

**REPORTING RAPE BY VICTIMS AND THIRD PARTIES: EVIDENCE
FROM THE NATIONAL CRIME VICTIMIZATION SURVEY (1992-2012)**

by

Brandie Pugh

A thesis submitted to the Faculty of the University of Delaware in partial fulfillment
of the requirements for the degree of Masters of Arts in Sociology

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Brandie Pugh

Approved: _____
Ronet Bachman, Ph.D.
Professor in charge of thesis on behalf of the Advisory Committee

Approved: _____
Kirk Williams, Ph.D.
Chair of the Sociology and Criminal Justice Department

Approved: _____
George H. Watson, Ph.D.
Dean of College of Arts and Sciences

Approved: _____
James G. Richards, Ph.D.
Vice Provost for Graduate and Professional Education

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ABSTRACT

Sexual assault is a pervasive problem in our society with evidence from the National Violence Against Women Survey (NVAWS) revealing that one out of six women are survivors of rape. Despite increased efforts in rape reform legislation to increase reporting, rape remains the most underreported crime in America. However, reporting sexual assault may be the only way for the criminal justice system to address it. Thus the factors that influence reporting behavior are important to identify in order to adequately inform policy directed at improving reporting rates. The current research utilized the National Crime Victimization Survey (NCVS) data from 1992-2012, focusing solely on adult women (18 years or older) that experienced a completed or attempted rape. Most previous research has not distinguished between third party and victim reporting of sexual assault. This study seeks to address this gap in the literature, while also determining the factors that appear to be most important in reporting decisions. Logistic and multinomial logistic regressions will be utilized to determine which factors were prominent in predicting reporting in general, as well as third party reporting and victim reporting. Policy implications and directions for future research will be discussed.

Chapter 1

INTRODUCTION

Sexual assault is a pervasive problem with disturbingly high prevalence rates. Statistics on the occurrence of sexual assault vary, although all signify that sexual assault is a problem in the general population (Black et al. 2010) and particularly among college aged women (Fisher, Daigle, and Cullen 2003). Research has also documented that the majority of rapes are never reported to police (Rennison 2002) and that rapes that occur on college campuses are rarely reported to police (Fisher, Daigle, Cullen, and Turner 2003).

There is some evidence that the likelihood of reporting has increased over time (Bachman and Paternoster 1993; Baumer, Felson, and Messner 2003), which Baumer et al. (2003) attributed to an increase in third party reporting (i.e. someone other than the victim) for changes between the years 1973 and 1991 and both victim and third party reporting for the years 1992-2000. Nonetheless, despite this increase and rape reform efforts, studies show that rape continues to be the most underreported crime in America (Kilpatrick 2000; Koss 1992; Tjaden and Thoennes 2000a). Clearly, while estimates of under-reporting vary by the population studied, less than half of all sexual assaults are ever reported to police, which is lower than any other violent crime (Rennison 2002). As such, understanding the factors related to this issue of under-reporting remain an important area of inquiry.

The purpose of this study is to determine the factors related to reporting a sexual assault to the police by both victims and third parties utilizing NCVS data from

1992-2012, which is a recent, nationally representative sample. This survey measures sexual assault and rape, and can be used to isolate the factors related to help seeking behavior, or in particular, police reporting behavior. Specifically, it contains measures on victim, offender, incident, and contextual characteristics, as well as the victim/offender relationship which can be used to examine reporting likelihood.

Chapter 2

LITERATURE REVIEW

Factors Related to Reporting Rape to Police

Research on reporting behavior has examined reporting to police by victims only (Lisak and Miller 2002), reporting to third parties and to police by victims (Fisher, Daigle, Cullen, and Turner 2003), and reporting to police by third parties *and* victims (Baumer et al. 2003; Chen and Ullman 2010; Felson and Paré 2005; Felson, Messner, and Hoskin 1999; Greenberg and Ruback 1992). Other research has also examined overall reporting behavior (reported or not, regardless of who informed the police) without investigating the differences among those who report (see Clay-Burner and Burt 2005 for example). Chen and Ullman (2010) point out that this is problematic because previous research has identified that the mechanisms that encourage or discourage reporting are different between third parties and victims (Felson et al. 1999; Felson and Paré 2005). For example, researchers indicate that third parties are less likely to report sexual assault than victims, primarily because these assaults are more likely to occur in private (Felson and Paré 2005). However, research rarely examines the differences between victim and third party reporting (Chen and Ullman 2010) and as a result, less is known about third party reporting. Therefore, the current study will examine the factors related to both third party and victim reporting.

Incident Characteristics

Research on police reporting behavior has consistently found that incident characteristics have the largest influence on reporting likelihood. The following incident characteristics have been shown to significantly increase the likelihood that a victim will report sexual victimizations: use of weapon (Bachman 1998; Chen and Ullman 2010; Fisher et al. 2003; Gartner and Macmillan 1995; Pino and Meier 1999), use of physical force (Bachman 1993; Du Mont, Miller, and Myhr 2003; Gartner and Macmillan 1995), victim injuries (Bachman 1993, 1998; Chen and Ullman 2010; Du Mont et al. 2003; Gartner and Macmillan 1995; McGregor, Wiebe, Marion, and Livingstone 2000; Pino and Meier 1999; for exception see Jones, Alexander, Wynn, Rossman, and Dunnuck 2009), and if a victim sought medical assistance (Bachman 1993; Pino and Meier 1999). On the other hand, the only identified findings on incident characteristics and third party reporting are contradictory. Greenberg and Ruback (1992) found that when weapons are involved, the assault was less likely to be reported, whereas Felson and Paré (2005) found that when a victim sustained additional injuries and when a weapon was involved, that third parties were more likely to report the assault.

Overall, the majority of these findings on incident characteristics are consistent regardless of the sample (e.g. NVAWS). Many utilized nationally representative samples including the National Violence Against Women Survey (Chen and Ullman 2010; Felson and Paré 2005), the National Crime Victimization Survey (Bachman 1993; Pino and Meier 1999), and the Canadian Violence Against Women Survey (Gartner and Macmillan 1995). Additionally, other studies utilized data gathered from a victim services agency (Du Mont et al. 2003; McGregor et al. 2000). It is important to note however, that Jones et al. (2009) analyzed data from a victim service agency as

well and this is the only study reported above in which victim injuries did not increase reporting likelihood.

It has been suggested that these incident characteristics have such a large and positive influence on reporting likelihood because they increase the perception of crime seriousness (Bachman 1998; Greenberg and Ruback 1992; Pino and Meier 1999). According to Greenberg and Ruback (1992), crime seriousness is determined based on harm experienced. It is possible that perceptions of crime seriousness (i.e. harm) increase when a weapon is used, physical force is used, the victim sustains injuries, and the victim receives medical attention (Greenberg and Ruback 1992). In fact, believing that the incident was not serious enough was a primary reason cited for not reporting sexual assault in a study using a national sample of college women (Fisher et al. 2003).

A related hypothesis is that women are more likely to report assaults with these specific characteristics since this tends to align with the stereotypical version of “real rape” which is largely based on rape myths (Du Mont et al. 2003; Estrich 1987; Gartner and Macmillan 1995; Littleton and Axsom 2003). Monumental work by Susan Estrich (1987) brought attention to the issues and rape myths surrounding how our society defines and reacts to rape. She argued that forced sex against someone’s will is not considered as rape by the law or society unless it contained these incident characteristics (e.g. physical injury, weapon present, physical force) and resistance by the victim. This notion of what “real rape” is has infiltrated our society and what people consider to be rape. It is precisely this reason that some scholars have suggested that the majority of rapes are never reported to the police because most sexual assaults do not involve the characteristics of a stereotypical (i.e. “real rape”)

scenario (Greenberg and Ruback 1992). Another and interrelated hypothesis is that women who experience a rape with these incident characteristics (e.g. force) in addition to the rape may be more likely to acknowledge themselves as rape victims (Littleton, Axsom, Bretkopf, and Berenson 2006), which may increase the chances that they will report the assault (Fisher et al. 2003).

Research has been divided on whether or not a completed rape is more likely to be reported. It has been hypothesized that a completed rape is more likely to be reported than an attempted rape as this could be considered a more serious assault (Greenberg and Ruback 1992). Some research suggests that this could be the case, finding that completed rape was more likely to be reported than attempted rape (Bachman 1993; Gartner and Macmillan 1995; Greenberg and Ruback 1992) while others have not (Pino and Meier 1999).

This contradictory evidence could be due to the samples used or methodological choices. For example, Gartner and Macmillan (1995) utilized the Canadian Violence Against Women Survey and included victims who experienced multiple victimizations (as opposed to the most recent victimization). Both Bachman (1993) and Pino and Meier (2000) analyzed incidents reported to the National Crime Victimization Survey prior to the NCVS redesign that was commissioned to address the limitations of this survey as it did not previously ask about sexual assault experience resulting in a lack of disclosure of sexual assault victimization. Greenberg and Ruback (1992) conducted a multi-method study with official reports, surveys and quasi-experimental methods.

Contextual Characteristics

Some research has highlighted that the location in which a sexual assault occurs affects reporting likelihood. Greenberg and Ruback (1992) used a multi-method strategy and found that sexual assaults that occurred outside in public spaces were more likely to be reported. However, Clay-Warner and Burt (2005), utilized data from a nationally representative sample from the National Violence Against Women Survey and counted only the most recent victimization, did not find a significant relationship between location of assault and reporting behavior. Similarly, Felson and Paré (2005) discuss that third parties may be less likely to report intimate partner sexual assaults due simply to the fact that those rapes may be more likely to occur in private. Felson and Paré (2005) also employed the NVAWS, however, included multiple victimizations.

Victim alcohol and/or drug use is strongly and negatively related to reporting likelihood. At the collegiate level, alcohol-related sexual assault is the most common form of sexual victimization (Abbey 2002; Lawyer, Resnick, Burkett, and Kilpatrick 2010). Research has consistently underscored the role that alcohol plays in college sexual assaults, finding that those who use alcohol and/or drugs are at a higher risk of victimization than those who do not engage in frequent substance use (Fisher, Sloan, Cullen, and Lu 1998).

Both studies that utilized a nationally representative college sample (Fisher et al. 2003) and the NVAWS (Clay-Warner and Burt 2005; Felson and Paré 2005), found that women who have been using alcohol and/or drugs before the assault have also been found to be less likely to report the assault. It is possible that victims could be under the legal drinking age and decide not to report the assault for fear of getting in trouble (Fisher et al. 2003; Ruback, Ménard, Outlaw, and Shaffer 1999). Other reasons

cited relate to victims blaming themselves or feeling responsible (Felson and Paré 2005; Fisher et al. 2003), which can be attributed to common public and media perceptions about victims. That is, the majority of people hold victims *more* accountable for alcohol-related sexual assault and perpetrators *less* accountable for it (Abbey 2002). These popular public perceptions can be internalized leading to self-blame and a reduced likelihood of reporting (Finkelton and Oswald 1995). In fact, these same cultural factors could help explain why third parties are particularly unlikely to report sexual assaults when the victim was using substances (Felson and Paré 2005). On the contrary, Felson and Paré (2005) in examining sexual and physical assault reporting found that when the offender was using substances, that both victims and third parties were more likely to report the assault.

Victim/Offender Relationship

Generally, research finds that the chances of reporting when the perpetrator is a stranger are significantly higher than if the perpetrator is someone known to the victim (Chen and Ullman 2010; Felson and Paré 2005; Fisher et al. 2003; Gartner and Macmillan 1995; Pino and Meier 1999; Ruback and Ménard 2001). Similarly, some researchers have found that the effect of the reporting based on the victim/offender relationship is somewhat stronger for third parties than for victims (Baumer et al. 2003) and that third parties are less likely to report sexual assaults when the offender is an intimate partner (Felson et al. 1999; Felson and Paré 2005) or an acquaintance (Felson and Paré 2005). Moreover, a study that examined changes in the rates of reporting over time found that while the overall likelihood of rape reporting increased, rapes that fit the stereotypical “real rape” scenario were significantly more likely to be

reported than rapes that did not fit this scenario (Clay-Warner and Burt 2005; Estrich 1987). However, a few studies have found contradictory evidence to this.

Bachman (1993, 1998) found that the victim/offender relationship did not have a significant impact on the decision to report. Some critiques of Bachman's findings (1993, 1998) have been directed towards the sample used and the way NCVS interviewers ask about sexual assault experiences (Pollard 1995; Koss 1992). It is important to note that Bachman (1998) utilized the redesigned NCVS, aimed to address the methodological concerns (see Koss 1992 for list of these concerns), and still found no significant effect of victim/offender relationship on reporting rates. However, in support of Bachman's (1993, 1998) findings, aggregate time-series data revealed similarities between reporting rates in stranger and nonstranger rapes over time (Bachman 1995; Baumer et al. 2003). In other words, Baumer and colleagues (2003) using both the NCS (1973-1991) and the NCVS (1992-2000) did not find a significant relationship between victim/offender relationship and reporting likelihood.

It is crucial to note the contradictory findings here could simply be due to the datasets and survey methodology used. That is, the majority of research that has found the victim/offender relationship does not affect reporting likelihood has employed the National Crime Victimization Survey (Bachman 1993; 1998; Baumer et al. 2003). Research finding that stranger rapes are more likely to be reported has used the NVAWS (Chen and Ullman 2010), the National College Women Sexual Victimization (NCWSV) (Fisher et al. 2000), official data and records collected from the Pennsylvania Coalition Against Rape (PCAR), as well as samples gathered from the Canadian Violence Against Women Survey (Gartner and Macmillan 1995).

Victim Characteristics

Research also illuminates how victim characteristics affect reporting likelihood. For example, some studies have found that African American women were more likely to report sexual victimization (Bachman 1998; Felson and Paré 2005; Fisher et al. 2003). Relatedly, Chen and Ullman (2010) found that non-white women were more likely to report. These findings are based on analyses from random, nationally representative samples including the NCVS data (Bachman 1998), the NVAWS (Chen and Ullman 2010; Felson and Paré 2005), and the NCWSV (Fisher et al. 2003). On the other hand, a nonrandom, but multi-method study with survey data, official data, and quasi-experimental designs, found that African American women were less likely to report rape than White women (Greenberg and Ruback 1992).

Tjaden and Thoennes (1998), utilized the NVAWS, and found statistically significant differences in reporting behavior based on race/ethnicity. They found that Hispanic women were significantly less likely to report a sexual assault than women who did not identify as Hispanic, but that women who identified as Asian or Pacific Islander were the least likely to report both sexual and physical victimization. Women who identified as American Indian or Alaska Native were the most likely to report both sexual assault and physical assault (Tjaden and Thoennes 1998). Further, Asian, Native American, and Pacific Islander women in the “Other” racial/ethnic category, were significantly more likely to report sexual assault than White women. However, others have found that African American and Hispanic women did not exhibit a greater likelihood of reporting sexual assault when compared to White women (Wolitzky-Taylor, Resnick, McCauley, Amstadter, Kilpatrick, and Ruggiero 2011) and this study used data from the National Women’s Study-Replication. This study brought two samples together, one was a national cross-section of women who were

18-35 years of age, and an additional cross-section of women aged 35 and older was collected. This was a nationally representative sample of over three thousand women and the sample was weighted to represent U.S. Census estimates.

Studies that utilized nationally representative samples, as well as samples from victim service agencies have found that age is unrelated to reporting behavior (Bachman 1993; Clay-Warner and Burt 2005; Jones et al. 2009; McGregor et al. 2000; Wolitzky-Taylor et al. 2011). On the other hand, research that has utilized the NVAWS (Chen and Ullman 2010; Felson and Paré 2005), and a multi-method strategy (Greenberg and Ruback 1992) have found that older victims are more likely to report a sexual assault than younger victims. Additionally, victim's age has been found to have an effect on third party reporting. As the victim's age increases, the likelihood that third parties will report decreases (Chen and Ullman 2010; Greenberg and Ruback 1992). Further, Chen and Ullman (2010) found that victims were more likely than third parties to report if the victim was older and employed.

Socioeconomic status influences reporting as well, as victims of lower SES were more likely to report than victims of higher SES (Bachman 1993; McGregor et al. 2000; Pino and Meier 1999). Conversely, Fisher and colleagues (2003) found that sexual assault victims from a lower class were significantly less likely to report their victimization to campus authorities. This could be due to the fact that Fisher et al.'s (2003) analysis is based on a nationally representative college sample with which socioeconomic status may have a different effect on college students than in the general population. Whereas, Wolitzky-Taylor and colleagues (2011) found that income was not a significant predictor in reporting likelihood. Furthermore, while Wolitzky-Taylor and colleagues' (2011) sample was representative of the population,

respondents were only interviewed once for an average of twenty minutes. This could partly explain these differences. For example, this could be compared to Bachman's findings (1998) who found that victims of lower SES are more likely to report than victims of a higher SES and she utilized the NCVS which interviews respondents for a total of seven times over a three year period.

Research findings on how education influences reporting are also mixed. One study found that women without a college education were more likely to report their victimization than women with a college education (Chen and Ullman 2010). Similarly, Wolitzky-Taylor et al. (2011) measured education as the highest level of education attainment and found that when a woman is more educated, she is less likely to report the assault to the police. Conversely, Pino and Meier (1999) found that education was positively related to reporting behavior, while Clay-Warner and Burt (2005) found no influence of education on reporting likelihood. Interestingly, both Chen and Ullman (2010) and Clay-Warner and Burt (2005) used the NVAWS and collected incident information only on the most recent victimization. Thus, it could have to do with potential coding differences. For example, Chen and Ullman (2010) measured education as any college (any amount of years) and Clay-Warner and Burt (2005) coded education as "having attended college" with no indication of whether this refers to completing college or a variation of college experience. Finally, some research, both from the NCVS (Bachman 1993), a victim service agency (Jones et al. 2009), and another nationally representative sample (Wolitzky-Taylor et al. 2011) has found that marital status has no significant effect on reporting likelihood. Others have found that the probability of third party reporting of sexual assaults decreased for victims who were married (Chen and Ullman 2010).

As highlighted throughout this section, some of these inconsistencies in the literature could partially be explained by differences in the samples utilized across studies (Du Mont et al. 2003). For example, some studies have utilized data sets gathered from a sexual assault center or clinic (Du Mont et al. 2003; Jones et al. 2009; McGregor et al. 2000), thus only having data on those who voluntarily attended a center. These samples already have some self-selection bias as the victims have labeled themselves as victims, and ultimately, those who acknowledge they were raped and thus a victim may be more likely to report the assault to criminal justice authorities (Fisher et al. 2003; Ruback 1993). In fact, one study, utilizing a data set collected from a sexual assault center, found that seventy-five percent of the sexual assault victims in their sample¹ reported their victimization to the police (Jones et al. 2009). However, reporting estimates from nationally representative samples are much lower than this, with percentages as low as 5%, but generally around 20-40% (Bachman 1998; Fisher et al. 2000; Rennison 2002; Tjaden and Thoennes 2000a).

Reporting rates generated from the same data set often result in different estimates as well. For example, both Chen and Ullman (2010) and Felson and Paré (2005) used the National Violence Against Women Survey (NVAWS), data collected in 1995-1996, but a considerably larger number of incidents were included in Felson and Paré's sample. In the NVAWS, each respondent could report up to six sexual assaults and six physical assaults by different offenders, and if there were multiple assaults reported by the same offender, only incident characteristics, including

¹ This sample was created based on eligibility standard set by researchers (see Jones et al. 2009 for details on eligibility).

² These changes include the recent adjustment in the series victimizations capping method utilized by the NCVS. Previously, once respondents revealed six or more

reporting behavior, were obtained from the most recent incident. This resulted in a total of 1,787 sexual assaults and 6,291 physical assaults (Felson and Paré 2005). This practice of selecting more than one rape incident per respondent is suggested by Clay-Warner and Burt (2005) to be unsuitable for standard regression analysis techniques “as this violates the assumption of uncorrelated errors” (162). Conversely, Chen and Ullman (2010) included only incidents with male offenders and female victims that were at least 14 years of age. If the victim had been victimized more than one time, only the most recent incident was included. Their final sample included 874 sexual assaults and 1,376 physical assaults. This suggests that even using the same data, methodological decisions can still affect the estimate of reporting behavior. This is critical as it suggests that the findings on reporting behavior may be solely based on the data, measurement, and methodological decisions employed.

Furthermore, one study relied on data collected from respondents located at one college campus (Finkelson and Oswald 1995) while others (Lisak and Miller 2002; Pino and Meier 1999) have used antiquated data collected during the 1970s and 1980s prior to rape reforms that were intended to increase reporting behavior (Bachman and Paternoster 1993; Du Mont et al. 2003; Temkin 1997). Even data gathered shortly after the implementation of rape reforms may not accurately reflect changes in reporting that are attributable to rape reform legislation since changes resulting from reforms will not be immediate (Clay-Warner and Burt 2005). Essentially changes would not occur immediately due the pervasiveness of rape myths and beliefs that society hold towards rape. For example, it was hypothesized that the reforms would only affect reporting indirectly by changing our culture and how we view rape and

rape victims, but this societal change will not occur directly after rape reform legislation (Bachman and Paternoster 1993; Clay-Warner and Burt 2005).

Even though there has been a proliferation of research on this topic, there is still a lack of consensus on some of the factors related to reporting behavior. Incident characteristics (e.g. weapon present, completed rape, injuries sustained) hold the most support and are habitually found to increase the likelihood that the assault will be reported. In regards to victim characteristics, the literature has not provided an adequate understanding of how race, age, marital status, education, employment, and income relate to reporting likelihood. Similarly, it is also unclear how contextual characteristics including victim and offender drug and/or alcohol use, location of incident, and having a bystander present during the assault affect reporting likelihood. There is still a large amount of inconsistency on how the victim/offender relationship influences reporting likelihood. Some research has found that victims are less likely to report assaults committed by known offenders, while other research finds that this is not the case. Offender characteristics are less studied and what is known about these characteristics is minimal. While this paper cannot address each of these inconsistencies, it includes an analysis of both victim and third party reporting. This is imperative because third party reporting, as well as the differences between third party and victim reporting, have been largely neglected by previous research. Even the existing literature on third party reporting has yet to provide a full and comprehensive discussion on the factors related to third party reporting in general and in comparison with victim reporting.

This study utilized the most contemporary national data available, the National Crime Victimization Survey (NCVS) for the years of 1992-2012. These data were

collected following rape reform legislation in the early 1980s and the redesign of the NCVS in the early 1990s² (see Bachman and Taylor 1994 for specifics on the NCVS redesign). The NCVS has a particular methodological advantage in that it collects victimization reports for all respondents that reply “yes” to behaviorally specific questions³ which will be identified later, designed to identify victims of sexual assault (Fisher et al. 2003). Despite the fact that these questions have been criticized as still lacking sufficient behavioral specificity (Fisher et al. 2003; Fisher and Cullen 2000; Kilpatrick and Ruggiero 2004), the NCVS remains the largest nationally representative data set and can be used to examine the factors related to rape reporting behavior.

² These changes include the recent adjustment in the series victimizations capping method utilized by the NCVS. Previously, once respondents revealed six or more victimization experiences, this was documented as series victimization and only the details of the most recent incident were collected (Lauritsen, Owens, Planty, Rand, and Truman 2012). This cap was adjusted to ten. According to Lauritsen et al. “this new series counting decision balances the concerns of wanting victimization rates to include the experiences of high-rate victims while understanding that multiple sources of error exist in estimates of the number of victimizations that occurred.” (2012:14).

³ Behaviorally specific questions do not directly reference “rape,” but “describes an incident in graphic language that covers the elements of a criminal offense” in efforts to capture the occurrence of rape even if victims do not identify as rape victims (Fisher 2004:I-4-9).

Chapter 3

METHOD

Data

The NCVS is commissioned by the United States Department of Justice, Bureau of Justice Statistics. This survey was created in order to capture the actual prevalence of crimes that are both reported and not reported to the police. This survey seeks to gather information on types of crimes, as well as other contextual information such as the severity of victimizations, whether any injuries were sustained, offender and victim characteristics, and the relationship between the victim and offender. Data utilized in this study is from the NCVS 1992-2012⁴ Incident-Level File that is a concatenated file with all crimes of sexual assault, completed and attempted rape revealed by respondents.

The NCVS utilizes a stratified multistage cluster sampling procedure. This procedure results in a representative sample of households. Within households, persons 12 years of age or older are allowed to participate. Data are collected semi-annually, and intensive face-to-face interviews are used for the first interview followed by computer-aided telephone interviews. Once respondents are interviewed, they receive follow up interviews every six months for three years totaling seven interviews.

⁴ Data gathered from the Inter-university Consortium for Political and Social Research (ICPSR 34907).

The NCVS's screening questions for detecting when a respondent has been sexually assaulted are as follows: "Incidents involving forced or unwanted sexual acts are often difficult to talk about. Have you ever been forced or coerced to engage in unwanted sexual activity by: a) someone you didn't know before; b) a casual acquaintance; or c) someone you know well?" If the respondent answers yes to any of these questions, NCVS interviewers ask a follow up question to determine if the assault should be recorded as rape: "Do you mean forced or coerced sexual intercourse?" If the respondent needs clarification on the meaning of rape, the interviewer reads an official definition to them (Bachman and Taylor 1994; Baumer et al. 2003). Once the respondent has answered these questions, the assault is categorized as anything from verbal threats to a completed rape. Details on the victimization, or the most recent victimization (if more than one incident is reported), are then gathered.

For this paper, only victimizations against women 18 years or older, who experienced a completed or attempted rape by one or more male offenders were included. It would require a separate study to include cases when the victim was under the age of 18, as characteristics of adolescent sexual assault have been found to be different from adult sexual assault (see Danielson and Holmes 2004; Jones, Rossman, Wynn, Dunnuck and Schwartz 2003; Kilpatrick 2000; Muram, Hostetler, Jones, and Speck 1995; White and McLean 2006). Thus, the factors related to reporting for adolescents and adults may be different and therefore adolescents are excluded from the current study's sample parameter.⁵ The independent and control variables included

⁵ There were a total of 864 completed or attempted rapes against women eighteen years or older by one or more male offenders reported in the NCVS from 1992-2012. However, 244 of these incidents were excluded by list wise deletion in the multivariate analyses due to missing data on the independent and dependent variables.

in the study are: victim/offender relationship, physical force, weapon present, injury, medical attention, completed rape, victim's race, education, age, income, and employment, and whether or not the assault involved multiple offenders, offender age, offender substance use, the location of the incident, and whether or not a bystander was present during the incident.

Dependent Variables

This research will predict the likelihood of three dependent variables: whether the assault was reported in general, whether the victim reported the incident, or whether a third party initiated the report. To ascertain whether victimizations were reported to police, victims were asked whether the police "found out about the victimization," and if so, they were asked, "how did the police find out?" It is this question with which the measure of victim and third party reporting is derived. Respondents were asked to identify if they reported the victimization to the police or if the police were notified by anyone else. The other categories a respondent could choose were: "other household member," "someone official," "someone else," "police at the scene," "some other way." Following procedures conducted by Baumer et al. (2003), a polytomous dependent variable was created to contrast the factors related to a rape being reported by the victim or a third party with incidents that were not reported. To remain consistent with previous research, a binary dependent variable

This amount of missing data is consistent with other published research utilizing NCVS data (see Baumer et al. 2003: 851). In addition, income had many missing cases, but preliminary analyses confirmed that excluding this variable did not significantly change the coefficients and thus it was included in final analysis procedures.

was created to measure whether the assault was reported in any form (Baumer et al. 2003). This was coded as 1 for reported (victim or third party) and 0 for incidents that were not brought to the attention of authorities. For more information and descriptive statistics of these measures, see Table 1.

Independent Variables

Incident Characteristics. Descriptive statistics on all variables are included in Table 1. To include measurements identified by previous research and to gauge the seriousness of the completed and attempted rapes examined here (Greenberg and Ruback 1992), the following variables were included: a) injuries sustained during the assault, b) received medical treatment, c) weapon present, d) physical force used, and e) completed rape.

The injury variable was coded to only include additional physical injuries that were sustained during the rape (injury=1; no injury=0). These physical injuries are separate from rape and sexual assault injuries, which are reported as being present for all rapes and sexual assaults in the NCVS. Injuries included the following categories: suffering broken bones or teeth, internal injuries, bruises, cuts, stab wounds, bullet wounds or being knocked unconscious. In the NCVS, only those who report being injured are asked whether or not they received medical treatment.

If victims received medical treatment, this variable was coded as 1 and 0 otherwise. The variable “weapon present” was coded to include all incidents where the respondent stated that any type of weapon was present during the assault. Weapons included any knife, gun, or anything that could be used as a weapon such as a stick or broken bottle. When a weapon was present, this variable was coded as 1 and 0 otherwise.

The physical force variable was coded 1 for whether the offender used physical force and 0 otherwise. Physical force refers to when the offender used any type of physical force against the victim including if the victim was shot, shot at, attacked with a knife, hit by an object, hit by a thrown object, hit, slapped, or knocked down, grabbed, held, tripped, or another type of attack. Further, although the findings are mixed, some studies have found that completed rape is more likely to be reported than an attempted rape (Bachman 1998; Gartner and Macmillan 1995; Greenberg and Ruback 1992). To control for this effect, the dichotomous variable indicating completion is coded 1 for completed rapes and 0 otherwise.

Victim/Offender Relationship. As discussed earlier, how the relationship between the victim and offender affects reporting likelihood has been a point of contention in the literature as some research finds that stranger rapes are more likely to be reported, while others do not find this. In the following analyses, four dichotomous variables representing the victim/offender relationship were included: 1= partner or ex-partner; 2= family member or other relative; 3= an acquaintance or other known offenders; 4= stranger. In the analyses, stranger is used as the comparison category.

Contextual Characteristics. Some research has found that the location of the incident increases reporting likelihood (Greenberg and Ruback 1992), while others have found that location does not have an effect (Clay-Warner and Burt 2005). In the NCVS, respondents are asked where the incident happened. Distinctions are made between private locations (e.g. occurring in respondent's home or a friend's/relative's home) and public locations (i.e. not in an enclosed space). A binary variable was created to represent private location: 1 for all incidents occurring in a private location and 0 for all other locations. To control for the presence of bystanders, respondents

were asked if someone other than the offender and respondent was present during the assault. This variable was coded as 1=third party present and 0=only victim and offender were present.

Research suggests that victim and offender alcohol and/or drug use is related to reporting likelihood for both victims (Clay-Warner and Burt 2005; Felson and Paré 2005; Fisher et al. 2003) and third parties (Felson and Paré 2005). However, a limitation of the current research is that the NCVS does not gather information about the victim's use of substances. Nonetheless, perceived offender alcohol/drug use is included and coded 1 if the respondent reported they believed the offender was using alcohol and/or drugs and 0 otherwise. Although the NCVS distinguishes between which type of substance offender is using, Chen and Ullman (2010) found no difference when this was examined separately, thus providing the basis to assess offender substance use as one binary variable (1=drinking or drug use; 0=no drinking or drug use).⁶

*Offender Characteristics*⁷. Some research suggests that when an assault includes multiple offenders, the perceptions of seriousness may increase resulting in higher likelihood of reporting (Greenberg and Ruback 1992). To control for this, a dichotomous variable was coded as 1 when more than one offender was involved and 0 for all incidents involving one offender. Offender age was also included as a control

⁶ Ninety-nine respondents indicated that they did not know whether the offender was drinking or not. Thus, these cases were coded as 0, to indicate no drinking or drug use since it was not obvious to the victim.

⁷ Offender race was not included in analyses due to the fact that rape is often an intraracial crime (Eschholz and Vieraitis 2004) and including this variable could lead to a high degree of multicollinearity between offender race and victim race.

variable. In the NCVS, single offender age is included as an ordinal variable with four categories. Offender age was coded as 0 for all offenders 17 years or younger and 1 for all offenders 18 years or older.

Victim Characteristics. Demographics found by previous research to have an effect on reporting likelihood are a victim's race/ethnicity, age, marital status, employment, education, and income. Even though research on these characteristics has produced mixed results, it is important to control for these effects. Marital status was coded as a dichotomous variable: 1 for respondents who were married when the interview was conducted and 0 for unmarried respondents. Following previous coding procedures (Chen and Ullman 2010) education was coded as 0 for no college and 1 if the victim had some college experience or more. Some college includes all those that attended college and did not receive a degree, as well as those that did receive a college degree. Victim's age was measured in years. Household income contains fourteen income categories that range from less than 5,000 to more than 75,000 in total annual household income. If the respondent indicated that they had a job or worked in the last week, they were coded as 1 for employed and 0 otherwise. For victim's race, four dichotomous variables were created: Non-Hispanic White; Non-Hispanic Black; Non-Hispanic other; Hispanic of any race. In the analysis procedures, Non-Hispanic White served as the reference category.

Analytical Strategy

Initially, chi square analyses were performed to determine the relationship between each independent variable and reporting behavior. Next, a logistic regression was conducted to see whether the independent variables in this model adequately predict the dichotomous dependent variable of reported versus not reported, net of all

other factors. Essentially, this analysis will show us which factors are predicting reporting in general, regardless of who reported. In this model, the dependent variable measures the likelihood that someone (victim or third party) will report the assault to the police. A logistic regression was employed because the dependent variable is binary, making it unsuitable for the ordinary least squares regression model (Hosmer and Lemeshow 2000). Then, to examine differences between victim reporting, third party reporting, and not reporting, a multinomial logistic regression was utilized to examine the outcomes from this polytomous measure of reporting behavior (Baumer et al. 2003). Two multinomial logit models were estimated, with one using not reporting as the reference category and another utilizing victim reporting as the reference category. The purpose of estimating two models was to provide a more comprehensive discussion on the differences and similarities between victim and third party reporting.

The NCVS utilizes a stratified, multistage cluster sample design and thus we cannot assume that the observations in the sample are independent from one another (Baumer 2002). This is problematic considering regression models assume that observations are independent. In addition, an analysis devoid of any statistical adjustments for this sampling design may produce inaccurate standard errors and erroneous variances, thereby affecting the statistical null hypothesis tests (Lauritsen 2001; Lohr and Liu 1994). Lohr and Liu, when specifically discussing whether or not to apply weights for logistic regression analysis using NCVS data stated, “if the dependence among observations is ignored, estimates of variances will generally be too small” (1994: 347). Therefore, in order to adjust for the sampling procedures, an incident weight will be applied prior to conducting analyses. The incident weight

recognizes that personal incidents are separate from victimization. That is, one incident could contain three victimizations by three separate respondents within a cluster sampling procedure since it cannot be assumed that observations are independent from each other. Thus, the incident weight controls for the sampling design by counting each incident once. All computations were done using Stata, version 12.

Chapter 4

RESULTS

Sample Characteristics

Descriptive statistics for the sample are shown in Appendix A, Table 1. A total of thirty-five (n=290) percent of completed and attempted rapes were reported to the police. In twenty-four (n= 193) percent of reported rapes, the victim notified the police. In eleven percent (n=97) of the reported rapes, a third party reported the sexual assault. Seventy-two percent of women in the sample identified as non-Hispanic White, while fifteen percent identified as non-Hispanic Black, five percent non-Hispanic Other, and nine percent Hispanic of any race. Victim's age ranged from 18-76 years at the time of the incident and the average age of victims was thirty. Thirteen percent of the sample identified as married and almost half, forty-nine percent, of respondents had some college education. The modal household income category was between \$15,000-\$17,999, and over half, fifty-six percent of the women reported that they had a job or worked in the past week.

The majority of rapes, forty-four percent, were committed by an acquaintance, while thirty-four percent were committed by an intimate partner, three percent by a family member, and eighteen percent by strangers. Physical force was used in forty-two percent of the cases, and a weapon was present in sixteen percent of the incidents. In forty percent of the incidents, the victim sustained injuries in addition to the rape, and in twenty-eight percent of the cases where the victim reported an injury, the victim also received medical care. Sixty-two percent of the incidents were completed rapes.

In only six percent of the incidents, the victim reported that there was more than one offender. Only one percent of the incidents involved an offender under the age of eighteen. In slightly over half, fifty-one percent, of the cases, the victim perceived the offender as having been under the influence of alcohol and/or drugs. Seventy-three percent of the rapes occurred in a private location and in nineteen percent of the incidents, a third party was present at the time of the rape.

Bivariate Statistics

The relationships between all of the independent variables and the three dependent variables: reported to the police (by anyone), victim reported, and third party reported, were examined utilizing chi-square tests (see Appendix B, Table 2 for bivariate results). At the bivariate level, there were many significant relationships across all three dependent variables. Stranger assaults were significantly more likely to be reported by anyone, by a victim, and by a third party at the bivariate level. Four incident characteristics: physical force, weapon present, injury, and medical attention were all significantly related to overall reporting likelihood, victim reporting, and third party reporting.

At the bivariate level, a few victim characteristics were related to reporting behavior. Incidents involving Non-Hispanic Black victims were significantly more likely to be victim reported. Being employed was significantly related to both overall reporting likelihood and victim reporting likelihood. Incidents involving multiple offenders were significantly related to overall reporting likelihood. Private location was significantly related to both overall reporting likelihood and victim reporting. Last, incidents that occurred when a third party was present were also significantly related to reporting likelihood and third party reporting.

Multivariate Analyses of Reporting Behavior

First, a logistic regression (see Appendix C, Table 3) was estimated to examine the relationships between the independent variables and the binary dependent variable of reported versus not reported. A box plot was utilized to examine continuous variables for extreme outliers. During this process, one woman, aged ninety, was identified as an influential outlier and was excluded from multivariate analyses. Two multinomial logistic regressions were estimated to examine the relationships between the independent variables and reporting likelihood. The first model (Appendix D, Table 4) utilized “victim reported” as the comparison category, while the second model (Appendix E, Table 5) used “not reported” as the reference group. The purpose of a multinomial logit model is to examine the relationships between the independent variables and a nominal dependent variable. With this technique, comparisons between third party reported, victim reported, and not reported can be made. In addition, marital status was excluded from the multinomial logistic regression models due to the fact that it was insignificant in the bivariate analyses, the logistic regression, and preliminary analyses. No multicollinearity issues were detected among the independent variables. Overall, there were 620 incidents included in the final analyses.

Results from the logistic regression (Appendix C) reveal that net of other factors, none of the victim/offender relationship variables were significant. As such, after controlling for all of the other variables, women raped by strangers were not more likely to report their victimization compared to those raped by any known offender category. It should be noted, however, that the coefficient for intimate partner was marginally significant ($p < .07$). Three incident characteristics were significantly

associated with the odds of reporting. The odds of rape being reported increased significantly when a weapon was present, when the victim sustained injuries in addition to the rape, and when the victim received medical attention. Only one victim characteristic, employment, was significantly related to reporting and this relationship was negative. That is, when victims had a job or worked in the last week, the odds that an incident was reported significantly decreased. Last, one offender characteristic, offender age, was significantly and negatively related to reporting. When the offender was 18 or older, sexual assaults were less likely to be reported compared to victimizations where the offender(s) were 17 or younger.

Outcomes from the first multinomial regression analysis (i.e. victim report as comparison category), still did not find any significant differences between the odds of reporting and the victim/offender relationship. However, the three incident characteristics found to be significant in the logistic regression remain significant in the comparison between not reported and victim reported. In other words, when a weapon was present, when the victim sustained injuries, and when the victim sought medical attention, victims were more likely to report the incident herself compared to not reporting. Also, when the offender was perceived to be under the influence of a substance, victimizations were more likely to go unreported compared to victims reporting. When examining the coefficients that compare third party versus victim reporting, the only variable that was significantly different was whether the rape was completed. Rapes that were completed were more likely to be reported by the victim herself than by a third party. Offenders' age was also marginally significant ($p < .06$); victims raped by offenders 18 years of age or older were much more likely to go unreported compared to victims' reporting.

The second estimated multinomial logistic regression utilized not reported as the reference category. As shown in Appendix E, the first column is redundant to the first column in Appendix D, but with the reverse sign for the coefficients since the comparison category for this multinomial regression is “not reported.” When examining the third column, which presents the effects of the independent variables for third party versus not reporting, we see that, like victim reporting, third parties were more likely to report when a weapon was present and when medical attention was required, compared to the victimization going unreported. Incidents with offenders who were over the age of eighteen were less likely to be reported by third parties. Unlike victim reporting, third parties were significantly less likely to report victimizations perpetrated by intimate partners compared to the other relationship categories. In addition, third parties were more likely to report the victimization if another person was present during the victimization. In sum, there are some similar factors that increase the likelihood of both victims and third parties reporting a sexual assault, but there are also some unique factors that predict third party reporting.

Chapter 5

DISCUSSION

The current study utilized a recent, nationally representative sample from the National Crime Victimization Survey to examine the factors related to the likelihood of reporting sexual assault both generally as well as third party and victim reporting. The existing literature is characterized by equivocal findings regarding many variables, and moreover, there exists a paucity of research that has examined the differential factors that may predict victim reporting compared to third party reporting. This paper contributes to the current literature by providing an analysis of reporting behavior in general, as well as providing a more detailed analysis of the differences and similarities between victim and third party reporting.

Initial bivariate analyses identify several significant relationships between the independent variables and the three dependent variables of reporting overall, victim reporting, and third party reporting. However, once added into the multivariate models, a small number remained significant net of other factors. In the multivariate analyses, the victim/offender relationship did not significantly predict reporting behavior (Bachman 1993, 1998; Baumer et al. 2003), with the exception of third party reporting and incidents that were not reported at all, which will be discussed more thoroughly later. This finding is important because it contradicts some previous findings that stranger rapes are much more likely to be reported (Chen and Ullman 2010; Felson and Paré 2005; Fisher et al. 2003; Gartner and Macmillan 1995; Pino and Meier 1999; Ruback and Ménard 2001), while confirming others (Bachman 1993,

1998; Baumer et al. 2003). Baumer et al. (2003:862) in their examination of trends in reporting rape over the years 1993-2005 found that “currently women are just as likely to report to the police rapes by people they know as they are to report rapes by strangers.” Baumer et al. (2003) offered some reasons as to why this may be the case including that victims may be more inclined to report an intimate partner because this allows them to receive help or protection from the abuser (Felson et al. 1999; Felson et al. 2002). In addition, Baumer and colleagues (2003) outlined social, political, and legal changes in the way of rape reform and social awareness about acquaintance rape and attributed these efforts to being at least partially responsible for the increase in the reporting of sexual assault committed by nonstrangers. Overall, according to the analyses presented here, while it may not be the case for third parties reporting intimate partner rapes, this finding may still represent increased reporting tendencies of known offenders by victims.

It should be noted, however, that the coefficients for the victim/offender relationship categories may have generally failed to attain significance due to how the NCVS measures rape and sexual assault. In other words, it may be that because the NCVS does not utilize adequate behavior specific questions, respondents may be more likely to disclose to interviewers stereotypical rapes that involve strangers compared to rapes perpetrated by known offenders. Moreover, the rapes respondents disclose to interviewers that were perpetrated by known offenders may also have included injuries and/or a weapon, and it is these incident characteristics that are related to reporting, not the victim and offender relationship.

The other alternative may simply be that women are more likely to report victimizations perpetrated by known offenders today. As stated previously, Clay-

Warner and Burt (2005) suggested that data gathered shortly after rape reform legislation would not be an accurate estimate of changes in reporting due to legal efforts because the implementation of rape reform takes a significant amount of time. That is, it is hypothesized that changes in reporting behavior are more likely to be observed once these changes are embedded in and accepted by society (Bachman and Paternoster 1993; Clay-Warner and Burt 2005). In their analyses of reporting behavior, Baumer and colleagues (2003), utilized data from 1973-2000 and the current study used data from 1992-2012. Thus, it is possible that the results presented here represent a continued increase in the likelihood that victims will report nonstranger sexual assaults to the police.

Third parties were significantly less likely to report rapes perpetrated by intimate partners (Baumer et al. 2003; Felson et al. 1999; Felson and Paré 2005). While this could be indicative of a general hesitancy to report these types of sexual assaults as some previous research suggests (Felson et al. 1999; Felson and Paré 2005), it may also simply be that third parties are unaware that the sexual assault took place (Felson et al. 1999; Felson and Paré 2005). In fact, consistent with Felson and Paré (2005), the vast majority of sexual assaults in this sample, seventy-three percent, occurred in a private location. What's more, the current research also finds that when another person was present during the incident, the probability of a third party reporting as compared to incidents that were not reported, significantly increased, which could mean that third parties are reporting when they know about it. Nonetheless, this data cannot allow for an analysis of this since "third parties" who reported the victimization may or may not have been present at the time of the incident. In other words, even though the victim reported that a bystander was present

during the sexual assault, this does not necessarily mean the third party that reported was also the bystander.

Expectedly, in the bivariate analyses, the incident characteristics of physical force, weapon present, injury, and medical attention were all related to victim reporting, third party reporting, and reporting in general. In the logistic regression output, physical force was no longer significant when other variables were included. However, weapon present, injury, and medical attention significantly increased the odds that the sexual assault would be reported (Bachman 1993, 1998; Chen and Ullman 2010; Du Mont et al. 2003; Fisher et al. 2003; Gartner and Macmillan 1995; McGregor et al. 2000; Pino and Meier 1999). Similarly, these incident characteristics were also found to be significant in the multinomial logit models.

In the first model, with victim reported as the reference category, it was found that when a weapon was present, when the victim sought medical attention, and when the victim sustained injuries in addition to the rape victims themselves were more likely to report the incident to police. Furthermore, in this model when the sexual assault was identified as a completed rape, the odds that a rape would be reported by a third party were significantly lower than the probability of a victim reporting. Previous research on completed versus attempted rape has been inconsistent with some finding that completed rapes are more likely to be reported than attempted rapes (Bachman 1993; Gartner and Macmillan 1995; Greenberg and Ruback 1992), while others have found no difference in reporting based on this distinction (Pino and Meier 1999). Future research needs to investigate how experiencing a completed or attempted is related to reporting behavior.

In the second model, with not reported as the reference category, both weapon present and medical attention significantly increased the probability that a victim would report the sexual assault (Bachman 1993, 1998; Chen and Ullman 2010; Fisher et al. 2003; Gartner and Macmillan 1995; Pino and Meier 1999). When the victim sustained injuries in the addition to the sexual assault, this increased the odds that the victim would report as opposed to the police not being notified (Bachman 1993, 1998; Chen and Ullman 2010; Du Mont et al. 2003; Gartner and Macmillan 1995; McGregor, Wiebe, Marion, and Livingstone 2000; Pino and Meier 1999; for exception see Jones, Alexander, Wynn, Rossman, and Dunnuck 2009). Contrary to some previous research (Greenberg and Ruback 1992), but confirming of others (Felson and Paré 2005), when a weapon was present, the chances that a third party would report the sexual assault increased. A third party was also more likely to report the assault when the victim received medical attention.

These incident characteristic (e.g. weapon present, injury, medical attention) findings are consistent with much of the previous research. Essentially there are several interrelated arguments behind the fact that these incident characteristics increase the odds of reporting. One is the suggestion that when these characteristics are present, the sexual assault is viewed in light of commonly held beliefs in rape myths that keep issues of acquaintance and intimate partner hidden (Abbey 2002; Du Mont et al. 2003). Consequently, it is possible that knowing and endorsing this stereotype could increase the probability that the victim will perceive a sexual assault that aligns with this stereotype as more believable (Fisher et al. 2003). It could also increase the chances that the victim interprets the sexual assault as rape (Littleton et al. 2006) and thus is more likely to report it (Fisher et al. 2003). It could also be that the

rape was viewed as more serious, which has been identified as a potential reason for sexual assaults with these characteristics to have a higher likelihood of reporting (Fisher et al. 2003; Greenberg and Ruback 1992).

The context of third party reporting and incident characteristics is less understood. The reason why third parties may be more likely to report sexual assaults that involve a weapon, when compared to sexual assaults that are not reported, could also be related to perceptions of crime seriousness and emergency situations. It is conceivable that third parties are more likely to report when they perceive the incident as an emergency and thus more serious (Greenberg and Ruback 1992). Research on bystander behavior in general and sexual assault scenarios find that when the emergency is perceived as ambiguous, the bystander is less likely to act (Burn 2009; Banyard, Plante, and Moynihan 2004). Thus, when situations are considered an emergency and ultimately more serious, bystanders are more likely to act (Banyard, Plante, and Moynihan 2004; Burn 2009; Greenberg and Ruback 1992).

Contrary to previous findings that third parties are more likely to report the sexual assault when the victim sustained injuries in addition to the sexual assault (Felson and Paré 2005), the current study found that injury was not related to third party reporting likelihood. However, when the victim sought medical attention, the likelihood of a third party reporting the sexual assault significantly increased. One possible explanation could be that in these situations, the third party is a medical professional. That is, while injury is unrelated to third party reporting, if the victim received medical attention for her injuries, the sexual assault is more likely to be reported by a third party. Unfortunately, the current data does not provide information on exactly who the third party might be and thus this cannot be determined. The

finding that the odds are lower for third parties than for victims to report completed rapes is less clear and future research should investigate this with a more detailed analysis of the context behind third party reporting.

Of the victim characteristics, on the bivariate level, non-Hispanic Black (victim reporting), non-Hispanic other (third party reporting) and employment status (both victim and overall reporting) were related to reporting behavior. However, the only victim characteristic that remained significant in the multivariate analysis was employment. When a victim was employed, it significantly reduced the odds that the assault would be reported. This is somewhat inconsistent with Chen and Ullman's (2010) finding that victims are more likely than third parties to report the assault if the victim was older and employed. Future research should continue to explore how employment and age affect reporting likelihood.

The only offender characteristic significant at the bivariate level was the relationship between multiple offenders and overall reporting likelihood. However, in the logistic regression analysis, single offender age (coded as eighteen and older) was significant and negatively related to the odds of reporting. Older offenders were also less likely to be reported by third parties. Less is understood about how offender age is related to reporting likelihood, and future research should address this gap in our understanding of reporting behavior and offender characteristics.

There was no significant relationship between offender substance use and third party reporting likelihood, but victims were less likely to report the incident to police when they perceived the offender as using substances. This is inconsistent with previous research that found that victims and third parties are more likely to report when the offender was using substances (Felson and Paré 2005), but is consistent with

Fisher and colleagues (2003). In their study of college women, Fisher et al. (2003) found that victims were more likely to disclose sexual assaults that involved alcohol and/or drugs to friends than to campus authorities. At least in a college setting, it is possible that when the offender has been consuming alcohol and/or drugs, that the victim has been as well (Vander Ven 2011) and research has found that when victims have been using substances that they are less likely to report the assault (Clay-Warner and Burt 2005; Felson and Paré 2005; Fisher et al. 2003). However, this claim is beyond the scope of the current research and possibly specific to college settings, but should be examined more thoroughly in future research.

Furthermore, bivariate results identify significant relationships between the sexual assault taking place in a private location and overall sexual assault reporting and victim reporting. However, the location of the incident was not significant when other factors were taken into account. This is consistent with research that did not find a significant relationship between location of the rape and reporting behavior (Clay-Warner and Burt 2005), but it contradicts Greenberg and Ruback's (1992) findings that rapes that occur in public places are more likely to be reported.

Previous research often includes a variable to examine whether or not a third party being present during the rape increases the odds of reporting likelihood (Baumer et al. 2003), but less is known about the role that having a third party present plays in the overall, third party, and victim reporting of sexual assault. Bivariate results indicate that having a third party present increases overall reporting likelihood and third party reporting. In the multivariate analysis, net of other factors, having a third party present increased the odds that the third party would report the sexual assault when compared to the odds of it not being reported. As discussed earlier, this could

indicate that when third parties are present during, or aware of, a sexual assault that they may be more likely to report it. More research is needed to identify the mechanisms behind this as the current data does not provide adequate information to properly examine these issues.

This paper utilized a recent, nationally representative sample, and it examined differences between third party reporting, victim reporting, and failure to report. Further, estimating two multinomial logistic regressions allowed for a more comprehensive understanding of the differences among reporting behavior between victims and third parties. Rather importantly, it also provides support and additional context to the recent findings in the literature that the reporting of rapes committed by nonstrangers is on the rise (Baumer et al. 2003). It is hypothesized that changes in reporting behavior based on victim/offender relationship may not be seen until legal changes can infiltrate popular beliefs around sexual assault. Thus, utilizing recent data could mean that finding that the victim/offender relationship does not matter, adequately represents real changes in the reporting of nonstranger victimizations.

Limitations

Like all research, these data and analyses are not without weaknesses and some limitations of the current study need to be addressed. As with most nationally representative surveys that are largely based on telephone communication, certain groups of people, like the institutionalized and homeless or those who do not have a telephone, are excluded from the sample. In addition, some research has suggested that in-person interviews are preferred when the topic of the interview is more sensitive in nature (i.e. discussions about victimization experiences) (Crowell and Burgess 1996). In addition, questions about victim alcohol/drug use that have been found to affect

reporting likelihood were not asked on the NCVS, eliminating the opportunity for a satisfactory analysis on substance-related sexual assaults and reporting behavior.

Although the amount of missing data is similar to other studies that utilize the NCVS, it is important to note that having this missing data may have affected the results.

Researchers have also highlighted the deficiency of the screening questions for sexual assault utilized by the NCVS. These concerns are largely based on the inconsistencies between the NCVS and the NVAWS in estimating the annual incidence and annual victimization rates (Kilpatrick and Ruggiero 2004; Koss 1992; Tjaden and Thoennes 2000b). However, in contrast to these findings, Rand and Rennison found “*no significant differences between NCVS and NVAWS estimates of overall rape or intimate partner rape against women $p < 0.05$* ” (2005: 281-282, emphasis in original). What’s more, the NVAWS only collected data from one point in time between November 1995 and May 1996 (Kilpatrick and Ruggiero 2004). Thus, the “NCVS represents the only national level data source in the United States that includes information about crimes that did not come to the attention of the police” (Baumer and Lauritsen 2010: 131).

Chapter 6

CONCLUSION

Ultimately, as scholars in this line of inquiry, it is important to consider that our findings on police reporting behavior are simply a product of the data set utilized. For example, this study, as well as the previous studies identified in this article that found that the victim/offender relationship is not important in reporting likelihood, used NCVS data. Some other studies that do not find this to be the case utilize data from the National Violence Against Women Survey and the National College Women Sexual Victimization Study. Thus, the finding that the victim/offender relationship does not matter could simply be an artifact of NCVS data.

Importantly, there are other inconsistencies in the findings on victim, offender, and contextual characteristics that could be simply due to data limitations, sample parameter used, methodological choices (e.g. counting multiple victimizations versus most recent victimization), and measurement issues. For example, both Chen and Ullman (2010) and Felson and Paré (2005) utilized the National Violence Against Women Survey but their sample parameters were not identical. While it cannot be directly attributed to the sample parameter utilized, Felson and Paré (2005) found that victims who were using alcohol and or drugs at the time of the incident were less likely to report the assault to the police, while Chen and Ullman (2010) found no relationship between victim substance use and reporting likelihood. Even though the majority of their findings were similar, it is clear that methodological choices can affect our estimates of reporting likelihood. Although it is beyond the scope of this

paper to closely examine all the methodological choices and data limitations and how these could affect estimates of reporting, it highlights the need for scholars in this area to critically consider the directions of future research in this line of inquiry.

The finding that “real rape” scenarios (e.g. weapon present, injury, and medical attention) are still more likely to be reported than sexual assaults that do not involve these characteristics suggests that there is still a need for education and social campaigns to reiterate that sexual assault does not have to have these characteristics to be considered rape. That is, victims may be unable to evaluate sexual assaults that do not involve these characteristics as rape and thus are unlikely to acknowledge themselves as victims (Littleton et al. 2006), which decreases reporting likelihood (Fisher et al. 2003).

It could also be that victims perceive these scenarios as more believable (Fisher et al. 2003) and thus are more likely to report them. Therefore, it is important to not only create social awareness of all the forms in which sexual assault can occur, but it is equally imperative to create training programs for criminal justice officials and victim service providers. The goal of creating these training programs is to create a more conducive and receptive atmosphere for victims who go to victim service providers and/or criminal justice officials with rape cases that do not align with the “real rape” scenario. In addition, social campaigns and improved awareness of sexual assault would likely create more knowledgeable third parties, which would hopefully increase reporting by third parties when they become aware of the rape. More research is needed on the context of third party reporting before adequate policy recommendations can be generated.

In conclusion, this paper offers a comprehensive analysis of third party reporting, victim reporting, and failure to report sexual assault. This study offers analyses using recent data and is based on a nationally representative sample. While this study attempted to address many of the inconsistencies in the extant literature on sexual assault, it also sought to further address how the victim/offender relationship affects reporting likelihood, a major point of contention within the literature. This study adds to the current state of the literature and will hopefully ignite more research in this area, including more qualitative work to further illuminate the mechanisms behind the factors related to reporting likelihood.

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Appendix A
UNIVARIATE STATISTICS

Table 1. Descriptive Statistics for Variables Included in Analysis of Police Reporting of Completed or Attempted Rape by Victims and Third Parties (NCVS 1992-2012).⁸

	Percent
<u>Dependent Variables</u>	
Reported to Police	.35
Victim Reported	.24
Third Party Reported	.11
Not Reported	.65
 <u>Independent Variables</u>	
<i>Victim/Offender Relationship</i>	
Strangers	.18
Non-Strangers	.82
Partner/Ex-Partner	.34
Family/Other Relatives	.03
Acquaintances/Other known offenders	.44
 <i>Incident Characteristics</i>	
Physical Force	.42
Weapon Present	.16
Injury	.40
Medical Attention	.28
Completed Rape	.62

⁸ These descriptive statistics are based on unweighted data.

Control Variables

Victim Characteristics

Victim's Race	
Non-Hispanic White	.72
Non-Hispanic Black	.15
Non-Hispanic other	.05
Hispanic of any race	.09
Marital Status	.13
Education	.49
Age (Mean)	.30
Household Income ⁹	6.57
Employment	.56

Offender and Contextual Characteristics

Multiple Offenders	.06
Offender Age (% 18 or older)	.99
Offender Substance Use	.51
Private Location	.73
Third Party Present	.19

Note. Sample sizes ranged from N=750-864 with weapon present (N=744) and income (N=750) having the most missing cases. A total of 864 respondents either answered no or yes to the rape being reported. 822 respondents identified her relationship with the offender. 828 respondents answered if there was physical force, 827 for injuries sustained, and 864 for both medical attention and completed rape. 860 respondents identified their race, 859 answered about their marital status, 857 told interviewers about their education experience, 863 reported their age, and 856 provided information about whether they were employed. A total of 857 respondents provided information on how many offenders were present, 794 on the proximate age of the offender, and 848 disclosed as to whether they perceived the offender as having been using substances. A total of 864 respondents revealed the location of the assault and 827 respondents revealed whether or not a third party was present during the incident.

⁹ Measured as ordinal variable. Mean is 6.34. This income category is \$15,000-17,499.

Appendix B

BIVARIATE PROPORTIONS

Table 2. Examining Relationship Between Independent Variables and Reporting Likelihood, Victim Reporting, and Third Party Reporting (NCVS 1992-2012).

	<u>Dependent Variables</u>		
	Reported	Victim	Third Party
<u>Independent Variables</u>			
<i>Victim/Offender Relationship</i>			
Strangers	.49***	.29*	.20**
Partner/Ex-Partner	.26***	.17*	.08**
Family/Other Relatives	.39***	.24*	.14**
Acquaintances	.35***	.25*	.10**
<i>Incident Characteristics</i>			
Physical Force	.42***	.27*	.15***
Weapon Present	.58***	.37***	.21***
Injury	.48***	.32***	.16***
Medical Attention	.64***	.42***	.23***
Completed Rape	.34	.25	.10
<u>Control Variables</u>			
<i>Victim Characteristics</i>			
Non-Hispanic White	.33	.23*	.10
Non-Hispanic Black	.41	.32*	.11
Non-Hispanic other	.35	.12*	.21
Hispanic of any race	.40	.25*	.15
Marital Status	.41	.28	.14
Education	.34	.24	.10

Age ¹⁰			
18-36	.33	.23	.11
37-55	.39	.26	.12
56>	.39	.25	.13
Household Income			
<5,000 – 14,999	.34	.24	.11
15,000 - 74,999	.32	.22	.10
75,000>	.27	.14	.10
Employment	.30**	.21*	.10
<i>Offender and Contextual Characteristics</i>			
Multiple Offenders	.48*	.33	.15
Offender Age	.34	.23	.11
Offender Substance Use	.33	.21	.12
Private Location	.32**	.22**	.10
Third Party Present	.47***	.27	.19***

Note. ***p<.001; **p<.01; *p<.05 (Indicates categories in variable are significantly different)

¹⁰ Categories for age and income were collapsed for display purposes only. The original interval level variable will be used for age and income in subsequent analyses. One person, age ninety, was excluded from the analysis, as she was an identified as an influential outlier during analyses.

Appendix C

PREDICTING OVERALL REPORTING LIKELIHOOD

Table 3. Examining Relationships Between Independent Variables and Reporting Likelihood Net of Other Factors (NCVS 1992- 2012).¹¹

Independent Variables¹²¹³	Odds Ratio (SE)
<i>Victim/Offender Relationship</i>	
Strangers	
Partner/Ex-Partner	.553 (.18)
Family/Other Relatives	.909 (.54)
Acquaintances	.878 (.26)
<i>Incident Characteristics</i>	
Physical Force	1.15 (.26)
Weapon Present	2.46 (.73)**
Injury	1.717 (.40)*
Medical Attention	3.97 (.91)***
Completed Rape	1.01 (.22)
<u>Control Variables</u>	
<i>Victim Characteristics</i>	
Non-Hispanic White	
Non-Hispanic Black	1.30 (.36)
Non-Hispanic other	1.06 (.52)
Hispanic of any race	1.29 (.49)

¹¹ Results based on weighted data.

¹² No issues with multicollinearity were detected. Mean VIF=1.31 and VIF range=1.03-2.64.

¹³ Both “Strangers” and “Non-Hispanic White” served as reference categories.

Marital Status	1.19 (.39)
Education	.851 (.17)
Age	.993 (.00)
Household Income	.997 (.02)
Employment	.659 (.14)*
<i>Offender and Contextual Characteristics</i>	
Multiple Offenders	.745 (.37)
Offender Age	.081 (.09)*
Offender Substance Use	.704 (.14)
Private Location	.790 (.20)
Third Party Present	1.411 (.38)

Note. N=620. Log Likelihood = -309.63226, $p < .0001$.

Hosmer- Lemeshow Goodness of Fit: Chi Square Statistic=12.34, $p < .136$.

*** $p < .001$; ** $p < .01$; * $p < .05$

Appendix D

MULTINOMIAL LOGISTIC REGRESSION: MODEL 1

Table 4. Examining Differences Between Third Party Reporting, Not Reporting, and Victim Reporting Likelihood (NCVS 1992-2012).¹⁴

	<u>No vs. Victim Report</u> Odds Ratio (SE)	<u>Third Party vs. Victim Report</u> Odds Ratio (SE)
Independent Variables¹⁵		
<i>Victim/Offender Relationship</i>		
Strangers		
Partner/Ex-Partner	1.39 (.52)	.42 (.21)
Family/Other Relatives	.75 (.49)	.27 (.32)
Acquaintances	.94 (.31)	.53 (.22)
<i>Incident Characteristics</i>		
Physical Force	.98 (.25)	1.52 (.59)
Weapon Present	.43 (.14)**	1.38 (.55)
Injury	.50 (.13)**	.63 (.25)
Medical Attention	.27 (.06)***	1.17 (.44)
Completed Rape	.81 (.20)	.48 (.18)*
Control Variables		
<i>Victim Characteristics</i>		
Non-Hispanic White		
Non-Hispanic Black	.74 (.22)	.89 (.30)
Non-Hispanic other	1.74 (1.17)	4.24 (3.33)
Hispanic of any race	.80 (.33)	1.15 (.65)
Education	1.04 (.24)	.69 (.23)
Age	.99 (.01)	.97 (.01)

¹⁴ Results based on weighted data.

¹⁵ Both “Strangers” and “Non-Hispanic White” served as reference categories.

Household Income	1.00 (.02)	1.00 (.04)
Employment	1.45 (.35)	.80 (.27)

Offender and Contextual Characteristics

Multiple Offenders	1.11 (.61)	.53 (.35)
Offender Age	10.41 (13.42)	.52 (.68)
Offender Substance Use	1.60 (.37)*	1.47 (.49)
Private Location	1.25 (.36)	.96 (.38)
Third Party Present	.82 (.25)	1.67 (.65)

Note. N=620. Log Likelihood = -418.95748, $p < .0001$. "Victim Report" served as comparison group. 1= *victim report* vs. 2 = *third party report* vs. 3=*not reported*. R-squared=.1626. *** $p < .001$; ** $p < .01$; * $p < .05$
 Goodness of fit test: Degrees of Freedom=16; Chi squared statistic = 23.91, $p < .09$.

Appendix E

MULTINOMIAL LOGISTIC REGRESSION: MODEL 2

Table 5. Examining Differences Between Third Party Reporting, Not Reporting, And Victim Reporting Likelihood (NCVS 1992-2012).¹⁶

	<u>Victim Report vs. No</u> Odds Ratio (SE)	<u>Third Party Report vs. No</u> Odds Ratio (SE)
<u>Independent Variables</u> ¹⁷		
<i>Victim/Offender Relationship</i>		
Strangers		
Partner/Ex-Partner	.71 (.26)	.29 (.13)**
Family/Other Relatives	1.31 (.85)	.36 (.41)
Acquaintances	1.06 (.35)	.57 (.22)
<i>Incident Characteristics</i>		
Physical Force	1.02 (.26)	1.56 (.55)
Weapon Present	2.31 (.76)**	3.20 (1.26)**
Injury	1.96 (.52)**	1.24 (.45)
Medical Attention	3.71 (.95)***	4.38 (1.51)***
Completed Rape	1.23 (.30)	.59 (.21)
<u>Control Variables</u>		
<i>Victim Characteristics</i>		
Non-Hispanic White		
Non-Hispanic Black	1.32 (.40)	1.18 (.50)
Non-Hispanic other	.57 (.38)	2.43 (1.47)
Hispanic of any race	1.25 (.52)	1.44 (.78)

¹⁶ Results based on weighted data.

¹⁷ Both “Strangers” and “Non-Hispanic White” served as reference categories.

Education	.95 (.22)	.66 (.21)
Age	1.00 (.01)	.97 (.01)
Household Income	.99 (.02)	1.00 (.03)
Employment	.68 (.16)	.54 (.17)

Offender and Contextual Characteristics

Multiple Offenders	.89 (.49)	.47 (.31)
Offender Age	.09 (.12)	.05 (.07)*
Offender Substance Use	.62 (.14)*	.92 (.28)
Private Location	.79 (.23)	.77 (.28)
Third Party Present	1.21 (.37)	2.04 (.74)*

Note. N=620. Log Likelihood = -418.95748, $p < .0001$. "Not Reported" served as comparison group. 1= *victim report* vs. 2 = *third party report* vs. 3=*not reported*. R-squared=.1626. *** $p < .001$; ** $p < .01$; * $p < .05$
 Goodness of fit: Degrees of Freedom=16; Chi squared statistic = 21.58, $p < .157$.