviews conducted, which can have a cumulative effect on the progression of the case.

Although there is literature on suspect interviews by police (Mann, Vrij & Bull, 2004; Moston, Stephenson & Williamson, 1992), the occurrence or importance of these interviews in sexual assault cases has not been explicitly focused upon outside of training textbooks (for examples see Leo, 2001; Savino & Turvey, 2004). Savino and Turvey (2004) suggest proper location (no distractions), furniture (bare room with two chairs) and tactics to elicit facts of the case and a partial or full confession. The operation of American courts makes it highly unlikely that a case of sexual assault can proceed without an identified and interviewed suspect (defendant), and no research has been conducted on the relationship between a suspect interview and sexual assault case outcome. The final characteristic of an investigation is whether a forensic exam was performed (Campbell, Patterson & Lichty, 2005). Campbell, et al. found that forensic exams make a difference in rape investigations because of the detail and thoroughness of the exams performed by Sexual Assault Nurse Examiners in collecting evidence and determining injury.

The Current Study

Researchers have studied the prosecutorial decision making process (Frohman, 1991, 1998; Spohn, et al., 2001) and the reasons a victim may choose to report or not

report (Williams, 1984; Burgess & Hazelwood, 2001); however, little has been documented on police decision making, aside from investigational procedure techniques that may influence the victim (Archambault, 2007a, 2007b; Burgess & Hazelwood, 2001) or characteristics that influence the decision to forward a case onto the prosecution (Kerstetter, 1990; Ross & Randall, 1982). Very little literature exists regarding the reasons for a sexual assault victim to discontinue involvement with the police in a sexual assault case, but victim withdrawal in interpersonal or domestic violence has been examined and may provide insight, because withdrawal of victim participation is a common occurrence, citing reasons such as wanting the violence to end without wanting the suspect out of the victim's life, disinterest in public intervention and hopes of repairing the relationship with the suspect (Buzawa & Austin, 1993; Cretney and Davis, 1997; Berk & Loseke, 1980-1981; Hoyle & Sanders, 2000). Because most victims know their attacker, risking private repercussions and blame within their social networks (e.g. family, friends, partner), let alone facing their attacker in a public court hearing, can sometimes be a deterrent that influences victims to withdraw participation in police investigations (Jordan, 2004).

The current study will examine what factors predict whether reported sexual assault cases are either: 1) dropped/withdrawn by the victims; 2) dropped by law enforcement; or 3) referred by police to prosecutors for further consideration. There are two research questions in this paper. First, do assault characteristics play a role in the victim's decision to drop a case, law enforcement's decision to drop a case, or the police decision to forward a case? The specific hypotheses to be tested are: (1) Victims who use drugs and/or alcohol and become unconscious or black out will have a different

probability of having their case dropped by law enforcement than victims who do not. (2) Victims who know their offenders will have a different probability of having their case dropped by law enforcement than victims who do not. (3) Victims who are subjected to violent methods of control will have a different probability of having their case dropped law enforcement than victims who are not. (4) Victims who resist will have a different probability of having their case dropped by law enforcement than victims who do not.

Second, do investigation characteristics or case context influence the victim's decision to drop a case, law enforcement's decision to drop a case, or the police decision to forward a case? The specific hypotheses to be tested are: (1) Cases that include a suspect interview will have a different probability of being dropped than cases where police do not interview a suspect. (2) Victims who have a SANE forensic exam have a different probability of having their case dropped by law enforcement than victims who are not. (3) Victims who have a detective who takes their case seriously have a different probability of having their case dropped by law enforcement than victims who do not.

Additionally, several control and demographic variables will be used during the analyses. Control variables include site of data collection (department), whether the lead detective was SANE trained and the time period in which the assault occurred (before or after a SANE program implementation). Demographic information includes victim and suspect age and race.

METHODS

Sample

The research team completed Freedom of Information Act (FOIA) requests with all three police departments to request police reports for all reported adult sexual assault

cases from 1995 through 2005. Any case in which sexual assault occurred was included in the sample, and in some instances, the cases involved other crimes such as intimate partner violence, robbery, physical assault, kidnapping, and other assaults. Due to technology restrictions and lack of organized archiving of reports before 1999, two of the three departments were unable to give us any cases reported prior to January 1, 1999. These restrictions seriously curtailed the possibility of being able to examine pre-SANE to post-SANE changes because four years of pre-SANE data were completely unavailable in two of the focal departments (see below for more discussion on how this issue was ultimately resolved). In total, 352 adult sexual assault cases were collected.

From this initial sample of 352 reports, 43 cases were removed from the sample because the suspect was unknown, meaning that the suspect's relationship was not specified or categorized. Cases with an unknown relationship between the victim and suspect were different than cases where the suspect was categorized as a stranger because the documentation on the victim/offender relationship was completely missing from the report (system missing in the data set). Cases with an unknown suspect, whether as a result of poor or incomplete documentation had a great deal of additional correlating missing information, such as the lack of a suspect interview, missing suspect age and race. This information was critical in these variables and was coded similarly when it was omitted from the reports (as either "Missing" or "Not Applicable," depending on the specific variable). Because the 43 cases were missing this information across several variables, colinearity issues arose across the above mentioned variables because of the way in which the information was coded. These cases also had a skewed case outcome, which is the dependent variable in this study, of being dropped by either the victim or law

enforcement, which may indicate that cases with incomplete documentation were given less attention and resources and therefore deemed less likely to proceed in court, which could have led to the withdrawal of victim participation or outright lack of participation on the part of the police.

As noted above, two of the three departments were unable to provide pre-SANE cases. Indeed, only 43 pre-SANE cases were obtained (approximately 10% of the total initial sample) and the majority was from one department. The overall intent of collecting 10 years of data was to see how reporting practices changed from the pre-SANE to post-SANE time period, but because of the substantial degree of missing pre-SANE data, it was decided that a pre-post SANE comparison was not possible, and that the 43 pre-SANE cases obtained should be dropped from the current study's sample. Although dropping these cases reduces statistical power, it substantially improves the conceptual clarity of the study and what it can and cannot reasonably examine. Previous literature suggests that SANE programs can have a significant effect on sexual assault cases in terms of evidence collection, reliability of evidence collected and expert testimony (Campbell, et al., 2005). Evidence collection, quality and reliability of evidence and law enforcement training, among other factors have been found to be improved in these cases. Without an adequate sample size of pre-SANE cases to test these effects in the current study, the few pre-SANE that were collected only call into question whether there would be consistent meaning in variables analyzed, as well as conceptually cloud the sample. By removing these cases from the sample, the focus of study is narrowed, but conceptually clearer: this study examines what factors predict law enforcement case outcomes among post-SANE cases (only). Paired with the 43 cases that were laden with

missing information (and useless in the analyses), the final sample size for the current study was N=266.

Procedures

In order to develop the coding framework, the principle investigator, co-investigator and two research assistants read a sub-sample of 20 cases to assess the content of the reports and the level of detail about which they documented sexual assault. From that initial reading, a coding scheme was developed that covered ten major topics: 1) report characteristics, 2) victim characteristics, 3) victim interaction with law enforcement, 4) assault characteristics, 5) documented injuries, 6) suspect characteristics, 7) suspect interaction with law enforcement, 8) case characteristics, 9) consultations with other professionals, 10) tone of the report. Within each of these major topics, the team designed specific questions to capture relevant information. Table 2 shows a simplified version of the layout and sample questions.

Table 2. Sections and Sample Questions

1) Report Characteristics
Date of the Initial Report
Number of Days between the Report and the Assault
2) Victim Characteristics
Demographics (<i>Age, Sex, Race</i>)
Was the victim under the influence of drugs/alcohol at the time of the assault? (<i>Yes, No</i>)
3) Victim interaction with Law Enforcement
Was the victim Informed of her Rights as Victim? (<i>Yes, No</i>)
Did the victim want to prosecute? (<i>Yes, No</i>)
4) Assault Characteristics
Did the suspect use control mechanisms? (<i>Yes, No</i>)
Was there Penile/Vaginal penetration? (<i>Yes/No</i>)
5) Documented Injuries
General Physical Injury (<i>Presence Documented, Absence Documented</i>)
General Anogenital Injury (<i>Presence Documented, Absence Documented</i>)
6) Suspect Characteristics
Demographics (<i>Age, Sex, Race</i>)
Was the suspect under the influence of drugs/alcohol at the time of the assault? (<i>Yes, No</i>)
7) Suspect interaction with Law Enforcement
Was the suspect read his rights as a suspect (Miranda rights)? (<i>Yes, No</i>)
Did the suspect cooperate with the investigation? (<i>Yes, No</i>)
8) Case Characteristics
Did the police examine places to find evidence? (<i>Yes, No</i>)
Case Outcome (<i>victim drops, law enforcement drops, police forward case</i>)
9) Consultations with Other Professionals
Did law enforcement consult with a Sexual Assault Nurse Examiner? (<i>Yes, No</i>)
Did law enforcement consult with the Prosecutor? (<i>Yes, No</i>)
10) Tone of the Report
Did the detective/responding officer base decisions/ placing importance on information from a SANE/Medical Professional? (<i>Yes, No</i>)
Did the detective/responding officer alter his/her approach to the case based on what the detective thought prosecution would want/would do/would not do? (<i>Yes, No</i>)

For each question, the research assistants recorded the specified information, the source of the information (e.g. responding officer's report, evidence tech's report) and any comments that contained any pertinent information outside the scope of the questions on the code sheet (see Figure 2). The final code sheet included a total of 124 questions. Thirty percent of the cases were coded by two research assistants, and overall kappa was .81, which reflects high inter-rater agreement (Pett, 1997).

Figure 2. Excerpt from Coding Sheet

Q:	(Category) Physical Injury During Assault	(Answer Choices) Circle/ Enter Code	Law Enforcement Source	Comments: Information Source (e.g. victim, SANE, detective observation, etc...)
74	Physical injury	1= Presence documented 2= Absence documented 777= Not applicable 999= Missing	1= LD 2= SD 3= RO1 4= RO2 5= Victim's Statement 6= Evidence Technician 7= Suspect's Statement 8= Other (specify) 9= Conflicting Reports 777= Not applicable	

Measures

The codes for the dependent variable and all independent variables and descriptive percentages are provided in Table 3. The dependent variable, case outcome, is a three level dichotomous variable: victim makes report but withdraws participation/cooperation (35%), police decide to drop case (16%), and police refer case to prosecutor (49%).

Independent variables include four broad categories: control variables, demographic variables, assault characteristics and case characteristics. Control variables include department, whether the lead detective was SANE trained, law enforcement involvement with the SANE program, victim and suspect race, and victim and suspect age. Over half of the collected cases were from the largest department, while a quarter of the cases came from the mid-sized department, with and a fifth of cases coming from the County Sheriff department. Law enforcement involvement in the SANE program was measured between September 1, 1999 and December 31, 2005. The period of low engagement in the county of study was from September 1, 1999 until November 30,

2001; the program was operational but law enforcement was not yet fully co-operational because of the director in charge. Once the new director took leadership of the program on December 1, 2001, law enforcement was more willing to work together with the SANE program. Just over half of the cases occurred in the period of high law enforcement engagement with the SANE program. Whether the detective was SANE trained was measured by manually searching all available sign-in sheets for officers from the three focal departments. Training sessions were hosted by the county SANE program starting in 1999 and continuing today. Between 1999 and 2005, a quarter of cases in the sample involved a SANE trained member of law enforcement.

Demographic variables include measures of victim and suspect age, as well as victim and suspect race. Victim and suspect demographics were recorded using the documentation by law enforcement in the cases. A vast majority of victims and suspects were white, while the mean victim age was 29 years and the average age of a suspect was 33 years.

Assault characteristics include the victim's use of drugs or alcohol, victim/offender relationship, victim resistance and methods of control used by the suspect, such as the use of a weapon, use of verbal threats, physically restraining the victim and using violence to hurt the victim. Victim's use of drugs or alcohol was measured by documentation of evidence provided by the victim. Victims were under the influence of drugs or alcohol in under half of the cases, while they were unconscious or blacked out a quarter of the time. The relationship between the victim and offender was coded using the label given by the victim in the case (e.g. spouse, ex-partner, co-worker, etc.). It was later recoded into a dichotomous variable of "Known" and "Stranger" and

the vast majority of survivors knew their attacker in some capacity. Three quarters of victims were able to resist their attacker. Any form of resistance, whether it was verbal or non-verbal was coded in the affirmative. Methods of control were recorded by each specific instance mentioned by the victim in the police report using a dichotomous scale. Usage of control methods varied across cases, ranging from 6% (weapon use) to 54% (physical restraint).

Case Characteristics consist of whether the suspect was interviewed, whether a forensic exam was performed, and law enforcement effort. Suspect interviews were documented in the police reports, and interviews were measured by recording how many suspects were interviewed in each report. Roughly 60 percent of cases included a suspect interview. Forensic exams were measured by documentation in the police reports, with over half undocumented. Law enforcement effort was measured by a subjective, collective examination of the case, recorded by the amount of effort each detective invested in the case. There were two possible responses which were evenly split: 1) Detective did not appear to put little to no effort into the case and 2) Detective appeared to put a moderate to above average amount of effort into the case.

Table 3: Descriptive Statistics on the Sample (N=266).

Variable	Values	Percentages
Dependent Variable		
Case Outcome	0=Victim Withdrawal	35
	1=Police Drop	16
	2=Police Refer	49
Independent Variables		
<i>Control Variables</i>		
Collection Site (Department)	1=County Sheriff Dept.	19
	2=Second Largest County City Dept.	25
	3=Largest County City Dept.	56
SANE Trained Detective	0=No, not mentioned	74
	1=Yes	26
LE Involvement with SANE program	0=Low LE Engagement	45
	1=High LE Engagement	55
<i>Demographic Variables</i>		
Victim Race	1=White	88
	2=Non-white	12
Suspect Race	1=White	80
	2=Non-white	20
Victim Age	1=18-21 years	30
	2=22-25 years	23
	3=26-35 years	19
	4=35 and older	28
	Mean age=29 years	--
	Std. Deviation=12	
Suspect Age	1=15-25 years	31
	2=26-35 years	27
	3=36-45 years	19
	4=46 and older	23
	Mean age=33 years	--
	Std. Deviation=12	
<i>Assault Characteristics</i>		
Victim/Offender Relationship	1=Stranger to Victim	7
	2=Known to Victim	93
Victim use of drugs/alcohol	0=No, not mentioned	60
	1=Yes	40
Victim unconscious/blacked out during the assault	0=No, not documented	74
	1=Yes	26
Victim Resistance	0=No, none documented	25
	1=Yes, the victim resisted	75
Control Mechanism-Verbal Threats	0=No, not mentioned	72
	1=Yes	28
Control Mechanism-Physical Restraint	0=No, not mentioned	46
	1=Yes	54
Control Mechanism-Physically Hurt	0=No, not mentioned	69
	1=Yes	31
Control Mechanism-Weapon Used	0=No, not mentioned	94
	1=Yes	6

<i>Case Characteristics</i>		
Number of Suspect(s) Interviewed in cases where a Suspect's Identity was Known by Law Enforcement	0=No suspects	41
	1=1 or more Suspects	59
Forensic Exam	0=No forensic exam documented	51
	1=Yes, non-SANE exam done	6
	2=Yes, SANE exam done	43
Detective takes case Seriously	1=LE put little to no effort into case investigation	49
	2= LE put moderate to a great deal of effort into case investigation	51

RESULTS

Prior to conducting the substantive quantitative data analysis, the raw data were statistically and graphically examined to verify data quality, potential outliers, and distributional problems that may require transformations or alternative methods. Colinearity was checked using Ordinary Least Squares Regression, checking for a tolerance of 0.50 or lower; no variables showed strong correlation with another.

Bivariate Analyses

Because of the number of variables analyzed, the bivariate statistics have been organized into four groups that correspond to the models used in the regression. Table 4 summarizes chi square analyses that explored the relationship between the control variables and the dependent variable. Department of case collection was statistically significant at the $p < .05$ level. Both the largest and smallest department had the highest referral percentage, while the middle department had a fairly even split between victim withdrawal, police drop and referral to prosecution, with the highest percentage of cases under law enforcement dropping the case. Degree of law enforcement involvement in the SANE program and the presence of a SANE trained member of law enforcement were not shown to be statistically significant. SANE trained officers more commonly referred

the case to prosecution, but those who were *not* trained had a higher percentage rate or referral.

Table 4: Bivariate Analyses, Control Variables (N=266).

<i>Variable</i>	<i>Categories</i>	<i>Victim Withdraws Participation (Percent)</i>	<i>Police Drop/Unfound Case (Percent)</i>	<i>Police Refer Case to Prosecution (Percent)</i>
<i>*Collection Site (Department)</i>	County Sheriff Dept.	29	14	57
	Second Largest County City Dept.	38	26	36
	Largest County City Dept.	35	12	53
<i>Law Enforcement Involvement in SANE Program</i>	Low Engagement	31	16	53
	High Engagement	37	16	47
<i>SANE Trained Law Enforcement</i>	No	33	16	51
	Yes	39	15	46

* denotes a significance of $p < .05$

**denotes a significance of $p < .01$

Table 5 displays the chi squared analyses that investigated the relationship between demographics and case outcome. Suspect age was statistically significant ($p < .05$), while victim age and race were shown to be not statistically significant. Suspects who were in the youngest category (ages 15 to 25) were most commonly referred to the prosecution. Victim age did not seem to have a meaningful effect across any age group. Victims and suspects had the similar referral percentage rates across being white and non-white. For the multivariate analyses, victim age and suspect age will be continuous instead of categorical.

Table 5: Bivariate Analyses, Demographic Variables (N=266).

<i>Variable</i>	<i>Categories</i>	<i>Victim Withdraws Participation (Percent)</i>	<i>Police Drop/Unfound Case (Percent)</i>	<i>Police Refer Case to Prosecution (Percent)</i>
<i>Victim Age</i>	1=18-21 years	27	16	37
	2=22-25 years	18	6	37
	3=26-35 years	18	10	23
	4=35 and older	29	10	35
<i>Suspect Age*</i>	1=15-25 years	24	16	43
	2=26-35 years	21	10	40
	3=36-45 years	18	3	31
	4=46 and older	29	13	18
<i>Victim Race</i>	White	34	16	50
	Non-White	35	13	52
<i>Suspect Race</i>	White	33	15	52
	Non-White	35	18	47

* denotes a significance of $p < .05$

**denotes a significance of $p < .01$

Table 6 summarizes the chi square analyses that explored the relationship between the assault characteristics and dependent variable. Victim unconsciousness during the assault and verbal threats used to control the victim were statistically significant at the $p < .05$ level. Victim/offender relationship, resistance, use of drugs or alcohol, physically restraining, injuring or using a weapon on the victim as a control mechanism were not statistically significant. If the offender was a stranger, the most likely outcome was that police would drop the case, compared to the most common outcome of referral if the suspect's identity was known. If the victim was unconscious or blacked out, the victim was most likely to drop the case. When the victim was under the influence of drugs or alcohol, she was almost equally likely to drop the case as to have it referred to the prosecution. If a victim resisted the attack in any way, the most common law enforcement response was to forward the case. If the suspect used verbal threats,

physical restraint, physically hurting or a weapon to control the victim, the most common police response was to refer the case.

Table 6: Bivariate Analyses, Assault Characteristics (N=266).

<i>Variable</i>	<i>Categories</i>	<i>Victim Withdraws Participation (Percent)</i>	<i>Police Drop/Unfounded Case (Percent)</i>	<i>Police Refer Case to Prosecution (Percent)</i>
<i>Victim/Offender Relationship</i>	Stranger	26	26	47
	Known	35	15	50
<i>Victim use of Drugs/Alcohol</i>	No, not mentioned	31	16	53
	Yes	40	15	45
<i>Victim Unconscious/Blacked Out*</i>	No, not mentioned	31	15	54
	Yes	45	19	36
<i>Victim Resistance</i>	No, not mentioned	36	21	42
	Yes, victim resisted	34	14	52
<i>Use of Verbal Threats*</i>	No, not mentioned	38	18	44
	Yes	27	9	64
<i>Use of Physical Restraint</i>	No, not mentioned	38	19	43
	Yes	32	13	55
<i>Use of Physically Hurt</i>	No, not mentioned	35	16	49
	Yes	32	16	52
<i>Control Mechanism-Weapon Used</i>	No, not mentioned	36	16	48
	Yes	12	12	76

* denotes a significance of $p < .05$

**denotes a significance of $p < .01$

Table 7 displays the results of the chi squared tests that investigated the relationship between case characteristics and the dependent variable. Number of suspects interviewed and law enforcement perceived effort were both statistically significant at the $p < .01$ level. In cases where the identity of a suspect was known but no interview was conducted, the most common outcome was for victims to withdraw (whether this is before or after law enforcement had the opportunity to interview the suspect is unknown). Cases where one or more suspect was interviewed had the most common outcome of police referral to prosecution. As may be expected, cases with little to no law

enforcement effort had the most common outcome of withdrawal of victim participation, while cases with moderate to above average effort had police referral as most common. The presence of a forensic exam was not found to be statistically significant. Those who received a SANE exam had the highest percentage of cases that police forwarded to the prosecution, but non-SANE exams and no documentation of any exam had the same referral rate.

Table 7: Bivariate Analyses, Case Characteristics (N=266).

<i>Variable</i>	<i>Categories</i>	<i>Victim Withdraws Participation (Percent)</i>	<i>Police Drop/Unfound Case (Percent)</i>	<i>Police Refer Case to Prosecution (Percent)</i>
<i>Number of Suspect(s) Interviewed**</i>	No suspects	49	21	30
	1 or more Suspects	25	12	63
<i>Forensic Exam</i>	No, not mentioned	39	16	45
	Yes, non-SANE exam	50	13	37
	Yes, SANE exam	27	16	57
<i>Law Enforcement perceived effort**</i>	LE put little to no effort into case investigation	48	17	35
	LE put moderate to a great deal of effort into case investigation	22	15	63

* denotes a significance of $p < .05$

**denotes a significance of $p < .01$

Multivariate Analyses

Multinomial logistic regression was used to explain the variation in law enforcement outcome using control variables, demographics, assault and case characteristics. Because this is exploratory research with many predictors but few cases, a sequential process was used to build and test an empirical model (see Hosmer & Lemeshow, 1989). All variables were not entered into a single model, as that would have violated the cases-to-variables ratio; rather, a series of models were analyzed to test for

significant variables that were combined into the final model. Model 1 = control variables, Model 2 = demographics, Model 3 = assault characteristics, and Model 4 = case characteristics. This analysis allowed for tests of: 1) the effects of assault characteristics (e.g., victim use of drugs/alcohol, victim/offender relationship) on law enforcement decisions; 2) the impact of case characteristics on law enforcement decisions (e.g., completion of a forensic examination, law enforcement effort), controlling for demographic and SANE program characteristics; and 3) the overall predictability of law enforcement decisions. The first model included only the three control variables as factors (see Table 2). Variables with a significant a Wald test and odds ratio were retained for inclusion in the final model. For instance, report collection site (i.e., department) was a significant predictor of case outcome; therefore, this variable was retained in all subsequent models as it indicates that which department handled the case strongly influenced case outcome and needed to be accounted for in all analyses. The second model included the four demographic variables as predictors, with significant variables used in the final model. The third model included the seven assault characteristics variables as predictors; again, significant variables were retained for the final model. The fourth model included the three case characteristics variables as predictors, with significant variables retained for the final model.

The fifth model (which included only the significant variables from the prior four) was estimated using a step-wise procedure, with variables organized into conceptually meaningful blocks to be entered sequentially, with the order planned to facilitate examination of the contribution of variables in later blocks, controlling for the effects of variables in earlier blocks (Hosmer, Taber & Lemshow, 1991). The fifth model took all

variables significant in models one, two, three and four (department, unconsciousness and/or intoxication, number of suspects interviewed, law enforcement effort) and used them as factors in this better fitting model, in agreement with Hosmer, Taber and Lemeshow's recommendations (1991). In order to determine which variables contributed the most to the overall model, a series of likelihood ratio statistics testing for the significant effect of each level to predict unique variance in the outcome variable were computed, which is explained and detailed in Table 13.

Table 8 presents the first analysis of this model that included the control variables expected to predict the least variance in case outcome. In this preliminary model, department site was the only significant variable related to case outcome. Cases from the medium department in comparison to cases from the largest department were 3.1 times more likely to be referred rather than dropped by law enforcement. The degree of involvement between the law enforcement agency and the county's SANE program was not significant, nor was whether law enforcement had participated in cross-agency trainings offered by the SANE program. The overall model was not significant using the Likelihood Ratio test, indicating that the model did not provide a reasonably good fit for the data. Based on Cox and Snell's pseudo r-square, the variables in the model explained 4% of the variation in case outcome.

Table 8: Control Model

CONTRAST Police Refer
and Victim Withdraws

CONTRAST Police Refer
and Police Drop

<i>Predictors</i>	<i>B</i>	<i>SE</i>	<i>Wald</i>	<i>Exp(B)</i>	<i>B</i>	<i>SE</i>	<i>Wald</i>	<i>Exp(B)</i>
Intercept	-0.190	0.282	0. 453	--	-1.422	0.404	12.371	--
Smallest relative to Largest Site	-0.251	0.367	0.469	0.778	0.059	0.497	0.014	1.061
Medium relative to Largest Site	0.458	0.342	1.795	1.581	1.140	0.417	7.493	3.128**
LE Involvement with SANE program	-0.214	0.318	0.454	0.807	-0.006	0.414	0.000	0.994
LE not SANE trained relative to LE SANE trained	-0.180	0.355	0.259	0.835	-0.075	0.483	0.024	0.928

Note: LR χ^2 (75.967, N=266) = 10.539, $p > .05$; Cox & Snell's Pseudo R-Square=.039
* $p < .05$ ** $p < .01$

Table 9 presents the second model, which included department (the control variable previously found to be significant, see Table 7 above) and victim and suspect demographics. No demographic variables were statistically significant, but department site remained significant at the $p < .05$ level. A 2% reduction occurred in the odds of referral as opposed to police dropping the case for cases from the medium department in comparison to cases from the largest department. Accordingly, the overall model was not significant using the Likelihood Ratio test, and Cox and Snell's pseudo r-square indicates only 6% of the variation in the dependent variable is explained by the independent variables.

Table 9: Victim and Suspect Demographics

<i>Predictors</i>	CONTRAST Police Refer and Victim Withdraws				CONTRAST Police Refer and Police Drop			
	<i>B</i>	<i>SE</i>	<i>Wald</i>	<i>Exp(B)</i>	<i>B</i>	<i>SE</i>	<i>Wald</i>	<i>Exp(B)</i>
Intercept	-0.923	0.633	2.130	--	-0.651	0.570	1.304	--
Smallest relative to Largest Site	0.008	0.014	0.360	1.008	0.403	0.744	0.294	0.973
Medium relative to Largest Site	0.000	0.013	0.000	1.000	-0.296	0.894	0.110	0.985*
Victim Age	-0.289	0.408	0.503	0.749	-0.028	0.023	1.441	1.271
Suspect Age	0.481	0.366	1.729	1.618	-0.015	0.020	0.589	2.971
White relative to Non- White Victim	0.076	0.564	0.018	1.079	0.240	0.546	0.194	1.496
White relative to Non- White Suspect	-0.004	0.474	0.000	0.996	1.089	.469	5.389	0.522

Note: LR χ^2 (423.926, N=234) = 14.177, $p > .05$; Cox & Snell's Pseudo R-Square = .059
 * $p < .05$ ** $p < .01$

Table 10 displays the third model of the analyses, which included department and assault characteristics. Model 3 yielded three statistically significant variables: department, the victim being blacked out/unconscious or intoxicated, and the suspect using verbal threats. However, victim/offender relationship, victim resistance, the suspect physically restraining or injuring the victim, and using a weapon were not significant. If a victim was only unconscious/blacked out for the assault, the odds that her case would be referred as opposed to her withdrawing participation were 23% as high as for women who were conscious and sober. This same set of women also had odds of referral versus

police dropping the case that were 21% as high as for those victims who were conscious and sober. If the suspect used verbal threats, the case was 3.1 times more likely to be referred to the prosecutor in comparison to being dropped by police. The overall model was statistically significant ($p < .05$) using the Likelihood Ratio test. Based on Cox and Snell's pseudo r-square, the variables in the model explained 13% of the variation in case outcome. In this particular model, many of the independent variables had low endorsement rates; 65% of the cells, when examining the dependent variable levels by subpopulations, had zero frequencies. Consequently, it is not surprising that many variables were non-significant.

Table 10: Assault Characteristics Model

**CONTRAST Police Refer
and Victim Withdraws**

**CONTRAST Police Refer and
Police Drop**

<i>Predictors</i>	<i>B</i>	<i>SE</i>	<i>Wald</i>	<i>Exp(B)</i>	<i>B</i>	<i>SE</i>	<i>Wald</i>	<i>Exp(B)</i>
Intercept	0.356	1.247	0.081	--	-0.895	1.491	0.361	--
Smallest relative to Largest Site	-0.555	0.388	2.048	0.574	-0.231	0.527	0.193	.793
Medium relative to Largest Site	0.408	0.358	1.302	1.504	0.985	0.435	5.136	2.678*
Suspect is a Known person relative to Stranger	-0.428	0.627	0.467	0.651	0.340	0.669	0.257	1.404
Blacked out/ Unconscious & Under Influence of Drugs/Alcohol relative to Conscious and Sober	-0.563	0.420	1.794	0.570	0.045	0.555	0.007	1.046
Blacked out/ Unconscious relative to Conscious and Sober	-1.475	0.675	4.775	0.229*	-1.578	0.780	4.095	0.206*
Under Influence of Drugs/Alcohol relative to Conscious and Sober	-0.557	0.370	2.271	0.573	-0.387	0.499	0.603	0.679
Victim did not Resist relative to Documented Resistance	.041	0.364	0.013	1.042	0.519	0.447	1.351	1.681
Suspect used verbal threats relative to no verbal threats	0.628	0.365	2.955	1.873	1.122	0.525	4.558	3.070*
Suspect physically restrained victim relative to no physical restraining	0.205	0.335	0.376	1.228	0.232	0.434	0.285	1.261
Suspect hurt/injured victim relative to not hurting victim	-0.320	0.345	0.860	0.726	-0.593	0.449	1.749	0.553
Suspect used weapon relative to no weapon	1.344	0.810	2.752	3.835	0.596	0.883	0.455	1.815

Note: LR χ^2 (286.038, N=266) = 35.966, $p < .05$; Cox & Snell's Pseudo R-Square = .126
* $p < .05$ ** $p < .01$

Table 11 displays the fourth model of the analyses, which contained case characteristics, yielding four statistically significant variables. Cases in which one or more suspects were interviewed relative to cases where no suspects were interviewed were 3.6 times more likely to be referred as opposed to dropped by the police and 3.5 times more likely to be referred than dropped by the victim. Cases where law enforcement put forth moderate to above average effort relative to cases where law enforcement put forth little to no effort were 3.9 times more likely to be referred than dropped by police. The presence of a SANE exam was not statistically significant. Overall, the model itself was statistically significant ($p < .01$) using the Likelihood Ratio test. Based on Cox and Snell's pseudo r-square, the variables in the model explained 21% of the variation in case outcome.

Table 11: Case Characteristics Model

<i>Predictors</i>	CONTRAST Police Refer and Victim Withdraws				CONTRAST Police Refer and Police Drop			
	<i>B</i>	<i>SE</i>	<i>Wald</i>	<i>Exp(B)</i>	<i>B</i>	<i>SE</i>	<i>Wald</i>	<i>Exp(B)</i>
Intercept	-1.108	0.688	2.591	--	-2.168	0.962	5.072	--**
Smallest relative to Largest Site	-1.206	0.430	7.880	0.299**	-0.651	0.549	1.409	0.521
Medium relative to Largest Site	0.370	0.380	0.948	1.448	1.073	0.430	6.220	2.924*
Cases where 1+ suspect was interviewed relative to cases where no suspect was interviewed	1.259	0.325	14.970	3.522**	1.275	0.402	10.072	3.578**
No SANE exam relative to SANE exam	0.393	0.324	1.478	1.482	0.195	0.395	0.243	1.215
No Non-SANE exam relative to Non-SANE forensic exam	-0.555	0.633	0.770	0.574	-0.038	0.898	0.002	0.963
Moderate to Above Average LE Effort relative to Little to no law enforcement Effort	1.371	0.340	16.239	3.937**	0.667	0.425	2.471	1.949

Note: LR χ^2 (62.819, N=266) = 138.179, p <.01; Cox & Snell's Pseudo R-Square=.210

* p<.05 ** p<.01

Model 5 combined all of the statistically significant variables in the four preliminary models to create a model that would isolate which variables were the strongest predictors of case outcome. Table 12 displays the analyses. Cases from the medium department in comparison to cases from the largest department were 2.6 times

more likely to be referred as opposed to dropped by law enforcement. Cases from the smallest department in comparison to cases from the largest department experienced a 76% reduction in the odds of referral as opposed to the case being dropped by law enforcement. If a victim was unconscious/blacked out and under the influence of drugs/alcohol for the assault, the odds that her case would be referred as opposed to her withdrawing participation were 40% as high as for women who were conscious and sober. If the suspect used verbal threats, the case was 2.7 times more likely to be referred to the prosecutor in comparison to being dropped by police. Cases where one or more suspects were interviewed relative to cases where no suspects were interviewed were 3.8 times more likely to be referred as opposed to dropped by the police and 4.1 times more likely to be referred than dropped by the victim. Not surprisingly, cases where law enforcement put forth moderate to above average effort relative to cases where law enforcement put forth little to no effort were 3.9 times more likely to be referred than the victim withdrawing from the case. Overall, this final model is statistically significant ($p < .01$) using the Likelihood Ratio test, and based on Cox and Snell's pseudo r-square, the variables in the model explained 25% of the variation in case outcome.

Table 12: Model 5

<i>Predictors</i>	CONTRAST Police Refer and Victim Withdraws				CONTRAST Police Refer and Police Drop			
	<i>B</i>	<i>SE</i>	<i>Wald</i>	<i>Exp(B)</i>	<i>B</i>	<i>SE</i>	<i>Wald</i>	<i>Exp(B)</i>
Intercept	0.605	0.994	0.370	--	-0.695	1.181	0.346	--
Smallest relative to Largest Site	-1.421	0.440	10.435	0.241**	-0.836	0.560	2.228	0.434
Medium relative to Largest Site	0.280	0.383	0.535	1.323	0.943	0.437	4.652	2.566*
Blacked out/ Unconscious & Under Influence of Drugs/Alcohol relative to Conscious and Sober	-0.921	0.420	4.815	.398**	-0.391	0.523	0.557	0.677
Blacked out/ Unconscious relative to Conscious and Sober	-1.088	0.727	2.243	0.337	-1.383	0.790	3.063	0.251
Under Influence of Drugs/Alcohol relative to Conscious and Sober	-0.731	0.402	3.316	0.481	-0.534	0.505	1.117	0.586
Suspect used verbal threats relative to no verbal threats	0.502	0.373	1.812	1.652	1.001	0.495	4.085	2.721*
Cases where 1+ suspect was interviewed relative to cases where no suspect was interviewed	1.405	0.340	17.102	4.074**	1.331	0.419	10.084	3.786**
Moderate to Above Average LE Effort relative to Little to no law enforcement Effort	1.351	0.340	15.750	3.860**	0.561	0.422	1.761	1.752

Note: LR χ^2 (75.128, N=266) = 214.790, p <.01; Cox & Snell's Pseudo R-Square=.246

* p<.05

** p<.01

For the final portion of the analyses, all four levels of predictors were used to determine whether they predicted unique variance in law enforcement decision making;

that is, what is the relative predictive strength of information about law enforcement department and SANE involvement (the control model), victim and suspect demographics (age, race), assault (methods of control, victim resistance) and case (number of suspects interviewed, presence of a SANE exam) characteristics to predict case outcome? To determine this, a procedure borrowed from Darlington (1968) for ordinary least squares regression and is adapted here for multinomial logistic regression.

A series of likelihood ratio (LR) tests were performed to examine the variance explained by each level of analyses. In this test, the LR of the model with only the significant control variable present (Model 7) is compared to the LR for the model with the block of case characteristic variables removed (Model 6), which is then compared to the LR in the final model (Model 5). As seen in Table 13, Model 7 and Model 6 each explain unique variance within the overall final model (Model 5), which has already been established as statistically significant. Model 7 is compared to Model 6, and the LR from Model 7 is subtracted from the LR of Model 6 to evaluate significance (taking into account the difference degrees of freedom) to determine whether the case characteristics variables significantly increased model fit. Similarly, the LR from Model 6 is subtracted from LR of Model 5 to evaluate significance, and each set of characteristics contributed additional and significant variance in the final model. Adding assault characteristics to the analysis improved model fit above site alone, and with the model of just control and assault characteristics, adding the case characteristics improved fit above and beyond control and assault characteristics alone. More simply, it can thus be concluded through these results that each set of characteristics explained unique variance in law enforcement's decision making in sexual assault cases.

Table 13: Likelihood Ratio Tests

Predictors	Difference in LR χ^2
Model 7 (Modified Model 2) Site	18.03*
Model 6 (Modified Model 3) Site Unconscious/Intoxicated Verbal Threat	48.00**
Model 5 (Final Model) Site Unconscious/Intoxicated Verbal Threat Number of Suspects Interviewed Law Enforcement Effort	--

Note: ** p <.01 * p <.05

Discussion

The purpose of this thesis was to examine law enforcement decision making in sexual assault cases, using control variables, demographic information, assault and case characteristics. Police can use their discretion to make decisions that affect sexual assault case outcome; they can invest time and effort in cases to bolster the possibility of prosecution of the case. Or, they may assign low effort and energy to the case, indirectly or directly causing the victim to withdraw participation because of discouragement. Police can also choose to drop the case if they feel that the case has a low probability of succeeding in the prosecutorial stage, among other reasons. From this, two research questions were developed. The first question was: what role do assault characteristics play in case outcome? Specifically, the hypotheses tested were: (a) Victims who use become intoxicated and pass out will have a different probability of having their case dropped by law enforcement than victims who do not; (b) Victims who know their offenders will have a different probability of having their case dropped by law

enforcement than victims who do not; (c) Victims who are subjected to violent methods of control will have a different probability of having their case dropped law enforcement than victims who are not; (d) Victims who resist the assault will have a different probability of having their case dropped by law enforcement than victims who do not.

The second research question was whether case characteristics influence case outcome. The specific hypotheses tested were: (a) Cases that include a suspect interview will have a different probability of being dropped than cases where police do not interview a suspect. (b) Victims who have a SANE forensic exam have a different probability of having their case dropped by law enforcement than victims who are not. (c) Victims who have a detective who takes their case seriously have a different probability of having their case dropped by law enforcement than victims who do not.

Summary of Major Findings

Overall, assault characteristics influenced case outcome at the level of law enforcement. Consistent with prior literature, the first hypotheses was significant, that victims who use drugs or alcohol will have a different probability of having their case dropped by law enforcement than victims who do not (Campbell & Raja, 1999; Rose & Randall, 1982; Schuller & Stewart, 2000). Specifically, intoxication and unconsciousness during the assault had a negative effect on case referral in comparison to the victim withdrawing. Perpetrators likely target victims in these situations because they are sure to resist minimally; additionally, after the fact, these women may have a blurred or incomplete recollection of the assault, which can be damaging to credibility. As a result of this confusion and memory loss, they may sound inconsistent or untruthful when questioned by police. Any amount of police disbelief in her story may cause the survivor

to withdraw participation from the case. Prior literature has shown that victims under the influence of drugs or alcohol may suffer a loss of credibility with the police and other members of the criminal justice system (Campbell & Raja, 1999; Rose & Randall, 1982; Schuller & Stewart, 2000) and loss of credibility may lead to decreased effort and subsequently a negative case outcome.

The second hypothesis that victims who knew their offenders will have a different probability of having their case dropped by law enforcement was not found to be statistically significant in the analyses. A possible explanation for this is the low number of stranger-rape cases (less than 10%) in the sample, which is less than half of the number of stranger-rape cases in the initial sample. Those cases were dropped for reasons of colinearity and conceptual clarity, and in order to find significance with such a skewed variable, the effects would have had to be especially salient.

The third hypothesis postulated that victims who are subjected to violent methods of control will have a different probability of having their case dropped by law enforcement than victims who are not. However, the only control mechanism that was found statistically significant was verbal threats of force or harm. Cases including verbal threats were found to be more likely to be referred to the prosecutor as opposed to being dropped by police. This effect is consistent with Frazier and Haney (1996), but no other control mechanisms were significant, although weapon use was a factor in referral versus the victim withdrawing ($p=.097$, $OR=3.8$), which is consistent with prior literature (Campbell, et al., 2001; Chandler & Torney, 1981; Kerstetter, 1990; LaFree, 1981; Rose & Randal, 1982). Since threats from the attacker have been shown to influence a survivor's decision to withdraw her complaint (Jordan, 2004), it is interesting in the

present findings that the presence of a threat had a significantly positive effect on *referral* as opposed to the police dropping (not the victim withdrawing). Verbal threats against the life/welfare of the victim of her loved ones may have been linked to other case characteristics, such as appearing more frightened, therefore garnering more compassion and support, leading to more overall law enforcement effort which would result in more referrals. In terms of verbal threats, the personality of the individual survivor and the relationship to her assailant may also be of importance. For example, a survivor who reports abuse from an intimate partner may be more convinced that she may be assaulted again (and therefore very afraid that the threats will be carried out) if she does not report and follow through to prosecution. Similarly, a survivor may be driven to follow through on a complaint because she does not want the offender to assault other women. Her determination may add to her credibility and thus earn more law enforcement effort on her case.

The final hypothesis for the assault characteristics research question was that victims who were documented as resisting the assault will have a different probability of having their case dropped law enforcement than victims who do not; this hypothesis was not supported in the current study. Although resistance is common in sexual assault cases (Siegel, et al., 1989; Zoucha-Jensen & Coyne, 1993), prior research has not shown a direct connection between resistance and an effect on case outcome, although the presence of resistance in sexual assault cases has been documented (Siegel, et al., 1989, Zoucha-Jensen & Coyne, 1993), as well as the credibility repercussions of a victim *not* resisting (Rose & Randall, 1982).

The second research objective was to determine whether case characteristics influence the outcome of a sexual assault case, which was found to be significant at the model level. The first hypothesis was that cases including a suspect interview will have a different probability of being dropped than cases where police do not interview a suspect. In order for a sexual assault case to progress through the criminal justice system, suspects must be identified, interviewed, and deemed possible of committing the crime before he can be arrested and taken to court for an arraignment, plea bargain or a trial. Following this logical progression, cases where a suspect was interviewed were significantly more likely to be referred as opposed to dropped by the police or withdrawn by the victim.

The second hypothesis was that victims who have a SANE forensic exam have a different probability of having their case dropped by law enforcement than victims who do not, but this research did not show a significant difference in case outcome when a SANE forensic exam was performed, which is inconsistent with prior research (Campbell, et al., 2005). These findings, which are important in their non-significance, suggest that medical forensic evidence does not play a role in police decision making. Additionally, this finding indicated that the decision for law enforcement to refer or drop a case is still strongly influenced by victim and assault characteristics. Since the findings in this study do not agree with Campbell, Patterson and Lichty (2005), it is worth speculating why, because the current study's findings postulate that forensic exams play no role in law enforcement decision making in sexual assault cases. Injury could have been an important factor that was not included in the analyses of this study, as it has been positively linked to victim credibility, law enforcement effort and case referral

(Campbell, Patterson & Lichty, 2005; Chandler & Torney, 1981; Frazier & Haney, 1996; Rose & Randall, 1982; Spears et al., 2001).

The final hypothesis concerning case characteristics was that victims with high law enforcement case effort have a different probability of having their case dropped by law enforcement than victims with low law enforcement case effort. As anticipated, cases with moderate to above average law enforcement effort were more likely to be referred as opposed to the victim withdrawing from the case. Interestingly, in this particular study, increased effort was only statistically significant in terms of referral versus victim withdrawal, not referral versus police dropping the case (which is where one might expect an obvious significance). Effort leading to referral is consistent with prior research (LaFree, 1980b; Patterson, 2008; Rose & Randall, 1982), which has found law enforcement effort to be important in case progression in the criminal justice system, because police regulate how much of their time, energy and resources go into investigating a case and interviewing the suspect, victim and witnesses. More energy and resources translates into more referrals instead of victim withdrawals in this study. Victims may feel like they are being taken seriously and being believed by the police and that their case and experience is important. A lack of time, energy and resources by the police may lead a victim to feel the opposite, possibly even grow unhappy with the attitude of the police and grow non-cooperative, which may lead to their withdrawal.

The one variable from the control and demographic variable blocks found to be significant was the department site of record collection. In comparison to the largest department, the smallest department was significantly less likely to refer cases than drop them. This is a finding that implies that law enforcement of this department may need a

specialized sexual assault detective unit, additional training or more updated procedures for handling sexual assault cases. Being a county sheriff's department, another factor to take into account is that their detective bureau may not be their most pressing responsibility; in Michigan, all sheriff departments are responsible for maintaining the county jails, which means that many deputies report for jail duty every day as well as road patrol. Another added strain on county sheriff departments is that they are responsible for policing and responding to calls in remote areas with little or no police assistance. City departments usually do not have the added responsibility of jail maintenance and therefore can spend more time and effort in casework. Conversely, the medium sized department relative to largest department was more likely to refer a case rather than drop it. The medium sized department has a specialized detective unit that handles all violent crimes against people, including homicide and sexual assault, which means that all cases of sexual assault are first handled by a responding officer who has general knowledge of how to handle a wide array of cases. Sexual assault cases are then immediately handed over to the specialized detective unit for further investigation. This unit is able to better serve survivors of sexual assault because they know the intricacies of rape cases.

The presence of victim and suspect demographics were non-significant in these analyses but were predicted to be significant. Unlike prior research which has found that victim age (Chandler & Torney, 1981; DuMont & Myhr, 2000; Rose & Randall, 1982), suspect age (Spears & Spohn, 1996; Spohn & Spears, 1996), and victim and suspect race (LaFree, 1980a, 1981; Chandler & Torney, 1981; Rose & Randall, 1982; Bradmiller & Walters, 1985; Frohmann, 1997; Spears et al, 2001) are significant in determining case

outcome, the findings from this study indicate that demographic factors are non-significant. These non-significant findings are encouraging, because when police look past demographics, they may be able to put forth more energy on case and assault characteristics, which is what the findings of this study indicate.

Limitations

The data for this study were drawn from archival records, which have several common problems including incomplete documentation, missing reports, departments blacking out more information than necessary and varying length and detail of reports. Police do not document everything they do or do not do. For example, some officers carefully documented interviews verbatim, including verbal and non-verbal responses. Other reports included a list of circumstances surrounding the assault in paragraph form, while how the officer retrieved the information and how the interviewee responded is left to the imagination of the reader. This may have accidentally led to certain variables being over- or underestimated during the coding process. One advantage of using archived police records is that there are no worries that police performance was somehow affected by the project the way a field observer may influence how an officer reacts to a situation or person.

Several issues with sample size were encountered in the study. First, sample size was initially affected by the lack of technology at two of the three departments. Cases prior to 1999 were not accessible, which (potentially) cut the sub-samples of the small and medium departments in half. Second, cases had to be cut from the sample because of colinearity of missing data and conceptual clarity of having a data set where all cases were after the introduction of the SANE program. Finally, because of the sample, there

may be some generalizability issues, although the county of study was chosen because the SANE program is a representative average of SANE programs nationwide.

A further limitation is that the amount of resources available to the respective departments and the county prosecutor are unknown. If a department does not have the resources to investigate sexual assault cases (e.g. if caseload per officer is overloaded), officers will not be able to expend energy and effort to conduct interviews and gather the necessary evidence to refer the case to the prosecutor. Similarly, if the prosecutor does not have the resources to prosecute the case (e.g. if each district judge has a full docket and each assistant prosecutor has an overflowing caseload), a prosecutor will not be able to take on a new case. The amount of resources could be an important mitigating factor, but measuring resources was an afterthought to the main study and could not be evaluated with the information and resources available to the research team.

Implications of Findings

Results from this study indicate several important suggestions for future research and for practitioners in the field. Future research on law enforcement handling of sexual assault cases should focus on utilizing archival and observational data, as well as qualitative interviews for these reasons: 1) archival data is often incomplete or may not truly capture the essence of the interaction between survivor and police officer; but it is typically an accurate record of the facts of the case, 2) observation of police interaction with survivors can be a good way to gain a feel for the non-verbal cues (body language, facial expression) police officers display that can show support or discourage victim participation. An important obstacle would be to gain the trust of police so that they do not alter their behavior. 3) Qualitative interviews of police and survivors (preferably the

same survivor and detective paired in a case) could reveal important nuances in how and why police treat survivors a certain way, as well as further explain how survivors react to the treatment they receive law enforcement.

Implications for police practitioners include the need for training and specialized units. Police would benefit from periodic department-wide training to help them focus on the offender, especially in cases of alcohol or drug facilitated sexual assault. Instead of focusing on the possible confusion and memory loss of the victim, it would be far more helpful to the investigation for law enforcement to focus their emotional reaction and effort on the offender that specifically targets women who are in a vulnerable state of mind and consciousness. These predators are perhaps the most dangerous, because they might not even know that what they are doing is wrong and against the law; in addition, they may victimize several women without ever being convicted (because the victim is not “credible enough”). Consistent with Pittel & Spina (2004), police would benefit from an increased knowledge of the types of drugs and motivations that offenders use to assault victims under the influence of various substances. Knowing these two factors will help determine how a crime was committed. In addition, this study has produced interesting findings in terms of what control mechanisms are significant because only the non-violent control mechanism was found to be significant. This finding implies that verbal threats are very important in the context of sexual assault, but they may also be a mitigating factor that could affect police/survivor interaction (for example if verbal threats are used in conjunction with one or more violent method of control). Other implications that can be drawn from this study include the importance of police identifying and interviewing a suspect and getting law enforcement on board to give

moderate to above average effort to the investigation of the case. Suspect interviews and moderate to high law enforcement effort in a case were strong predictors of referral, which means that if police put forth the extra effort to find and interview a suspect, the case will likely travel further in the criminal justice system.

Of interest but left for future research are two questions: 1) what predicts the presence of a suspect interview if only three out of five cases in this sample involve a suspect interview? And 2) what predicts moderate to above average effort on the part of law enforcement? Suspect interview and law enforcement effort were the two variables with the largest odds ratios in the multinomial logistic regression; therefore, they were the strongest predictors of case outcome in the study. If the presence of a suspect interview is crucial to the progression of a sexual assault case, it is important to know what predicts a suspect interview. If we know what predicts suspect interviews, police can use the information to their advantage to hopefully conduct suspect interviews and usher more cases through to prosecutors. Similarly, if we know that law enforcement effort is a strong predictor in a case getting referred to the prosecutor, knowing which types of cases are deemed worthy for high effort could be an important break through in understanding what drives case outcome at the level of law enforcement.

CONCLUSION

Police have a very important role in sexual assault cases. For some survivors, the irony is apparent that the police officer is “a public safety servant, possibly with little or no experience with rape survivors, has all the power and responsibility of a judge and jury in assessing the legitimacy of a [sexual assault] complaint” (Madigan & Gamble, 1991: 72). The objective of this thesis was to assess law enforcement decision making in

sexual assault cases; this study has shown that police may benefit from specialized training or specialized units (with correlating specific training). The up-side is that, currently, some police officers can effectively investigate sexual assault complaints and work with survivors to do what is best for them on an individual level, whether that be to refer the case or allow her to withdraw. The down-side is that many police officers are still employing ineffective and damaging investigative tactics, thereby alienating survivors and inadvertently botching cases. Additionally, there are assault factors that continue to groundlessly continue to cast doubt on a survivor's credibility. It is not enough that only *some* police officers are effectively handling sexual assault cases. Law enforcement plays such a pivotal role in these cases, not just on the formal level (dropping or referring), but also on an informal level: the way a case is handled and the way a survivor is treated can dramatically affect how she recovers from the physical and emotional violation her body. Just by displaying a belief in her complaint (whether they believe in its prosecutability or not), and assigning effort and time to the investigation (to identify and interview a suspect) can avoid secondary victimization and aid in the healing process. Law enforcement may have come a long way, but now is no time to stop and celebrate; there is much work yet to be done.

References

- Arshambault, J. (2007a). The preliminary sexual assault investigation. Retrieved on April 12, 2007 from: www.mysati.com.
- Arshambault, J. (2007b). Trauma and the impact on memory and the investigation. Proceedings from the End Violence Against Women International Conference, April 16-18, 2007, Houston, TX.
- Bachman, R. (1998). The factors related to rape reporting behavior and arrest: New evidence from the National Crime Victimization Survey. *Criminal Justice and Behavior*, 25(1): 8-29.
- Berger, R., P. Searles & W. Neuman (1988). The dimensions of rape reform legislation. *Law & Society Review*, 22(2): 329-358.
- Berk, S., & D. Loseke (1980-1981). "Handling" family violence: Situational determinants of police arrest in domestic disturbances. *Law & Society Review*, 15(2): 317-346.
- Binder, R. (1981). Why women don't report sexual assault. *Journal of Clinical Psychiatry*, 42(11):437-438.
- Bradmilller, L. & W. Walters (1985). Seriousness of sexual assault charges: Influencing factors. *Criminal Justice and Behavior*, 12(4): 463-484.
- Brownmiller, S. (1975). *Against our will: Men, women and rape*. New York: Simon & Schuster.
- Bryden, D. & S. Lengnick (1997). Rape in the criminal justice system. *The Journal of Criminal Law and Criminology*, 87(4): 1194-1384.
- Buddy, A. & A. Miller (2001). Beyond rape myths: A more complex view of perceptions of rape victims. *Sex Roles*, 45(3-4): 139-160.
- Burgess, A. (2001). Contemporary issues. In *Practical aspects of rape investigation: A multidisciplinary approach, 3rd Ed.*, pp 29-46. Robert Hazelwood & Anne Wolbert Burgess (Eds.).CRC Press: Washington D.C.
- Burgess, A. & R. Hazelwood (2001). The victim's perspective. In *Practical aspects of rape investigation: A multidisciplinary approach, 3rd Ed.*, pp 29-46. Robert Hazelwood & Anne Wolbert Burgess (Eds.).CRC Press: Washington D.C.
- Burt, M. (1980). Cultural Myths and Supports for Rape. *Journal of Personality and Social Psychology*, 38(2): 217-230.

- Buzawa & Austin (1993). Determining police response to domestic violence victims: The role of victim preference. *American Behavioral Scientist*, 36(5): 610-623.
- Cretny & Davis (1997). Prosecuting Domestic Assault: Victims Failing Courts, or Courts Failing Victims? *Howard Journal of Criminal Justice*, 36(2): 146-157.
- Darlington, R. (1968). Multiple regression in psychological research and practice. *Psychological Bulletin*, 69: 161-182.
- Campbell, R. (1998). The community response to rape: Victims' experiences with the legal, medical, and mental health systems. *American Journal of Community Psychology*, 26(3): 355-379.
- Campbell, R. (2005). What really happened? A validation study of rape survivors' help-seeking experiences with the legal and medical systems. *Violence and Victims*, 20(1): 55-68.
- Campbell, R. (2006). Rape survivors' experiences with the legal and medical systems. *Violence Against Women*, 12(1): 30-45.
- Campbell, R. & C. Johnson (1997). Police officers' perceptions of rape: Is there consistency between state law and individual beliefs? *Journal of Interpersonal Violence*, 12(2): 255-274).
- Campbell, R. & S. Raja (1999). Secondary victimization of rape victims: Insights from mental health professionals who treat survivors of violence. *Violence and Victims*, 14(3): 261-275.
- Campbell, R., D. Patterson & L. Lichty (2005). The effectiveness of Sexual Assault Nurse Examiner (SANE) programs: A review of psychological, medical, legal and community outcomes. *Trauma, Violence & Abuse*, 6(4): 313-329.
- Campbell, R., S. Wasco, C. Ahrens, T. Sefl, & H. Barnes (2001). Preventing the second rape: Rape survivors experiences with community service providers. *Journal of Interpersonal Violence*, 16(12): 1239-1259.
- Chandler, S. & M. Torney (1981). The decisions and the processing of rape victims through the criminal justice system. *California Sociologist*, 4: 155-169.
- Cretny, A. & G. Davis (1997). Prosecuting domestic assault: Victims failing courts, or courts failing victims? *The Howard Journal*, 36(2): 146-157.
- DuMont, J. & T. Myhr (2000). So few convictions: The role of client-related characteristics in the legal processing of sexual assaults. *Violence Against Women*, 6(10): 1109-1136.

- Federal Bureau of Investigation, (2006). *Uniform Crime Report: Forcible rape*. U.S. Department of Justice.
- Frazier, P. & B. Haney (1996). Sexual assault cases in the legal system: Police, prosecutor, and victim perspectives. *Law and Human Behavior*, 20(6): 607-628.
- Frohman, L. (1991). Discrediting victims' allegations of sexual assault: Prosecutorial accounts of case rejections. *Social Problems*, 38(2): 213-226.
- Frohman, L. (1998). Constituting power in sexual assault cases: Prosecutorial strategies for victim management. *Social Problems*, 45(3): 393-407.
- Galvin, J. & K. Polk (1983). Attrition in case processing: Is rape unique? *Journal of Research in Crime and Delinquency*, 20, 126-153.
- Gelles, R. (1977). Power, Sex, and Violence: The Case of Marital Rape *The Family Coordinator*, 26(4): 339- 347.
- Giardino, A., E. Datner & J. Asher (2003). *Sexual assault: Victimization across the lifespan: a clinical guide*. St. Louis, MO: G.W. Medical Publishing.
- Gregory J. & S. Lees (1996). Attrition in rape and sexual assault cases. *The British Journal of Criminology*, 36(1): 1-17.
- Hosmer, D. & S. Lemeshow (1989). *Applied logistic regression*. New York: Wiley.
- Hosmer, D. S. Taber & S. Lemeshow (1991). The importance of assessing the fit of logistic regression models. *American Journal of Public Health*, 81(12): 1630-1635.
- Hoyle, C. & A. Sanders (2000). Police response to domestic violence. *The British Journal of Criminology*, 40(1): 14-36.
- Jordan, J. (2004). Beyond Belief: Police, rape and women's credibility. *Criminal Justice*, 4(1): 29-59.
- Kerstetter, W. (1990). Gateway to justice: Police and prosecutorial response to sexual assaults against women. *The Journal of Criminal Law and Criminology*. 81(2): 267-313.
- Koss, M. (1993). Rape: Scope, impact, interventions and public policy responses. *American Psychologist*, 48: 1062-1069.
- Koss, M., J. Bailey, N. Yuan, V. Herrera & E. Lichter (2003). Depression and PTSD in survivors of male violence: Research and training initiatives to facilitate recovery. *Psychology of Women Quarterly*, 27: 130-142.

- Lawrence A. & L. Greenfeld (1997). *Sex offenses and offenders: An analysis of data on rape and sexual assault*. Bureau of Justice and Statistics, U.S. Department of Justice. Washington, DC: U.S. Government Printing Office.
- Lafree, G. (1980a). The effect of sexual stratification by race on official reactions to rape. *American Sociological Review*, 45(5): 842-854.
- Lafree, G. (1980b). Variables affecting guilty pleas and convictions in rape cases: Toward a social theory of rape processing. *Social Forces*, 58(3): 833-850.
- Lafree, G. (1981). Official reactions to social problems: Police decisions in sexual assault cases. *Social Problems*, 28(5): 582-594.
- LeGrand, C. (1973). Rape and rape laws: Sexism in society and law. *California Law Review*. 61(3), 919-941.
- Leo, R. (2001). "Interrogations and false confessions in rape cases," In R. Hazelwood & A. Burgess (Eds.), *Practical aspects of rape investigation: a multidisciplinary approach*, 3rd Edition (p. 223-241). Boca Raton, FL: CRC Press.
- Lonsway, K., S. Welch & L. Fitzgerald (2001). Police training in sexual assault response: Process, outcomes, and elements of change. *Criminal Justice and Behavior*, 28(6) 695-730.
- Lopez, P. (1992). He said... she said... an overview of date rape from commission through prosecution through verdict. *Criminal Justice Journal*, 13: 275-302.
- McCormick, J., A. Maric, M. Seto & H. Barbaree (1998). Relationship to victim predicts sentence length in sexual assault cases. *Journal of Interpersonal Violence*, 13(3): 413-420.
- McGregor, M., E. Wiebe, S. Marion & C. Livingstone (2000). Why don't more women report sexual assault to the police? *Canadian Medical Association Journal*, 162(5): 659-660.
- McGregor, M., G. Le, S. Marion & E. Wiebe (1999). Examination for sexual assault: Is the documentation of physical injury associated with the laying of charges? A retrospective cohort study. *Canadian Medical Association Journal*, 160(11): 1565-1569.
- Madigan, L. & N. Gamble (1991). *The second rape: society's continued betrayal of the victim*. New York: Lexington Books.
- Mann, S., A. Vrij & R. Bull (2004). Detecting True Lies: Police Officers' Ability to Detect Suspects' Lies. *Journal of Applied Psychology*, 89(1): 137-149.

- Martin, E., C. Taft & P. Resick (2007). A review of marital rape. *Aggression and Violent Behavior, 12*: 329–347.
- Michigan Penal Code 750 § 520. Criminal Sexual Conduct Act 328 of 1931.
- Moston, S., G. Stephenson & T. Williamson (1992). The effects of case characteristics on suspect behaviour during police questioning. *British Journal of Criminology, 32*(1): 23-40.
- Patterson, D. (2008). *Constructing justice: How the interactions between victims and detectives affect the quality of rape investigations*. East Lansing, MI: Michigan State University.
- Pittel, S. & L. Spina (2004). “Investigating drug-facilitated sexual assault,” J. Savino & B. Turvey (Eds.), in *Rape Investigation Handbook* (p. 94-118). Burlington, MA: Elsevier Academic Press.
- Reynolds, J. (1914). Sex morals and the law in ancient Egypt and Babylon. *Journal of the American Institute of Criminal Law and Criminology, 5*(1): 20-31.
- Robin, G. (1977). Forcible rape: Institutionalized sexism in the criminal justice system. *Crime and Delinquency, 23*(2): 136-153.
- Rose, V. & S. Randall (1982). The impact of investigator perceptions of victim legitimacy on the processing of rape/sexual assault cases. *Symbolic Interaction, 5*(1): 23-36.
- Savino, J & Turvey, B. (2004). “Interviewing suspects and victims,” J. Savino & B. Turvey (Eds.), in *J. Rape Investigation Handbook* (p. 94-118). Burlington, MA: Elsevier Academic Press.
- Schuller, R. & A. Stewart (2000). Police responses to sexual assault complaints: The role of perpetrator/complainant intoxication. *Law and Human Behavior, 24*(5): 535-551.
- Siegel, J., S. Sorenson, J. Golding, M. Burnam & J. Stein (1989). Resistance to sexual assault: Who resists and what happens? *American Journal of Public Health, 79*(1): 27-31.
- Sinclair, H. & L. Bourne, Jr. (1998). Cycle of blame or just world: Effects of legal verdicts on gender patterns in rape-myth acceptance and victim empathy. *Psychology of Women Quarterly, 22*: 575-588.

- Slaughter, L., C. Brown, S. Crowley & R. Peck, (1997). Patterns of genital injury in female sexual assault victims. *American Journal of Obstetrics and Gynecology*, 176(3): 609-616.
- Spears, C., D. Beichner & E. Davis-Frenzel (2001). Prosecutorial justifications for sexual assault case rejection: Guarding the Gateway to Justice. *Social Problems*, 48(2): 206-235.
- Spears, J. & C. Spohn (1996). The effect of offender and victim characteristics on sexual assault case processing decisions. *Justice Quarterly*, 13(4): 649-680.
- Spohn, C. & D. Holleran (2001). Prosecuting sexual assault: A comparison of charging decisions in sexual assault cases involving strangers, acquaintances, and intimate partners. *Justice Quarterly*, 18(3): 651-688.
- Spohn, J. & J. Horney (1993). Rape law reform and the effect of victim characteristics on case processing. *Journal of Quantitative Criminology*, 9(4), 383-409.
- Spohn, C. & J. Spears (1996). The effect of offender and victim characteristics on sexual assault case processing decisions. *Justice Quarterly*, 13(4): 649-679.
- Spohn, C. & J. Spears (1997). The effect of evidence factors and victim characteristics on prosecutors' charging decisions in sexual assault cases. *Justice Quarterly*, 14(3): 051-524.
- Tjaden, P., & N. Thoennes (1998). *Prevalence, incidence, and consequences of violence against women: Findings from the National Violence Against Women Survey*. Washington, DC: National Institute of Justice, U.S. Department of Justice.
- Tjaden, P., & N. Thoennes (2006). *Extent, Nature, and Consequences of Rape Victimization: Findings From the National Violence Against Women Survey*. National Institute of Justice, U.S. Department of Justice. Washington, DC: U.S. Government Printing Office.
- Wright, R. (1984). A note on the attrition of rape cases. *British Journal of Criminology*, 24(4): 399-400.
- Williams, L. (1984). The classic rape: When do victims report? *Social Problems*, 31(4): 459-467.
- Zoucha-Jensen, J. & A. Coyne (1993). The effects of resistance strategies on rape. *American Journal of Public Health*, 83(11): 1663-4.