Drug-facilitated, Incapacitated, and Forcible Rape: A National Study

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Executive Summary

Having accurate information about the scope, nature, and consequences of rape in the United States is critically important. This information can help policymakers make well-informed decisions, and may be used to guide the development of rape prevention and intervention services. Data on rape from national samples are especially useful because they give some indication of the magnitude of the problem in the nation as a whole. We interviewed 5,000 U.S. women aged 18-86. Of these, 3,001 comprised a national sample representing all U.S. women and 2,000 comprised a national sample representing women currently attending U.S. colleges and universities. The existence of both samples allowed us to examine the distinct needs of women in both community- and university-based settings to identify resources that might uniquely benefit them.

This report provides information addressing four key goals:

- To identify how many women in the U.S. and in college settings have ever been raped or sexually assaulted during their lifetime and within the past year. This includes the number of women who have experienced rape that involves (a) force (i.e., *forcible rape*); (b) drugs, alcohol, or other intoxicants deliberately given to the victim by the perpetrator (i.e., *drug-facilitated rape*); or (c) self-induced intoxication by the victim (i.e., *incapacitated rape*).
- To identify key case characteristics of drug-facilitated and forcible rapes, including the percentage of cases that involve injury, involve strangers *vs.* known perpetrators, are reported to law enforcement, involve receipt of medical care, and enter the criminal justice system.
- To examine factors that affect the willingness of women to report rape to law enforcement or seek help from their support network.
- To make comparisons between the different types of rape with regard to (a) the numbers of women affected in the U.S. and college settings, (b) risk factors, (c) reporting to law enforcement, and (d) mental health consequences.

Rape in America

Our findings indicate that about 20 million out of 112 million women (18.0%) in the U.S. have ever been raped during their lifetime. This includes an estimated 18 million women who have been forcibly raped, nearly 3 million women who have experienced drug-facilitated rape, and 3 million women who have experienced incapacitated rape[1]. During the past year alone, over 1 million women in the U.S. have been raped: over 800,000 who have been forcibly raped, nearly 200,000 who have experienced drug-facilitated rape, and about 300,000 who have experienced incapacitated rape. Although this study offers limited insight into changes in the prevalence of rape over time, our estimates do not appear to support the widely held belief that rape has significantly declined in recent decades.

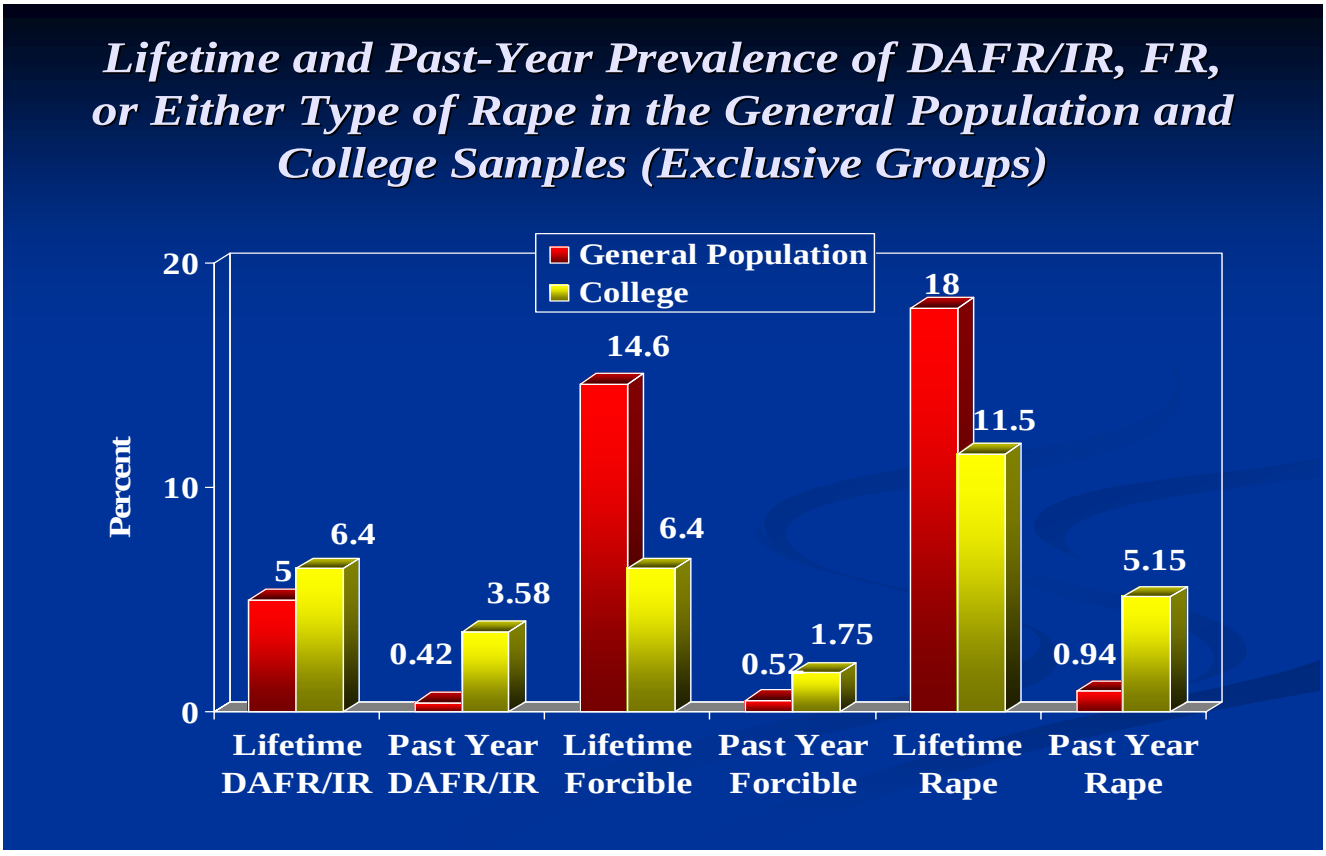
One of the more striking findings of this study was that only 16% of all rapes were reported to law enforcement. Notably, victims of drug-facilitated or incapacitated rape were somewhat less likely to report to the authorities than victims of forcible rape. Major barriers to reporting rape to law enforcement included: not wanting others to know about the rape, fear of retaliation, perception of insufficient evidence, uncertainty about how to report, and uncertainty about

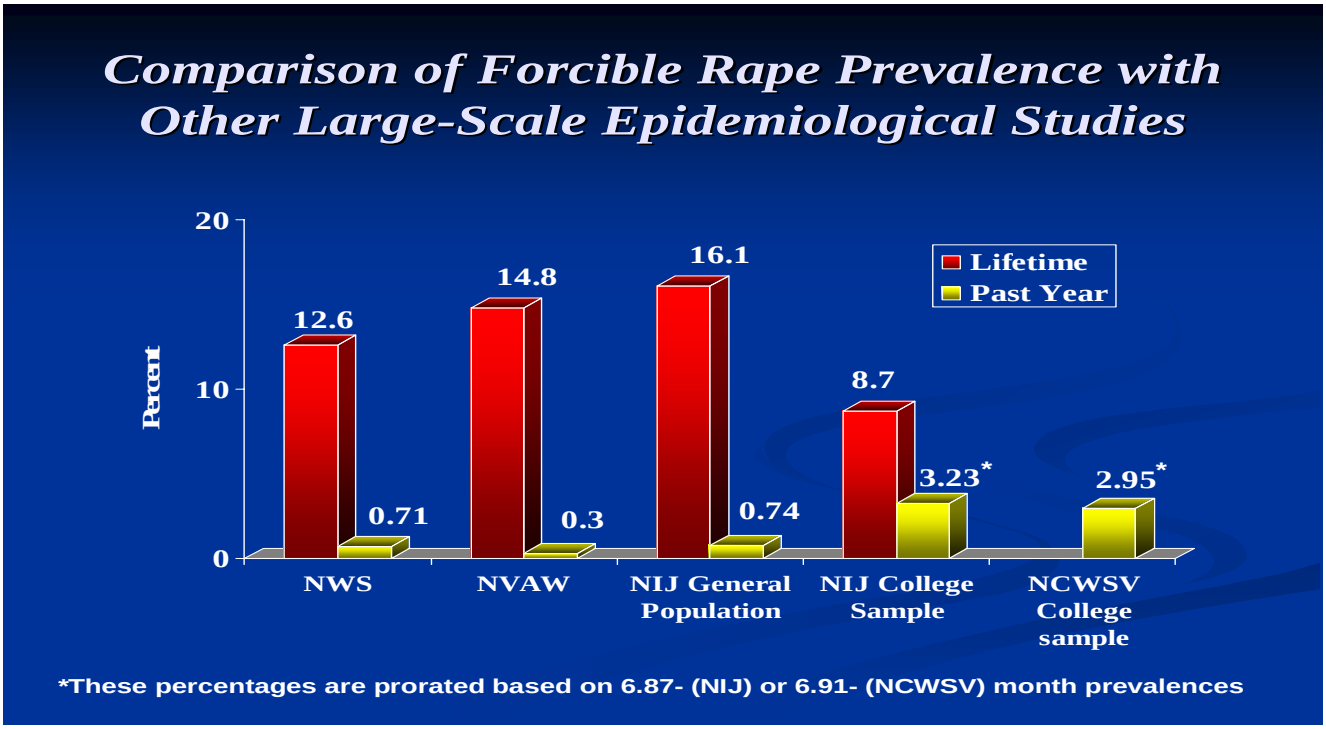
whether a crime was committed or whether harm was intended. Injury was reported for 52% of forcible rape incidents and 30% of drug-facilitated or incapacitated rape incidents assessed. Medical care was received following 19% of forcible rape incidents and 21% of drug-facilitated or incapacitated rape incidents. Perpetrators were known to the victim in a high percentage of forcible rape, drug-facilitated, and incapacitated rape incidents.

Rape among Women in U.S. Colleges

Estimates are that 673,000 of nearly 6 million women (11.5%) currently attending American colleges have ever been raped.[2] This includes an estimated half-million college women who have been forcibly raped, 160,000 who have experienced drug-facilitated rape, and over 200,000 who have experienced incapacitated rape.[1] During the past year alone, 300,000 college women (5.2%) were raped: nearly 200,000 who have been forcibly raped, nearly 100,000 who have experienced drug-facilitated rape, and over 100,000 who have experienced incapacitated rape.

Among college women, about 12% of rapes were reported to law enforcement. Consistent with the national sample, victims of drug-facilitated or incapacitated rape were less likely than victims of forcible rape to report to the authorities. Barriers to reporting rape incidents to law enforcement among college women included: not wanting others to know about the rape, fear of retaliation, perception of insufficient evidence, uncertainty about whether a crime was committed or harm intended, and uncertainty about whether the incident was "serious enough". Injury was reported for 47% of forcible rape incidents and 20% of drug-facilitated or incapacitated incidents. Medical care was received following 14% of forcible rape incidents and 19% of drug-facilitated or incapacitated incidents. Perpetrators were known to victims in most rape cases.





Mental Health Consequences of Rape

Several mental health problems associated with rape were identified in both samples. First, criteria for posttraumatic stress disorder (PTSD) within the past year were met by 9% and 12% of women in the national and college samples, respectively. In the national sample, this includes approximately 23% of rape victims *vs.* 6% of non-victims; in the college sample, this includes 34% of rape victims *vs.* 9% of non-victims. Second, past-year depression was experienced by 9.1% and 13.1% of women in the national and college samples. This includes 23% of victims and 6% of non-victims in the national sample, and 33% of victims *vs.* 11% of non-victims in the college sample. Third, past-year alcohol or drug abuse was reported by 6.7% and 19.8% of women in the national and college samples. This includes 10% of victims *vs.* 6% of non-victims in the national sample, and 40% *vs.* 17% of non-victims in the college sample.

Victims of forcible *vs.* drug-facilitated *vs.* incapacitated rape were comparable with regard to risk for PTSD and depression. Notably, victims of drug-facilitated or incapacitated rape were nearly twice as likely as victims of forcible rape to have past-year substance abuse problems. This was true both in the national and college-student samples.

Implications

This study provides important information regarding the lifetime prevalence, past year prevalence, characteristics, and mental health impact of rape among adult women residing in United States households as well as among United States female college students. In addition to providing comparison data about the extent to which the prevalence, characteristics, and impact of forcible rape have changed among adult women in the U.S. population, the study also provides the first and most comprehensive national data on the prevalence, characteristics, and impact of drug and alcohol facilitated rape and incapacitated rape among U.S. adult women and U.S. college women.

Key findings can be summarized as follows. First, contrary to some sources, comparison data from this study provide no evidence that there has been a reduction in the proportion of adult women who are forcibly raped each year over the past 15 years. Second, drug-facilitated rape and incapacitated rape were found to be prevalent in this study, and these types of rape are associated with risk for mental health and substance use problems. Third, incapacitated rape is somewhat more prevalent than drug-facilitated rape among both U.S. women and college women. This finding suggests that the most common rape-risk situation for both adult women and college women is not being rendered intoxicated; it is being taken advantage of by a sexual predator after she has become intoxicated voluntarily. Fourth, the data from this study provide strong support for the contention that alcohol is, by far, the most frequently involved substance in both drug-facilitated and incapacitated rape cases. Fifth, findings from this study did not support the notion that today's rape victims are more willing to report forcible rape cases than rape victims were 15 years ago. Finally, study findings provided substantial support for the fact that rape increases risk for PTSD, major depression, substance abuse.

Major recommendations stemming from this research are described in the final section of this report. Briefly, recommendations for researchers highlight the need for new studies on the prevalence and risk/protective factors associated with rape. These studies should not be restricted to victims of forcible rape, and careful behaviorally specific screening should be used to detect rape cases that are drug-facilitated or incapacitated. Research is also needed to develop and examine interventions designed to reduce risk for drug- and alcohol-facilitated rape. Careful longitudinal research also is needed to measure the temporal sequences among child victimization, family environment risk factors, alcohol and other drug use, and risk for drug-facilitated, incapacitated, and forcible rape.

Eight recommendations were made relevant to policy and practice. First, major efforts should be made to encourage women to report cases of rape to law enforcement. Second, rape prevention efforts focused on reducing risk of DAFR and IR among female adolescents and adults should begin before the risk period for these types of rape begins. Third, mental health professionals, especially those who work with female adolescents and women with substance abuse problems, should receive more training about the extent to which DAFR, IR, and FR are major risk factors for mental health problems. Fourth, education about the true scope and characteristics of DAFR, IR, and FR cases should be provided to a variety of target audiences including the general public, victim advocates, other criminal justice system officials and jurors. Fifth, The U.S. Department of Justice should seriously consider improving its measurement and reporting of forcible rape, and it should expand measurement and reporting efforts to include DAFR and IR. Sixth, public education and anonymous reporting and medical care-related policies should be implemented to increase numbers of women receiving acute post-rape medical care. Seventh, modification of hospital and medical center assessment protocols is needed to improve systematic data gathering within these settings. Finally, routine screening for history of forcible, drug-facilitated, and incapacitated rape should be conducted within primary healthcare settings.

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Introduction

There is a growing amount of information available about rape among women. Much has been learned about risk factors for rape, the magnitude of the rape problem in the US, and various emotional and behavioral effects of rape. However, many questions still need to be answered before we will fully understand the scope and nature of the rape problem, as well as how to address it with carefully developed policies and interventions. These questions include, but are not limited to: How many women have ever been raped? How many college women have ever been raped? How many rapes involve drugs or alcohol knowingly or unknowingly consumed by the victim? How does victim incapacitation change the course of a rape scenario and does it affect recovery? Are forcible rapes more likely to be reported to law enforcement than rapes facilitated by drugs or alcohol? How are college women uniquely affected by rape? How can we promote disclosure of rape experiences and increase rates of reporting among victims?

Several well-designed studies have been done to answer some of these questions. Some key conclusions that have emerged from these studies include:

- Roughly 1 in 7 U.S. women have been raped at least once in their lifetime according to studies conducted in the early-to-mid 1990s (Kilpatrick, Edmunds, & Seymour, 1992; Tjaden & Thoennes, 2000)
- Koss and colleagues (1987) reported that the prevalence of forcible rape or rape following use of alcohol or drugs occurring since age 14 among a nationally representative sample of female college students was 15.4% (Koss, Gidycz, & Wisniewski, 1987). A second study of female college students reported a lifetime prevalence of forcible rape of 20% (Brener, McMahon, Warren, & Douglas, 1999). Past year prevalence of forcible rape among college women was estimated to be 2.95% based on data from Fisher et al. (2000).
- More than half of all rape victims experience their first rape before the age of 18 (Kilpatrick et al., 1992; Tjaden & Thoennes, 2000)
- Only 15-20% of rape victims report the rape to law enforcement (Kilpatrick et al., 1992; Tjaden & Thoennes, 2006)
- Roughly half of all rapes experienced by college students involve alcohol use knowingly or unknowingly consumed by perpetrator or victim (Abbey, et al, 2001; Koss, et al., 1987)
- Common mental health consequences of rape are posttraumatic stress disorder, major depression, and alcohol or drug abuse (Kilpatrick et al., 1997; Resnick et al., 1993). However, many victims do not develop any of these mental health problems.

Some of the questions listed above have not yet been answered by research, and many of the important findings described above need replication. The current study advances our knowledge by broadening the scope of information available and giving greater focus to the details of women's rape experiences. This study addressed four specific sets of questions using a probability sample of female college students *and* a probability household sample of women in the general community. First, how many women in the United States and on college campuses have experienced forcible rape (FR), drug- or alcohol-facilitated rape (DAFR), and incapacitated rape (IR)? Second, what is the distribution of key rape characteristics in these populations (e.g., percentage of rapes involving injury, percentage involving known *vs.* stranger perpetrators)? Third, what are the major barriers to reporting rape to law enforcement? Fourth, how do women

in college settings *vs.* nationally differ with regard to the prevalence, risk factors, effects, and reporting of rape? Each of these aims is discussed in more detail below.

Prevalence of Rape

Annual estimates of forcible rape are provided each year by the federal government via the National Crime Victimization Survey (NCVS) and Federal Bureau of Investigation's Uniform Crime Reports (UCR). Other studies also have examined the scope of the rape problem with different populations and methods. From these sources, we have learned much about the general scope of the problem in the population as a whole. However, very few sources have

Key Terms and Definitions

Term	Definition
Drug and alcohol facilitated rape (DFR)*	The perpetrator deliberately gives the victim drugs without her permission or tries to get her drunk, and then commits an unwanted sexual act against her involving oral, anal, or vaginal penetration. The victim is passed out or awake but too drunk or high to know what she is doing or to control her behavior.
Incapacitated rape (IR)*	Unwanted sexual act involving oral, anal or vaginal penetration that occurs after the victim voluntarily uses drugs or alcohol. The victim is passed out or awake but too drunk or high to know what she is doing or to control her behavior.
Forcible rape (FR)	Unwanted sexual act involving oral, anal or vaginal penetration. The victim also experiences force, threat of force, or sustains an injury during the assault. In cases where FR includes elements of DFR, we categorized the incident as DFR.
Posttraumatic stress disorder (PTSD)	An anxiety disorder that can occur after experiencing or witnessing a life-threatening event (such as abuse, military combat, or a terrorist incident). People with PTSD may relive the experience through nightmares or flashbacks, may have difficulty sleeping or feel irritable, or they may feel detached or numb
Major depressive disorder (MDD)	A disorder characterized by sadness or feeling “down,” losing interest or pleasure in things that were once enjoyed, hopelessness, changes in appetite and/or sleep, decreased energy, or thoughts of death or suicide.
Substance use disorder	Using alcohol, illegal drugs, or prescription drugs in a manner that results in one or more life difficulties, such as trouble at work or at school, problems with loved ones or friends, trouble with the law, or driving while intoxicated.
Rape-facilitating drugs	Drugs that are given to victims, usually without the victim’s consent, that either cause the victim to lose consciousness or temporarily impair the victim’s ability to control her own behavior. Two commonly implicated drugs are Rohypnol and GHB. Victims given these drugs report sensations of drunkenness that are inconsistent with the amount of alcohol consumed, inexplicable gaps in memory, and altered consciousness.
Disclosing	Telling someone else about an assault. People can disclose to anyone, including friends, family, teachers, medical professionals, or law enforcement agencies.
Reporting	Disclosing an assault to a police officer, campus security, or other law enforcement agency in order to officially document the incident.
Acknowledging	Identifying an assault specifically as “rape” instead of describing it as something else, such as a crime other than rape or an unpleasant incident.

* By definition, DFR and IR are mutually exclusive.

examined both lifetime and past-year prevalence of rape. Even fewer have separately examined forcible rape (FR), drug or alcohol facilitated rape (DFR), and incapacitated rape (IR). Most national studies on rape focus solely on FR (Kilpatrick, 2004) and do not include DFR and IR, two other types of rape defined in the U.S. Federal Criminal Code. Further, national studies on lifetime and recent histories of rape have not been conducted within the past 10 years. The National Women's Study (NWS) and the National Violence Against Women Survey (NVAWS) were conducted in 1991 and 1995. It is unclear whether the past decade has seen new trends in rape prevalence and case characteristics. Thus, new data are needed to produce an updated picture of the rape problem in America. This is particularly important because the makeup and distribution of the U.S. population has changed significantly over the past two decades.

Advances in the field have been pointing to the importance of examining DFR and IR. Among college women, as many as 3 in 4 recent rape victims reported being too intoxicated to consent at the time of rape (Mohler-Kuo, et al., 2004), with alcohol being the substance most commonly involved in these incidents (Testa et al., 2003, Mohler-Kuo et al., 2004). Studies using national samples of community women have found that between 23% and 32% of women reported using alcohol or drugs prior to a forcible rape. Our study builds on these findings by examining lifetime and past-year prevalence of FR, DFR, and IR in national samples of college women and women in the general community.

Case Characteristics

A second aim of our study was to obtain information about key case characteristics of DFR, IR, and FR (e.g., victim-perpetrator relationship, where the assault happened, reporting to law enforcement, receipt of medical care). Case characteristics are important to understand because they help to identify vulnerable populations and may inform strategies for prevention. For example, if DFR victims are found to be less likely than FR victims to report the crime to authorities and receive medical care, this may suggest that policy changes are needed or that public education is needed to increase societal awareness of the safety measures in place for DFR victims who report rape or seek medical care. The link between victim alcohol use and various rape characteristics is also a complex issue. For example, some studies have found that victims who are intoxicated at the time of rape are more likely to have non-intimate perpetrators, higher likelihood of rape completion, and less use of assertive resistance (Abbey et al., 2002). Testa et al. (2004) found that victim intoxication increased the risk of penetrative sexual assault but did not reduce likelihood of injury during assault. However, most research in this area has looked at victim substance use only as a "rape characteristic," without considering DFR or IR as a distinct form of rape. For this reason, little is known about differences in case characteristics between FR, DFR, and IR.

Barriers to Disclosure and Reporting

The NWS (Kilpatrick et al., 1992) found that only 16% of women with a history of forcible rape had reported their rape to the police or other authorities. Estimates for women in college are even lower. According to recent findings (Fisher et al. 2003) less than 5% of college victims of FR reported their rape to law enforcement. Women who used alcohol or drugs during the rape were less likely than other rape victims to report to law enforcement, but more likely to disclose to friends (Fisher et al, 2003). Little is known about the barriers to disclosure and reporting among rape victims. Disclosure and reporting have important effects not only in terms of the justice system, but also in terms of access to available victim resources. For these reasons, the current study also assessed women's opinions about how to increase disclosure and reporting.

Comparisons between FR, DFR, and IR

Studies with nationally representative samples have not examined differences between DFR, IR, and FR. Comparisons between these types of rape have only been made in a handful of studies using university- and community-based samples. Testa (2003) found that victims of

DFR/IR were more likely than victims of FR to have a history of alcohol and drug use, whereas victims of FR were more likely to have a history of childhood sexual abuse. Because previous studies with national data have focused primarily on FR, very little information exists about possible risk factors and mental health outcomes associated with DFR and IR. It was an aim of this study to describe risk factors for DFR, IR, and FR, as well as the mental health effects of each of these types of rape.

Method

Participants were a total of 5,001 women who formed two groups on the basis of the population from which they were recruited. One group consisted of a national telephone household sample of 3,001 U.S. women, whereas the second group consisted of 2,000 college women selected from a reasonably representative national list of women attending four year colleges and universities. Recruitment of these two samples helps us achieve an understanding of the magnitude of the rape problem both in the general population as well as in the college student population. This approach also allows us to make comparisons between these populations of women, which may differ with regard to the prevalence, risk, effects, and resource needs associated with rape.

In a national study of this scope, it is important to recruit study samples that are representative of the population as a whole. Use of representative samples enables us to calculate population estimates and allows us to interpret results with reference to the needs of the population as a whole. Several steps were taken to maximize the degree to which the general and college samples were representative of the populations of U.S. and college women. First, for the general population sample, we used random-digit-dial (RDD) methods (see the *technical details* box on RDD methodology). The use of this method introduces a randomization process in the selection of land line telephone numbers. Second, because the majority of women in the general population sample were between the ages of 18-34 years (younger women were oversampled to assist comparisons to college women), weightings were created to enable us to calculate population estimates. Third, the college women sample was recruited using the American Student List (ASL), the largest and most widely used list of college students in the United States. There is no extant list that enumerates all college students, so the ASL is the source of the best national list of female college students. Although National Center for Education statistics indicate that there are 4,216 degree-granting institutions in the U.S., our sampling frame was restricted to women attending 4 year institutions of higher education. According to the latest data available, in 2000, there were 2,450 such institutions. The ASL includes data from approximately 1,000 of these institutions, but it does not provide data on differences, if any, between institutions or students who are included in the ASL and those who are not. While it is not technically a probability sample, the ASL is a reasonably representative national sample of U.S. female college students. The ASL was previously used to select a sample by Fisher et al. (2000) in another major study of rape among college women (see the *technical details* box for more information).

Technical details: More information about random-digit-dial methodology

The household sample of 3,001 women was formed from two population samples: a national cross-section of 2,000 women aged 18-34 years plus a national cross-section of 1,000 women aged 35 and older. We used random-digit-dial (RDD) methodology to recruit this sample. RDD methodology for telephone surveys was developed in the 1960s as an improvement over existing procedures of sampling from telephone directories. The problem with telephone directories is that a substantial number of telephone households are not represented in these directories because of either unlisted, unpublished numbers, or new listings. Also, many listed numbers are outdated by the time the directory is used as a sampling frame. It is estimated that about 20-30% of telephone households have unlisted numbers. Further, these households have very distinctive income and racial characteristics, as well as geographic coverage. Consequently, the use of a selection procedure that is restricted to persons and households listed in telephone directories will produce a biased sample of telephone households. The RDD approach used in this study was designed to avoid this problem by introducing a randomization process in the selection of telephone numbers to be sampled so that households with unlisted numbers would have an equal probability of selection to households with listed numbers.

Recruitment of this sample involved three steps. First, the sample was geographically stratified to ensure that our sample was distributed across regions of the country at the same proportion as is the population. Second, a sample of assigned land line telephone banks was randomly selected from an enumeration of the Working Residential Hundreds Block (blocks of 100 telephone numbers) within the active telephone exchanges within the strata. Third, a two-digit number was randomly generated by a computer for each Working Residential Hundreds Block. Every telephone number within the Hundreds Block had an equal probability of being selected, regardless of whether it was listed or unlisted.

Technical details: More information about the American Student List

The college sample consisted of 2,000 women. The list sample for college women was purchased by SRBI from the American Student List (ASL). The ASL includes about six million students who are attending approximately 1,000 U.S. colleges and universities. The sample that SRBI purchased contained about 17,000 respondents in order to generate responses that were similar to the national census representation of college women. The sample was classified into nine regions: New England, Mid Atlantic, East North Central, West North Central, South Atlantic, East South Central, West South Central, Mountain, and Pacific. The sample was then released to be dialed (land lines only) in proportion to the national census representation of college women. This procedure was designed to ensure adequate representation to the U.S. population of college women. There were 253 different schools included in the sample from 47 different states.

Sample Characteristics

Exhibit 1 describes the distribution of both study samples (general population women and college women) on major demographic variables: current age in years at the time of the interview, racial/ethnic status, marital status, and household income for the 2005 calendar year.

Exhibit 1: Sample Characteristics

U.S. Women Population Sample			U.S. College Women Sample		
Demographics	**Pct**	**Mean**	**Demographics**	**Pct**	**Mean**
Current age		46.6	Current age		20.1
White, non-Hisp	79.7%		White, non-Hisp	75.6	
Black, non-Hisp	11.3%		Black, non-Hisp	11.1	
Hispanic	5.4%		Hispanic	6.1	
Asian, non-Hisp	1.7%		Asian, non-Hisp	6.1	
Native Amer, nH	1.9%		Native Amer, nH	1.1	
Married	56.0%		Married	2.4	
Widowed/Divorced	22.5%		Widowed/Divorced	1.2	
Never married	19.0%		Never married	96.3	
Income < $20K	21.6%		Income < $20K	11.1	
Income $20-40K	21.1%		Income $20-40K	17.0	
Income $40-60K	20.7%		Income $40-60K	16.9	
Income $60-100K	23.8%		Income $60-100K	31.4	
Income > $100K	12.8%		Income > $100K	23.6	

Means and percentages are weighted for the general population sample. Weights were used for all analyses with this sample to maximize representativeness by bringing the distribution of sample characteristics in line with Census figures. Mean age for general population women was 46.6 (range = 18-86, standard deviation = 17.9). More than half were married, whereas 1 in 5 women were never married. Income was roughly evenly distributed across each of the groupings listed. Racial/ethnic distribution of the sample was highly similar to that found in the general population of adult women, with the exception of Hispanic women, who were underrepresented in our sample (5.4% in our sample *vs.* approximately 11% in the U.S. population based on Census estimates).

The mean age for women in the college sample was 20.1 (weighting was not used for the college women sample). Range of ages in the college sample was 18-67, with a standard deviation of 3.2 years. Almost all women in this sample were never married (96%), and the distribution across income categories was somewhat skewed toward higher-income households (55% of college women reported a 2005 household income of $60,000 or over, as compared to 37% of general population women). Racial/ethnic distributions for the college women sample were comparable to those in the general population sample: roughly 75% was White, non-Hispanic, 11% was Black, 6% was Hispanic, and 6% was Asian American. The only major difference in racial/ethnic representation across the college and general population samples was that the percentage of Asian American women in the college sample was 3.5 times higher than that in the general population sample.

Interview Procedures

Interviews were completed between January 23 and June 26, 2006. Schulman, Ronca, and Bucuvalas, Inc. (SRBI) conducted the interviews under the direction of Dr. John Boyle. SRBI is a national survey research organization with extensive experience surveying women about

sensitive issues. The authors of this report designed the survey, computed key variables, and conducted the analyses in collaboration with consultants.

Women aged 18 and over were interviewed using a computer-assisted telephone interviewing (CATI) system. The CATI system is designed to reduce interviewer error in both data collection and data recording. Due to the nature of the study, only experienced female interviewers were involved in survey procedures. English and Spanish versions of the structured interview were developed; the version administered was based on respondent preference. Completed interviews averaged 20 minutes in length. Interviews were conducted from SRBI's telephone interviewing centers, located in New York and Fort Myers, Florida.

After determining that the residence contained one or more women who were eligible for the study, the interviewer briefly introduced the study and provided a toll-free telephone number to confirm the authenticity of the study. When a residence had more than one woman who met study criteria, the woman with the most recent birthday was selected for interview. The "most recent birthday" method is a commonly accepted and scientifically sound approach to respondent selection. Whenever possible, women were interviewed immediately after eligibility was determined and respondent selection occurred. Otherwise, appointments were scheduled or blind callbacks were made at different times of day and days of the week. A minimum of five callbacks were made before a case was abandoned. Consent to proceed with the interview was obtained from each survey respondent.

An important concern was whether respondents could answer interview questions freely and in private. Two steps were taken to increase the likelihood that questions could be answered in an open and honest manner with a reasonable degree of privacy. First, the interviewer specifically asked whether the woman was in a situation where they could be assured of privacy and could answer in an open manner. If the woman said that she could not, the interviewer offered to call back at another time when privacy was more likely. Second, the interview schedule is designed primarily with closed-ended questions. Therefore, the respondent could answer questions with a simple "yes" or "no," a number (as in age), the role of a person (e.g., "a neighbor), or other one-word or phrase answer. Therefore, even if someone were listening to the respondents' answers, they would not reasonably be able to recognize the context around the answers being provided. This strategy was successful in our previously conducted studies (e.g., the National Women's Study and National Survey of Adolescents) because terminated interviews were very low, consistent with rates found in studies on non-sensitive topics, and almost all respondents agreed to answer the most sensitive questions (e.g., sexual assault history).

Survey Questions

The 20-minute survey included assessment of five major areas. First, we asked women to provide us with basic demographic information (e.g., age, race, ethnicity, income). Second, we asked women their opinions and attitudes about reporting rape to the authorities and disclosing rape to family members, peers, or other individuals. This included questions about barriers to reporting and experiences that women have had being the recipient of a disclosure from a friend, relative, or other individual. Third, we asked women a series of questions about rape, including different types of forcible, drug- or alcohol-facilitated, and incapacitated rape (see *technical details* box below). Fourth, for women who endorsed one or more rape experiences, we assessed a wide range of rape characteristics. These included characteristics around the nature of the event, perpetrator-victim relationship, occurrence of injury, involvement of drugs or

Technical details: List of rape screening questions used in the interview

Our interviewers read, "Many women tell us they have experienced unwanted sexual advances at some point during their lives. Women do not always report such experiences to police or discuss them with family or friends. Such experiences can happen anytime in a woman's life – even as a child. The person making these unwanted advances can be friends, boyfriends, co-workers, teaching assistants, supervisors, family members, strangers, or someone they just met. The person making the unwanted sexual advances can be male or female…Regardless of how long ago it happened or who made the unwanted sexual advances:

1. Has a man or boy ever made you have sex by using force or threatening to harm you or someone close to you? Just so there is no mistake, by having sex, we mean putting a penis in your vagina.
2. Has anyone, male or female, ever made you have oral sex by force or threatening to harm you? So there is no mistake, by oral sex, we mean that a man or boy put his penis in your mouth or someone penetrated your vagina or anus with their mouth or tongue?
3. Has anyone ever made you have anal sex by force or threatening to harm you? By anal sex, we mean putting their penis in your anus or rectum.
4. Has anyone ever put fingers or objects in your vagina or anus against your will by using force or threatening to harm you?

Some women tell us they have had sex when they didn't want to because they were very high, intoxicated, or even passed out because of alcohol or drugs. We would like to ask you about these types of experiences you might have had. Again, we are interested in these experiences regardless of how long ago it happened, who did it, or whether or not it was reported to police.

5. Has anyone ever had sex with you when you didn't want to after you drank so much alcohol that you were very high, drunk, or passed out? By having sex, we mean that a man or boy put his penis in your vagina, your anus, or your mouth?
6. Has anyone ever had sex with you when you didn't want to after they gave you, or you had taken enough drugs to make you very high, intoxicated, or passed out? By having sex we mean that a man or boy put his penis in your vagina, your anus, or your mouth?

Sample of follow-up questions asked upon endorsement of one or more screeners:

- Were you physically forced to engage in these acts?
- Did the person or persons who did this to you threaten to hurt you or someone else if you did not do what they wanted?
- Had you ever seen the person who did this to you before?
- Did you know the person fairly well or not?
- Had you consumed any drugs or alcohol at the time of the incident(s)?
- When this happened, did the incident involve only alcohol use on your part, only drug use on your part, or some use of both alcohol and drugs?
- When this happened, did you drink the alcohol because you wanted to, did the person(s) who had sex with you deliberately try to get you drunk, or both?
- When this happened, did you take the drugs because you wanted to, did the person(s) who had sex with you deliberately give you drugs without your permission, or both?
- When this incident happened were you passed out from drinking or taking drugs?
- When this incident happened were you awake but too drunk or high to know what you were doing or control your behavior?
- Did you suffer serious physical injuries, minor injuries, or no physical injuries as a result of the incident?
- Did this incident involve oral penetration, anal penetration, or vaginal penetration?

alcohol, receipt of medical care, and whether the rape was reported to the authorities. Fifth, we asked a series of questions about women's mental health histories, including recent symptoms. Four areas of mental health, all known to be associated with rape, were assessed: posttraumatic stress disorder (PTSD), major depression, alcohol use and abuse, and drug use and abuse. PTSD was assessed with the National Women's Study PTSD module, a structured interview based on *DSM-IV* criteria. This includes re-experiencing symptoms such as nightmares, flashbacks, and intrusive thoughts; avoidance symptoms such as avoiding people, places, and events that remind the individual about a potentially traumatic event; and arousal symptoms such as sleep disturbance, concentration difficulties, and hypervigilance. Major depressive episode (MDE) was assessed using the National Women's Study MDE module, also a structured interview based on *DSM-IV* criteria. Hallmark symptoms of depression include persistent feelings of sadness as well as loss of interest or pleasure in things that were once enjoyed by the individual. Functional impairment was also assessed as part of the PTSD and MDE modules. Alcohol and drug use outcomes were also measured. This includes the assessment of past-year prescription drug use and abuse, marijuana use, and illicit drug use (see the *technical details* box below for more information).

A portion of the mental health module included assessment of help seeking or counseling. Specifically, Women were asked whether they had ever contacted a medical doctor, priest, minister, or rabbi, lawyer, psychiatrist, psychologist, social worker, or other therapist for help with emotional problems.

Technical details: Definitions of alcohol and drug use variables

Past year binge drinking was defined as consumption of 5 or more drinks of an alcoholic beverage with at least monthly frequency (at least 12 or more days within the past year).

When assessing drug use, specific drug names were used. For example, when asking about prescription narcotic use the terms Codeine, Darvon, Percodan, Demoral, Morphine, and Oxycontin were specifically asked about. A similar procedure was used when asking about other classes of drugs such as barbiturates, amphetamines, and inhalants. The general class terms are used here to summarize the categories.

Past year prescription drug abuse was defined as reported non-medical use of tranquilizers such as xanax, barbiturates, amphetamines, narcotics, or steroids on at least 4 or more occasions within the past year.

Past year marijuana use was defined as report of marijuana or pot on at least 4 or more occasions in the past year.

Past year other illicit drug use was defined as report of use on 4 or more occasions of specific illicit drugs that included cocaine or crack; angel dust or PCP; Heroin or methadone; inhalants; Ecstasy; GHB; Ketamine; Rohypnol; Methamphetamine; hallucinogens including LSD.

Past year use of any illicit drug or misuse of prescription drugs was defined as past year misuse on 4 or more occasions of prescription drugs or use on 4 or more occasions of marijuana or other illicit drugs.

At the conclusion of the interview, three questions were asked to gauge whether respondents were emotionally upset by the sensitive issues assessed in the interview, whether they continued to be upset at the conclusion of the interview, and whether they wished to speak to a mental health counselor. Although some women asked to talk to a counselor (a licensed clinical psychologist contacted them), none ultimately required referral to a mental health provider.

Of the 3,001 general population women:

- 227 (7.6%) said "yes" to the question, "were any of the survey questions emotionally upsetting to you?"
- 13 (0.4%) said they were still feeling emotionally upset at the end of the interview.
- 6 (0.2%) said they would like to have a counselor contact them.

Of the 2,000 college women:

- 152 (7.6%) said "yes" to the question, "were any of the survey questions emotionally upsetting to you?"
- 14 (0.7%) said they were still feeling emotionally upset at the end of the interview.
- 4 (0.2%) said they would like to have a counselor contact them.

These findings are consistent with several national surveys we have conducted on sensitive and traumatic stress issues with women, men, and youth. The vast majority of respondents in these studies report no emotional distress in response to interview questions, and more than 99% state that they do not still feel emotionally upset at the conclusion of the interview.

Data Analysis

Briefly, we analyzed the data in two major ways, depending on the nature of the question we were trying to answer. For questions about population percentages of U.S. women and of U.S. college women, data were analyzed at the level of the *person* (for the U.S. population sample this involved the use of weightings). That is, we estimated population percentages by dividing the number of women meeting a particular criterion by the total number of women in the sample (3,001 for the general population sample or 2,000 for the college women sample). In many instances, we then multiplied the population percentage by the total number of women in each respective population (112,068,000 for the general population sample and 5,853,000 for the college women sample) to estimate true population numbers of women. Data reported at the person level included classification of individuals based on history of each type of rape regardless of whether they also met criteria for another type of rape at the incident level. For example, someone who reported history of forcible rape as part of their most recent or only incident and who also met criteria for DFR was considered to have a history of both forcible and DFR. If someone reported both elements of DFR and IR within the same incident and they had only experienced one incident lifetime then that was classified as history of DFR. IR history was defined as report of at least one incident involving IR (without DFR), whether or not forcible rape was also part of that incident. Statistical analyses were conducted with respect to person level data that included a comparison of proportions within general population and college samples of those reporting different types of rape histories (DAFR, IR, and forcible rape). Regression analyses were also conducted related to predictors of reporting a most recent or only rape and with regard to mental health and substance abuse correlates of the different types of rape.

The second way that we analyzed data for some questions was at the level of the *case.* For the U.S. population sample this involved the use of weightings (generalizability, however, can only be assumed for *person*-level analyses, because *cases* were assessed on a non-random basis and no more than two cases were assessed for any particular respondent). Where we describe *cases* in this report, we are referring to individual rape *incidents* (as opposed to individual rape *victims*). Data reported at the incident level were classified as mutually exclusive and prioritization was given to classification of DFR if the incident involved report that someone deliberately tried to get her drunk or deliberately gave her drugs without her permission. For example, if an incident that involved DFR elements also involved forcible rape elements or IR elements it was classified only as DFR at the incident level. If an incident included IR alone or IR and forcible elements it was classified as IR. Thus, forcible rapes described at the incident level did not include either DFR or IR as part of the incident. The purpose of this was to provide

information that is descriptive of representative cases rather than use of a more restrictive focus on a single incident which would more easily allow for additional statistics. Information about characteristics of cases is depicted in figure and table format. Statistical analyses were conducted only for data examined at the person level as noted above.

Women who endorsed a history of rape in the interview were asked a series of follow-up questions about rape characteristics (e.g., extent of injury, involvement of alcohol or drugs, receipt of medical care, involvement of law enforcement). For women who indicated that they experienced more than one rape, these follow-up questions were administered twice: once in relation to the most recent rape experienced, and another time in relation to the first rape experienced by the respondent. In the general population sample, 541 women endorsed one or more types of rape, and provided data on 793 total rape cases. In the college women sample, 230 women endorsed one or more types of rape, and these women provided data on 326 total rape cases.

Survey Results

The results of our study are organized by question. These questions are listed below, and are electronically linked to different sections of the report where results are presented. Click on a question to jump to a corresponding section in our summary of the results.

How many women have ever been raped? How many have experienced FR, DFR, and IR?
How many women have experienced FR, DFR, or IR within the past year?
How do these estimates compare with previous estimates?
What is the prevalence of FR, DFR, and IR specifically in minority populations?
What is the distribution of FR, DAFR, and IR cases at the incident level?
What is the prevalence of rape in different age groups? When does rape first occur?
What were the specific types of rape women experienced?
Who are the perpetrators of FR, DFR, and IR?
How many rapes involve injury, verbal threats, drug or alcohol use?
In cases of Drug-Facilitated and Incapacitated Rape, Which Drugs were Used?
How many women seek medical care after a rape?
What are common concerns women have following a rape?
How are different types of rape perceived by victims?
What percentage of rape cases is reported to law enforcement?
What factors are associated with reporting of rape to law enforcement?
What are the attitudes and opinions of women about reporting rape to law enforcement?
What are major barriers to reporting that women identified?
How common are mental health problems among victims vs. non-victims of FR, DFR, and IR?
How many women (victims vs. non-victims of FR, DFR, and IR) seek mental health services?

How many women have ever been raped? How many have experienced FR, DFR, and IR?
Exhibits 2 and 3 provide a flowchart of our classification scheme for estimating the overall prevalence of rape among women in the general population and U.S. colleges. At least one sexual assault screening question was endorsed by 20.2% of general population women and 12.6% of college women. We elected to use a more conservative approach to estimating overall prevalence, however, and included several steps toward classifying positive cases. First, four women in the general population sample and two women in the college sample did not confirm a history of sexual assault after initially having endorsed one of the screeners. Second, 24 general population women and 4 college women denied the occurrence of penetration when asked detailed follow-up questions about the characteristics of sexual assault. Third, 36 women in the general population sample and 16 in the college sample denied elements of force, injury, threat of force, *and* drug or alcohol facilitation or incapacitation when asked detailed questions

about case characteristics. All of these women ultimately were coded as having “no history of rape” whereas women who screened positive for a history of rape *and* met confirmation criteria were coded as having a history of rape. Thus, final prevalence estimates of lifetime history of any type of rape were 18.0% for general population women (541 of 3,001) and 11.5% for women in U.S. colleges (230 of 2,000). Because 267 women in the general population sample and 100 women in the college sample provided information about two separate rape incidents (both most recent rape and first rape), we measured case characteristics details on a total of 1,119 sexual assault incidents (793 in the general population sample, 326 in the college sample).

Exhibit 2. Number Meeting Screening Criteria For At Least One Rape and More Than One Rape, and Total Number of Incidents Within the General Population Sample (N = 3001)

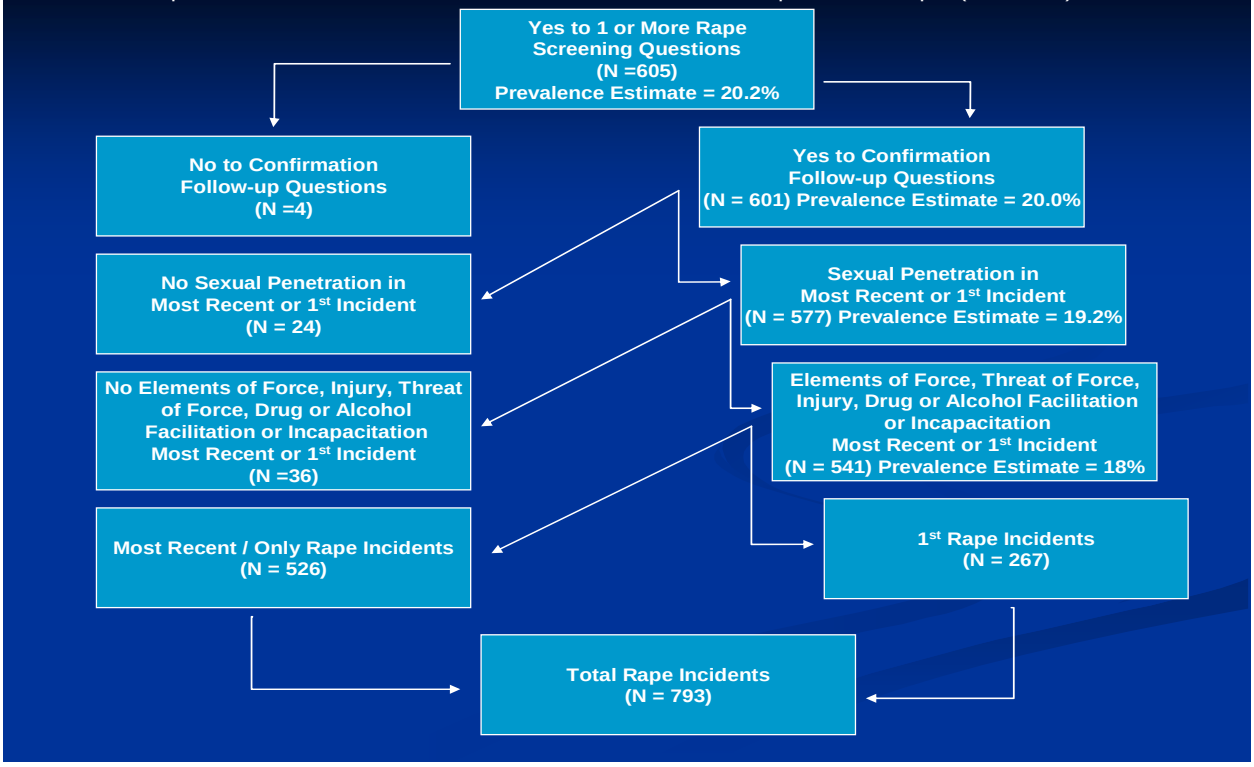


Exhibit 3. Number Meeting Screening Criteria For At Least One Rape and More Than One Rape, and Total Number of Incidents Within the College Sample (N = 2,000)

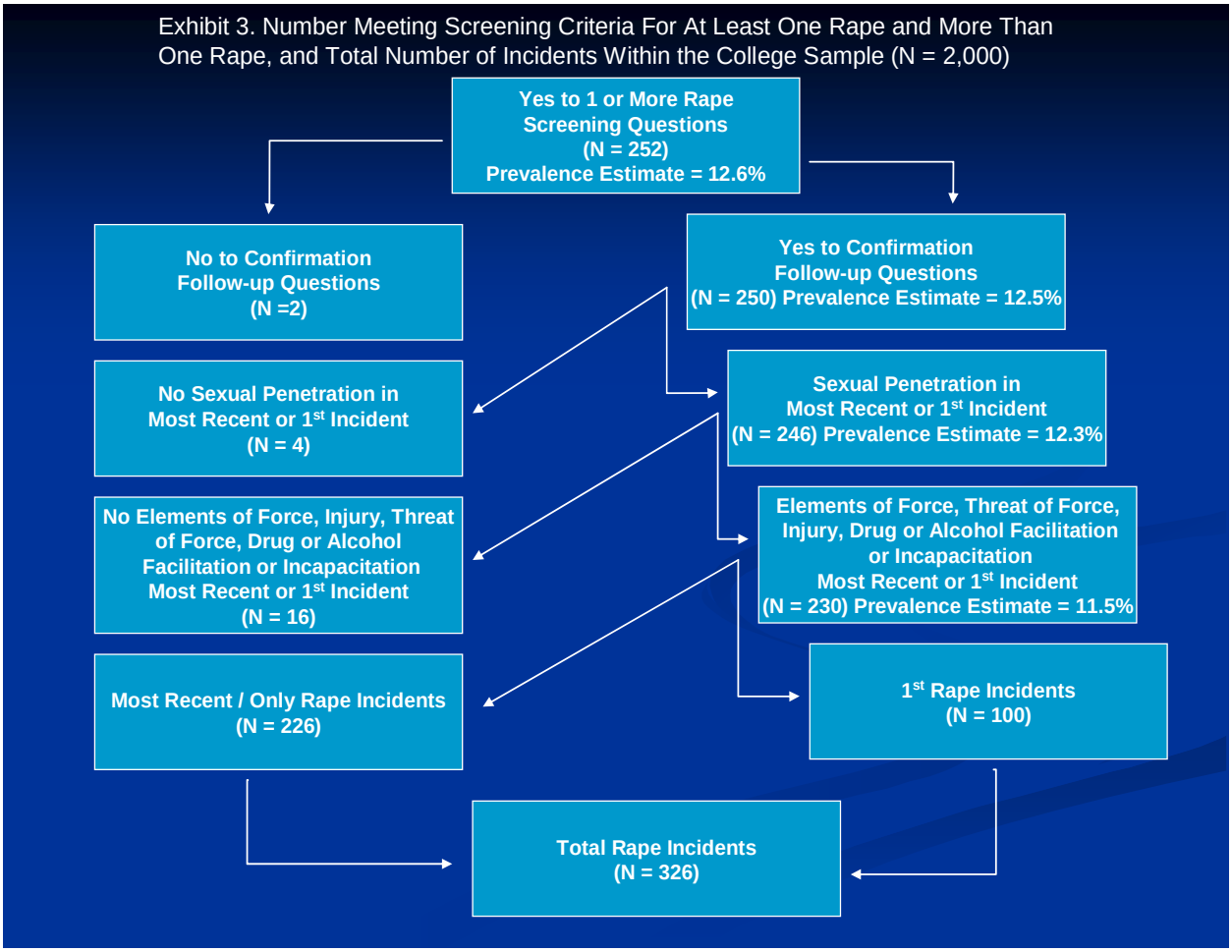


Exhibit 4. Lifetime Prevalence of Rape in the 2005 U.S. Population of Women

Type of Rape	*Victims (n)*	*% of Sample*	*Population estimate**
Any DAFR	**70**	**2.3**	**2.6 million**
Alcohol	**66**	**2.2**	**2.5 million**
Drugs	**14**	**0.5**	**0.6 million**
Any IR	**85**	**2.8**	**3.1 million**
Alcohol	**83**	**2.8**	**3.1 million**
Drugs	**22**	**0.7**	**0.8 million**
Any DAFR/IR	**150**	**5.0**	**5.6 million**
Any FR	**483**	**16.1**	**18.0 million**
Any FR Without DAFR/IR	**439**	**14.6**	**16.4 million**
Any Rape	**541**	**18.0**	**20.2 million**

**based on Census 2005 population estimates of 112,068,000 adult women in the U.S.*

1. Exhibits 4 and 5 provide lifetime estimates of FR, DFR, and IR in the general population and college settings. All population estimates are based on Census data for the year 2005. Based on our findings, about 20 million women in the U.S. have ever been raped during their lifetime: 18 million with a history of FR, 2.6 million with a history of DFR, and 3.1 million with a history of IR (these numbers add up to more than 20 million because some women met criteria for more than one type of rape). Lifetime prevalence of FR was lower among college women than in the general population, but lifetime prevalence of DFR and IR was higher among college women. The McNemar Test of proportions indicated that within the general population sample, the prevalence of DAFR and IR were not significantly different from each other. The prevalence of forcible rape was however significantly greater than the prevalence of DAFR/IR within the general population sample. Within the college sample, the prevalence of IR was significantly greater than the prevalence of DAFR and the prevalence of forcible rape was greater than the prevalence of DAFR/IR.

Exhibit 5. Lifetime Prevalence of Rape in the 2005 U.S. Population of College Women

Type of Rape	Victims (n)	% of Sample	Population estimate*
Any DAFR	54	2.7	158,000
Alcohol	49	2.5	146,000
Drugs	11	0.6	35,000
Any IR	80	4.0	234,000
Alcohol	79	4.0	234,000
Drugs	15	1.0	59,000
Any DAFR or IR	128	6.4	375,000
Any FR	174	8.7	509,000
Any FR without DAFR/IR	127	6.4	375,000
Any Rape	230	11.5	673,000

*based on U.S. Census 2005 estimates of 5,853,000 women enrolled full time in undergraduate colleges

How many women have experienced FR, DFR, or IR within the past year?

Results suggest that nearly 1% of women in the general population were raped in the past year (Exhibit 6). Most of these women experienced FR; nearly half experienced either DFR or IR. College women had a much higher prevalence of rape in the past year (Exhibit 7), although age cohort likely is partially responsible for these differences. More than 5% of college women were raped in the past year, and DFR/IR was more prevalent than FR in this sample. In fact, DFR/IR was nine times more prevalent among college women than among general population women.

Exhibit 6. Estimated Annual Prevalence of Rape in the 2005 U.S. Population of Women

Type of Rape	Number of Victims in Last 7 Months	Percent in Last 7 Months	Projected Annual Percent	Annual Population Estimate
Any DAFR	3	0.001%	0.16%	179,000
Any IR	5	0.17%	0.27%	303,000
DAFR/IR	8	0.27%	0.42%	471,000
Any Forcible	14	0.47%	0.74%	829,000
Forcible Only	10	0.33%	0.52%	583,000
Any Rape	18	0.60%	0.94%	1.1 million

Average number of months was 7.67 which was used in actual estimates.

Exhibit 7. Estimated Annual Prevalence of Rape in the 2005 U.S. Population of College Women

Type of Rape	Number of Victims in Last 7 Months	Percent in Last 7 Months	Projected Annual Percent	Annual Population Estimate
Any DAFR	17	0.85%	1.48%	87,000
Any IR	24	1.20%	2.10%	123,000
DAFR/IR	41	2.05%	3.58%	210,000
Any FR	37	1.85%	3.23%	189,000
Forcible Only	18	0.90%	1.57%	92,000
Any Rape	59	2.95%	5.15%	301,000

Average number of months was 6.87 which was used in actual estimates.

How do these estimates compare with estimates from the NWS, NVAW, NCWSV and national studies of college women?

It is useful to compare estimates with other general population or college women studies for several reasons. One of the most critical reasons is the ability to examine trends in the overall burden of rape in the U.S. over time; that is, to identify changes in the total number of women who have been directly affected by rape. Such comparisons have important implications for resource allocation. Also, these comparisons provide some insight into annual trends in rape prevalence over time. This information helps us understand whether rape is occurring more or less often in the U.S. population as in previous years.

Some sources have examined annual trends in rape prevalence among U.S. women, most notably the FBI Uniform Crime Reports (FBI UCR) and the National Crime Victimization Survey (NCVS). Estimates based on both of these sources have suggested meaningful decreases in the annual prevalence of rape during the past decade. However, as has been previously noted (Koss et al., 1987; Kilpatrick, 2004) there are major methodological issues with the FBI UCR and NCVS that restrict the degree to which we can accurately estimate the number of U.S. women who have been raped. First, the FBI UCR estimates the number of cases of forcible rape or attempted rape *reported to law enforcement agencies* across the nation. Because studies have found that only 1 in 6 rapes is reported to law enforcement, the FBI UCR methodology significantly underestimates the rape problem in America. A second major issue is that procedures for detecting rape incidents in the FBI UCR and NCVS are not sensitive and therefore fail to detect many cases that would be characterized as rape under the federal criminal code. The FBI UCR definition of rape excludes forcible rapes involving oral sex, anal sex, or penetration with fingers or objects. It also excludes drug- or alcohol-facilitated rapes when force and penile penetration are not both present. In the NCVS, rape screening questions heavily rely upon a woman's personal acknowledgement of an incident as a "rape" or "sexual assault" rather than asking behaviorally specific terms that clearly describe such incidents. Yet, a significant body of research demonstrates that many women who experience an unwanted sexual event that qualifies under the federal criminal code as a rape incident do not themselves label the incident as rape. For these reasons, many cases in both the FBI UCR and NCVS go

undetected (see Kilpatrick & Ruggiero, 2004). As reported here, undetected rape cases are more likely to be committed by a known perpetrator (e.g., relative, friend, dating partner), involve drugs or alcohol, or involve oral-genital contact or penetration by objects.

The National Women's Study (NWS, conducted in 1991), National Violence Against Women survey (NVAW, 1995), and National College Women's Sexual Victimization study (NCWSV, 1996-1997) were large epidemiological studies that used recruitment and interview procedures that are highly comparable to those used here. For this reason, comparisons can be made in estimates between the present study and each of these earlier studies. Unlike the FBI UCR and NCVS, highly sensitive screening questions were used in these studies involving behaviorally specific terms (refer to *technical details* box on rape screening, page 11). Screening questions do not require women to label an event as "rape" in order to qualify an event as a rape incident. Like the present survey, all three surveys were conducted using telephone interviews. These studies were designed, in part, to allow for direct comparisons of results and therefore great care was taken to ensure comparability in procedures to each of the other studies.

Exhibit 8 depicts the lifetime and past-year prevalence of FR in the present study as compared to results of the NWS, NVAW, and NCWSV. Lifetime estimates of forcible rape for the general population of women seem to have gradually increased from 1991 (NWS) to 1995 (NVAW) to 2005 (NIJ-DAFR). Note that this represents the *total* percentage of women with a history of rape, and therefore does not necessarily reflect an annual increase in rape. In the NWS, women aged 60 and older had a prevalence of only 5%, whereas all 5-year cohorts of women under 60 had prevalence between 12-19%. Women aged 60 and over in 1991 (when the NWS was conducted) were over age 75 at the time of the present study, and this low-prevalence cohort now represents a much smaller proportion of the population. This likely partially accounts for the increased percentages in Exhibit 8 within the general population sample. The lifetime forcible rape prevalence within the college sample of 8.7% was lower than the prevalence of 15.4% for rape since age 14 among college women previously reported by Koss et al., 1987. However, that lifetime prevalence also included cases that would be defined here as facilitated. Our lifetime prevalence of any rape (11.5%), reported in Exhibit 5, is closer to that figure but is still lower than the 20% prevalence observed by Brener et al., (1999). With regard to annual estimates, there is high comparability between the NWS 1991 and NIJ-DAFR 2005 general population figures (0.71% *vs.* 0.74%), as well as high comparability between the NCWSV 1996 and NIJ-DAFR 2005 college sample figures (3.23% *vs.* 2.95%). Similarly, Koss et al. (1987) reported a past 6 month victimization rate of 38 per 1,000 that included rape and attempted rape due to force or threat. The NVAW general population estimate, on the other hand, is lower than that found in the NWS and the present study. It is unclear why these estimates differ.

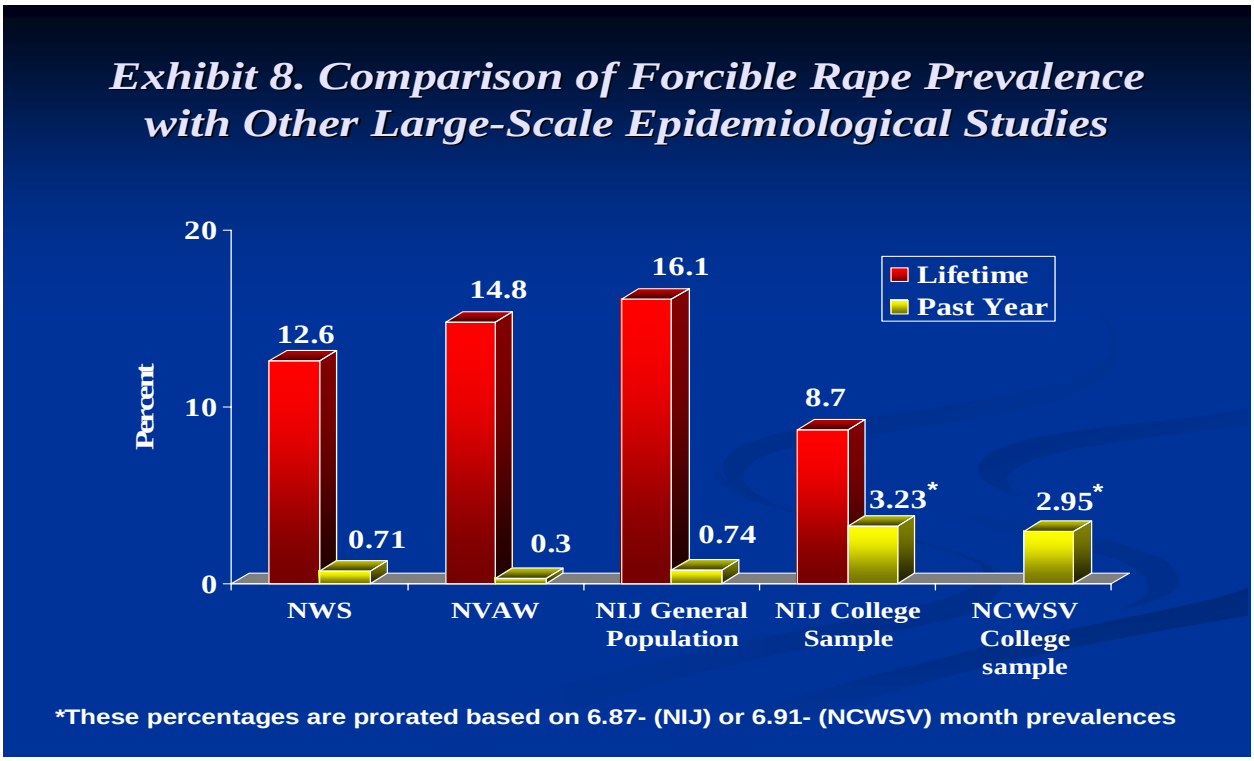
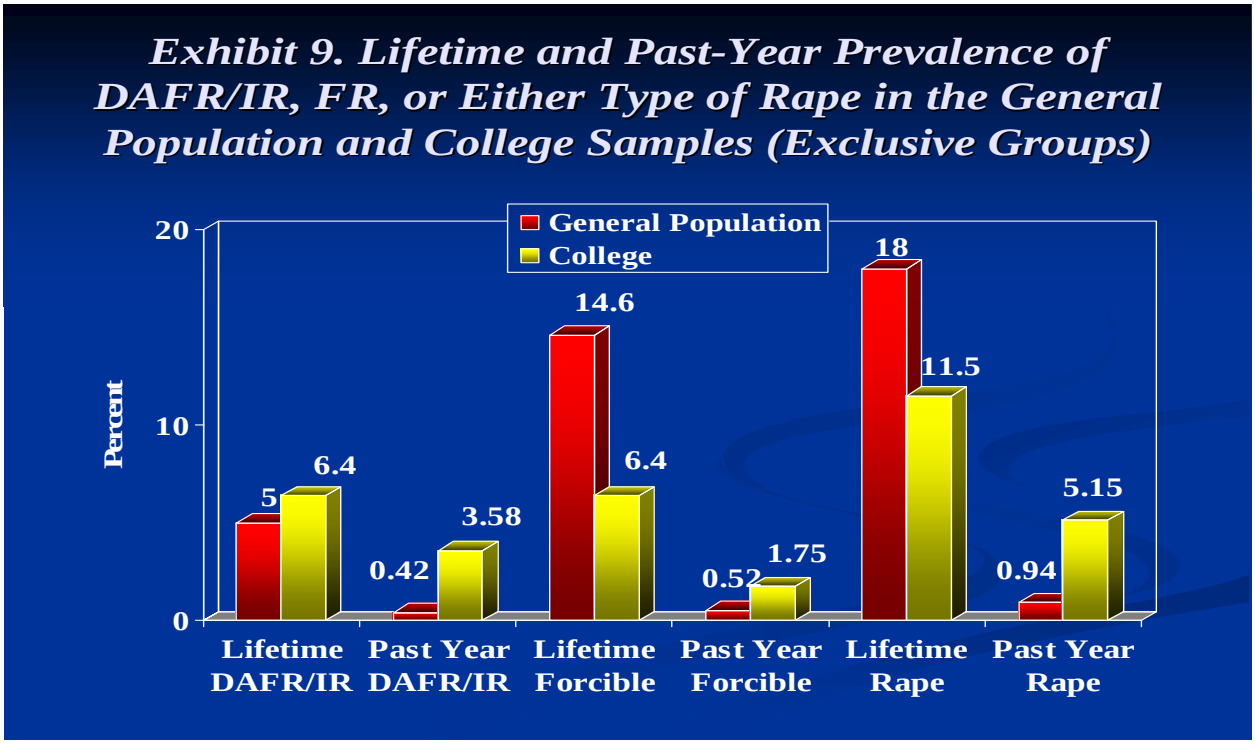
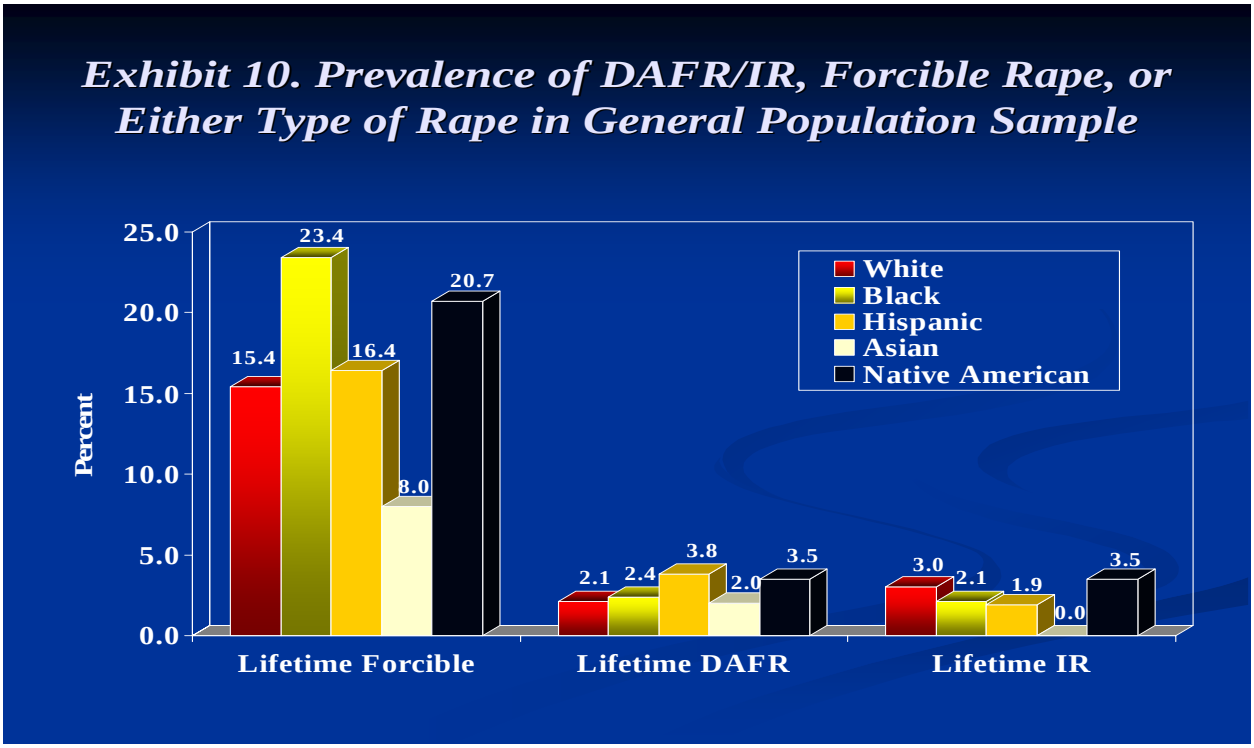


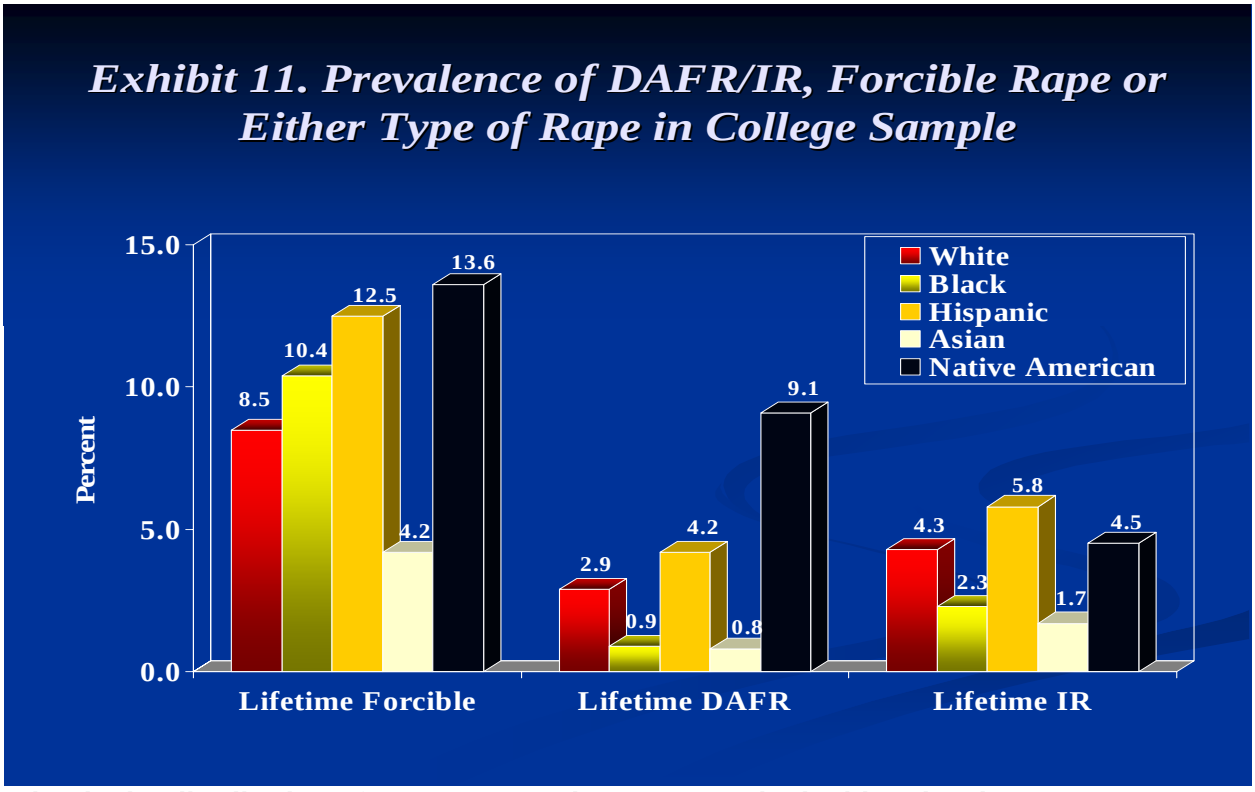
Exhibit 9 details the lifetime and past-year prevalence found for each specific type of rape in the present study. Whereas lifetime history of forcible rape is higher among general population than college women, the reverse is true for lifetime history of DAFR/IR. Further, past-year prevalence of rape is higher for all types among college women, likely due in part to cohort effects.



What is the prevalence of FR, DFR, and IR specifically in minority populations?
Some percentages in Exhibits 10 and 11 are based on a small number of women within certain minority groups. The 9.1% prevalence of rape among Native American college women is based

on a very small sample of 22 women, 2 of whom endorsed DFR. All other racial/ethnic groups in the college sample included at least 120 women. It is notable that African American women had a prevalence of FR that was about 50% higher than Caucasian and Hispanic women. This is inconsistent with earlier studies, where these three racial/ethnic groups had similar prevalence.





What is the distribution of FR, DAFR, and IR cases at the incident level?

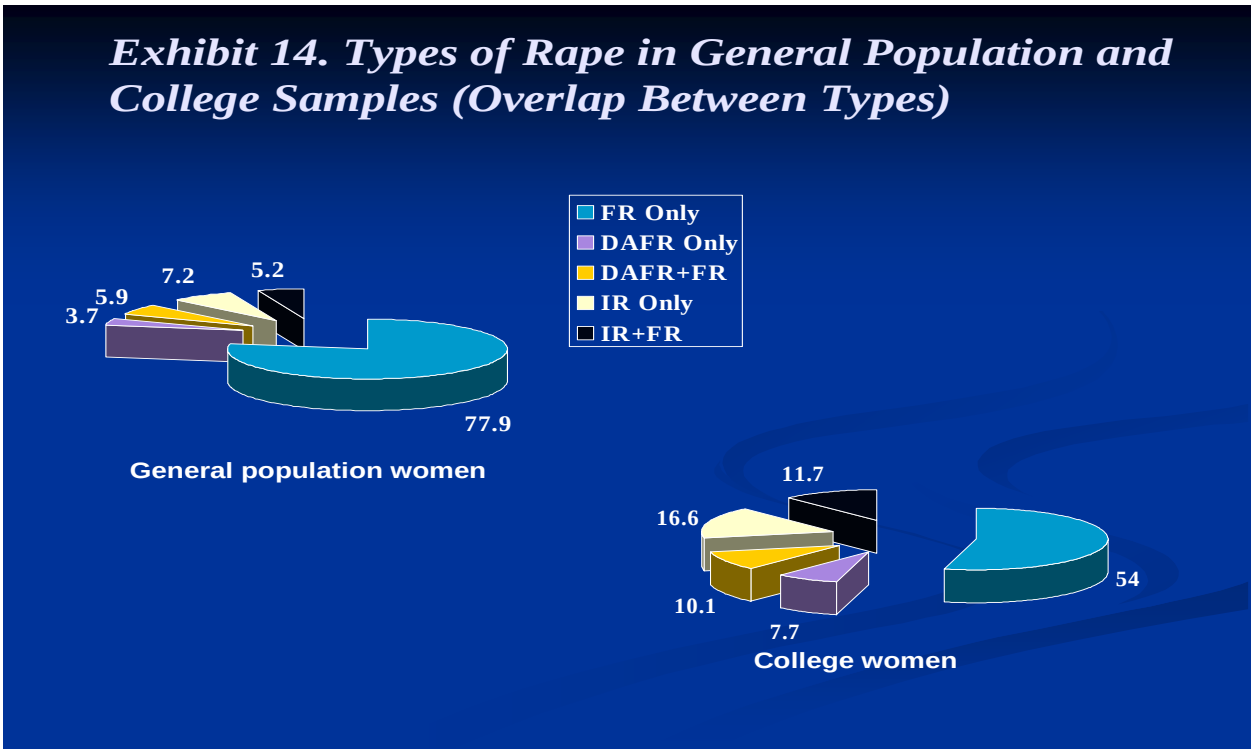
Exhibits 12 and 13 describe the distribution of cases by each type of rape (FR, DFR, and IR) for the general population and college women samples separately. Recall that this does not include all rape cases for these samples; only the most recent and first rapes were assessed for multiply victimized women. For general population women, 90% of cases included elements of force, whereas more than 1 in 5 cases involved alcohol or drug facilitation or incapacitation. In contrast, elements of force were present in only 72% of cases endorsed by college women, and drug or alcohol facilitation or incapacitation was present in nearly half of these cases. In both samples, DFR/IR cases were much more likely to involve alcohol than drugs. Exhibit 14 summarizes the data presented in Exhibits 12 and 13 in graphical form.

Exhibit 12. Lifetime Types of Rape Cases – General Population Sample – Incident Level Data (N=793)

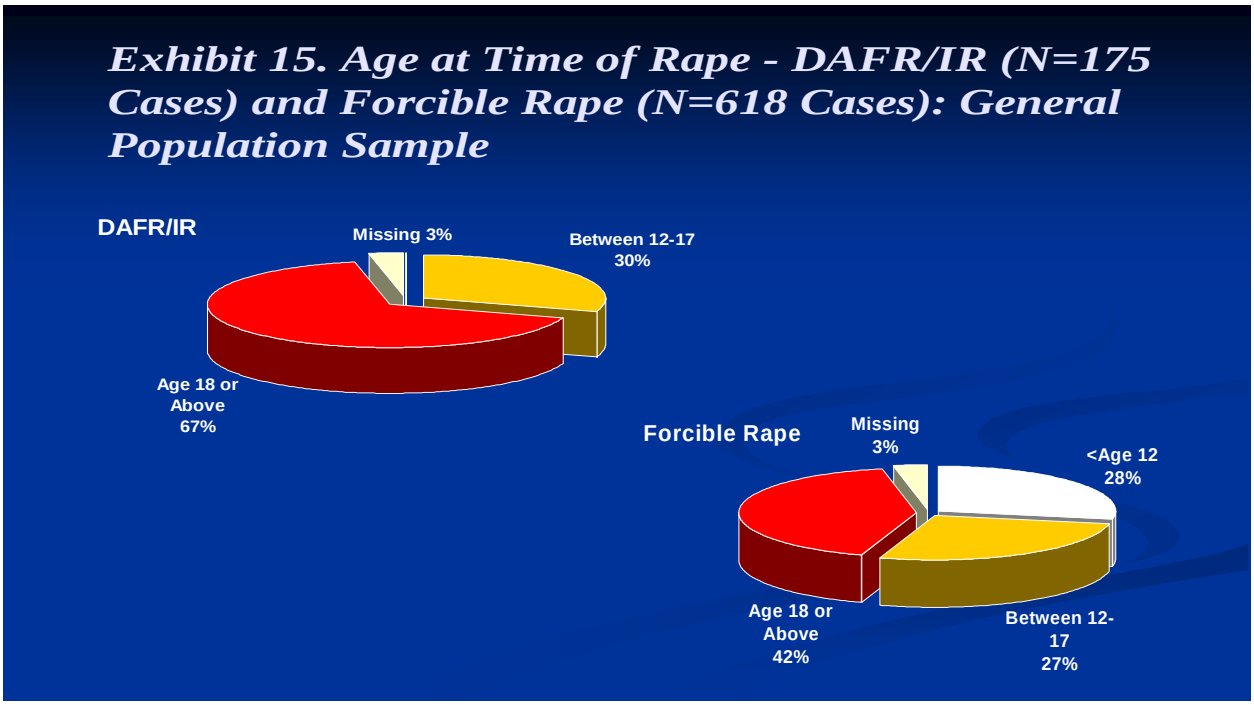
Type of Rape	*Number of Cases*	*Percent of Cases*
Any DAFR	76	9.6
Alcohol	73	9.2
Drugs	17	2.1
Any IR	99	12.5
Alcohol	97	12.2
Drugs	23	2.9
Any DAFR/IR	175	22.1
Any Forcible Rape	707	89.2
FR Only	618	77.9

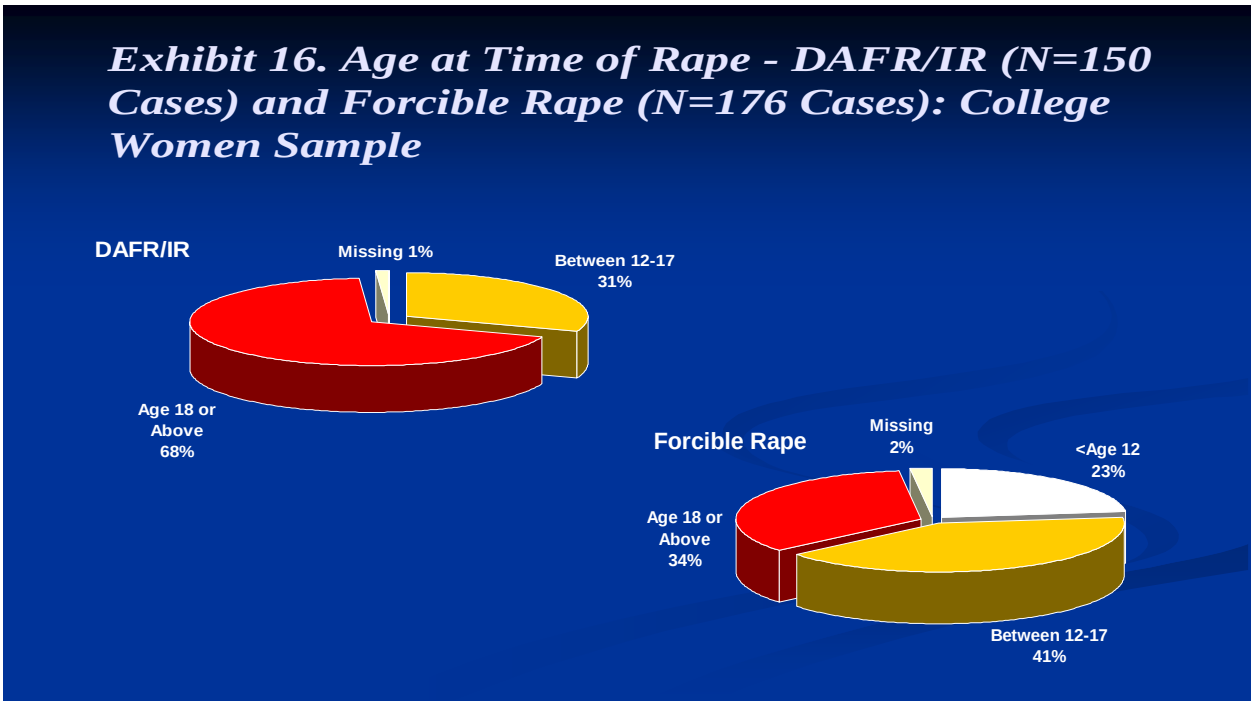
Exhibit 13. Lifetime Types of Rape Cases – College Sample – Incident Level Data (N=326)

Type of Rape	*Number of Cases*	*Percent of Cases*
Any DAFR	58	17.8
Alcohol	52	16.0
Drugs	12	3.7
Any IR	92	28.2
Alcohol	90	27.6
Drugs	15	4.6
Any DAFR/IR	150	46.0
Any Forcible Rape	247	71.8
Forcible Rape Only	176	54.0



What is the prevalence of rape in different age groups? When does rape first occur?
As seen in Exhibits 15 and 16, DAFR/IR incidents did not occur prior to age 12. Almost one-third of DAFR/IR incidents within each sample occurred to girls between the ages of 12 to 17 and about two-thirds occurred among women ages 18 and older. The distribution of ages at which DAFR/IR rapes occurred within the general population and college samples was strikingly similar. A substantial portion of forcible rapes occurred at younger ages. About one-fourth of those in each sample reported incidents occurring before the age of 12, with a relatively higher (28% vs. 23%) percentage of these younger age cases reported within the general population sample. A higher percentage of forcible cases within the college sample occurred between ages

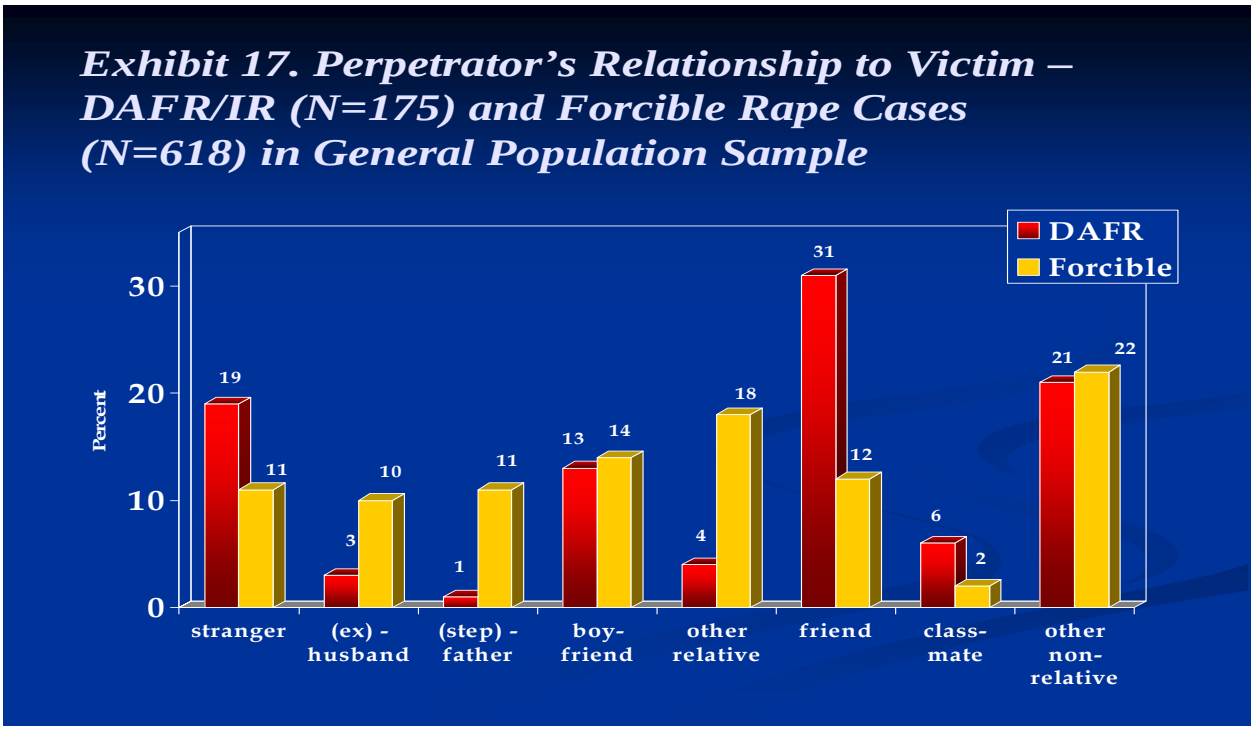


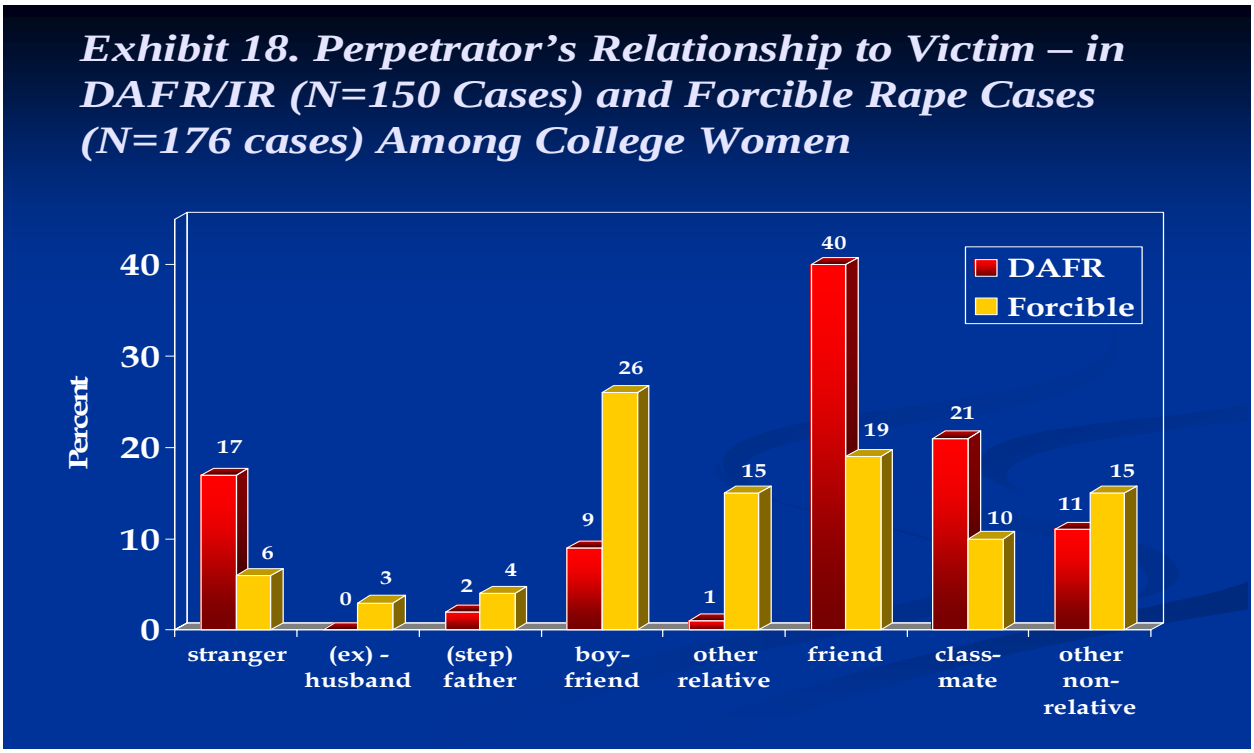


12-17 (41%) than in the general population sample (27%). Differences observed across the samples may be partially due to college women still being at risk due to their relatively younger age for future adult rapes which will shift the distribution over time. In terms of differences between DAFR/IR and forcible rape patterns there were similarities across the two samples.

Who are the perpetrators of FR, DFR, and IR?

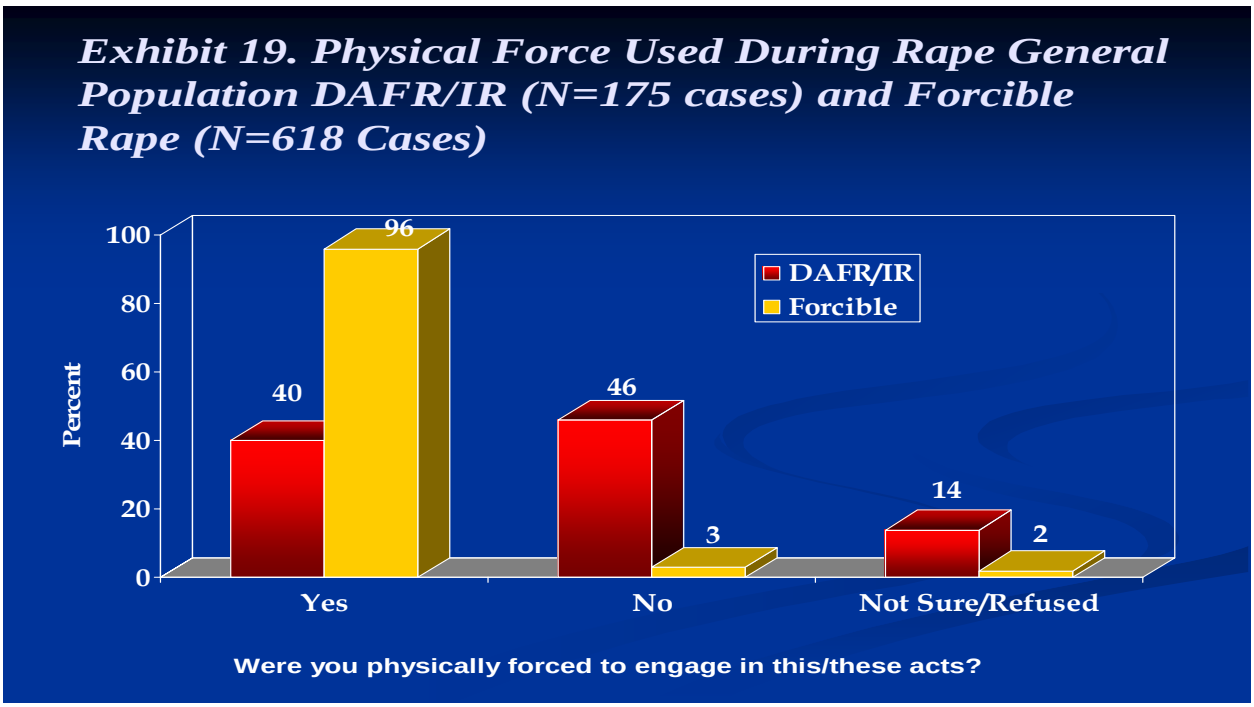
Different types of perpetrators commit FR *vs.* DFR/IR (Exhibits 17 and 18). A higher percentage of DFR/IR than FR cases is perpetrated by strangers, classmates, and peers. In contrast, relatives, dating partners, and (ex)husbands make up a greater percentage of FR than DFR/IR perpetrators. In the general population sample, relatives made up roughly 30% of all forcible

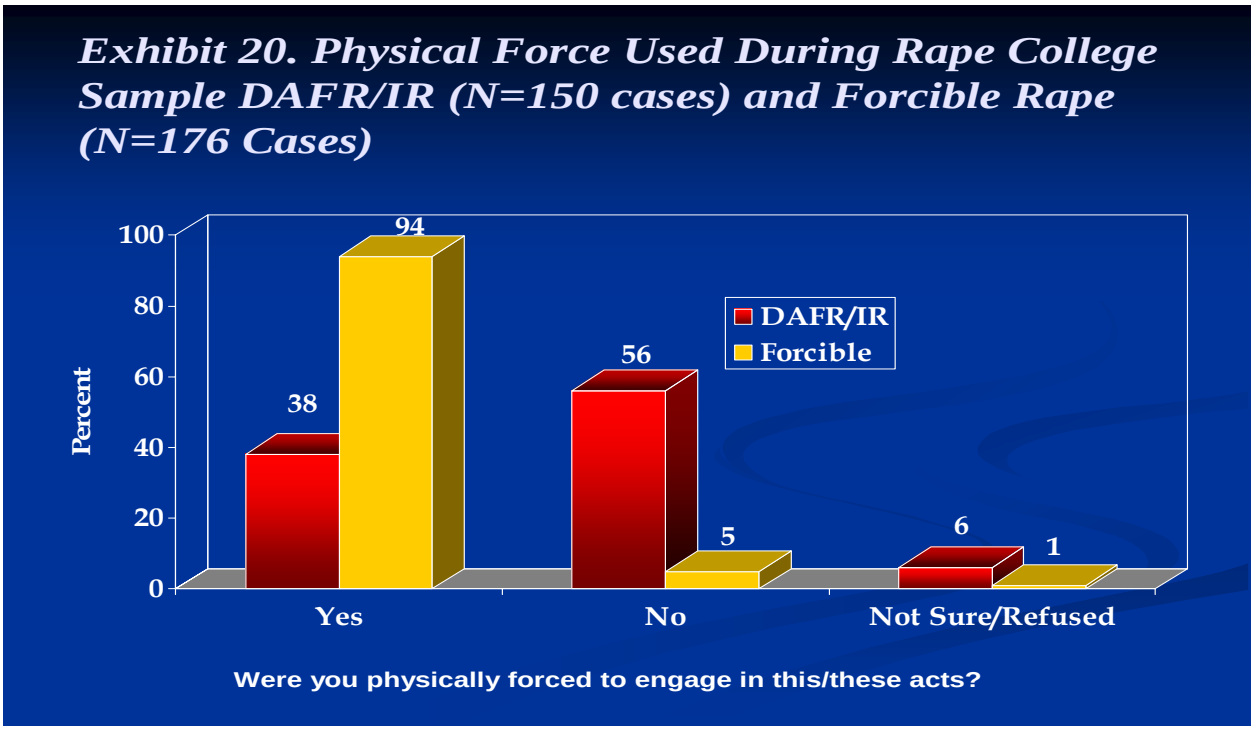




rapes, whereas in the college sample they made up roughly 20%. In the college sample, classmates, friends, and boyfriends made up over 50% of forcible rapes (*vs.* 28% in the general population sample) and about 70% of DFR/IR rapes (*vs.* 50% in the college sample). Many of these differences between college and general population women may relate to age cohorts, as younger women tend to report different sets of rape characteristics than older women.

How many rapes involve force, injury, verbal threats, drug or alcohol use?
Physical force, by definition, was highly prevalent in forcible rape cases (the remaining cases met criteria for forcible rape via presence of injury). Among victims of DFR/IR, roughly half of





valid responses in the general population sample (Exhibit 19), and about 40% of valid cases in the college sample (Exhibit 20), reflected that the woman felt she had been physically forced to engage in these acts. Forcible rape included injury more often than did DFR/IR (52% *vs.* 30%). One in 6 forcible rape cases in the general population involved serious injury (Exhibit 21), as compared to 1 in 16 DFR/IR cases. Fewer cases involved serious injury among college women (Exhibit 22): 1 in 16 forcible rape cases *vs.* 1 in 100 DFR/IR cases.

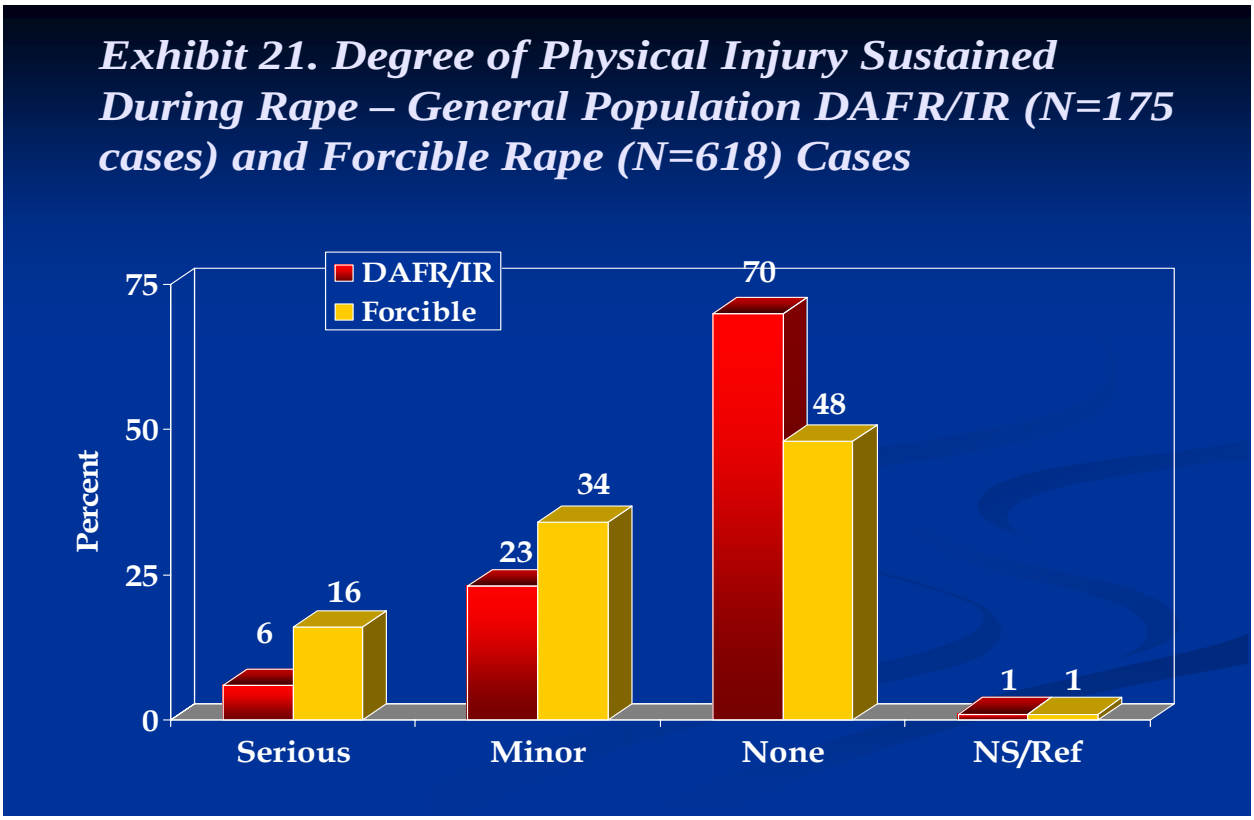
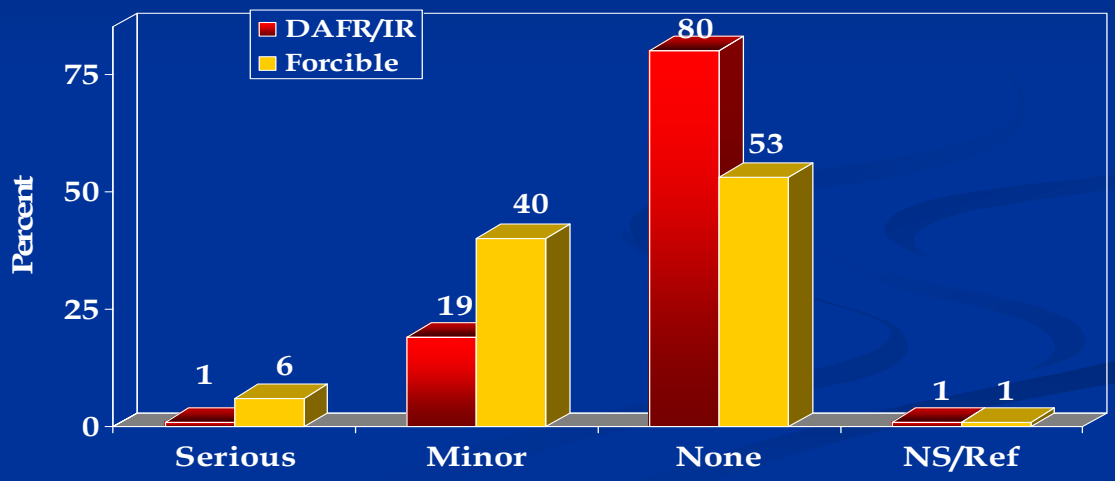
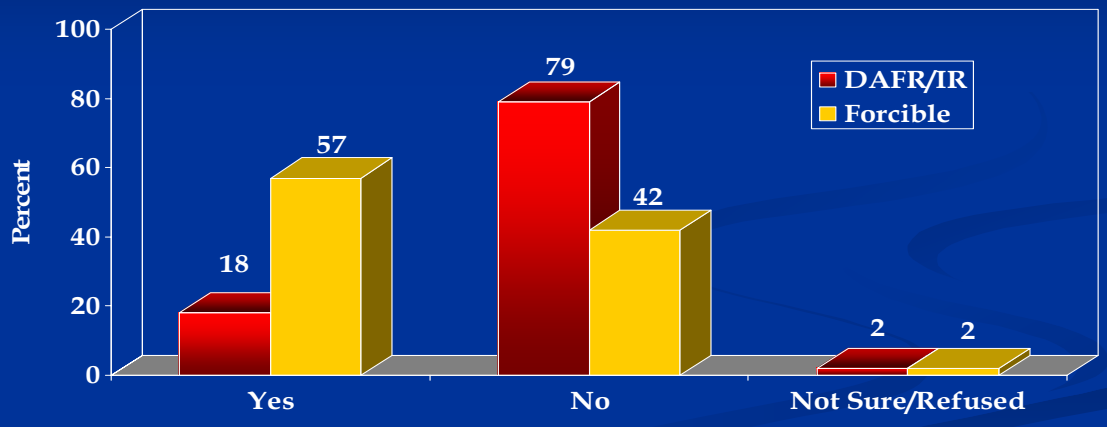


Exhibit 22. Degree of Physical Injury Sustained During Rape – College Sample DAFR/IR (N=150 cases) and Forcible Rape (N=176) Cases



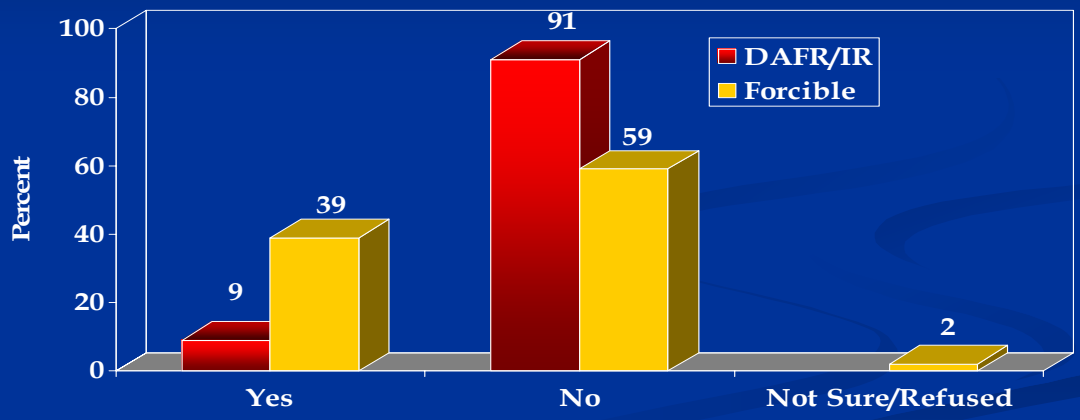
Verbal threat was also more likely to be used in the context of forcible rape incidents (3 out of every 5) *vs.* DFR/IR incidents (1 of every 6) in the general population sample (Exhibit 23). Among college women (Exhibit 24), this difference was even more pronounced: 2 of every 5 forcible rape incidents involved verbal threat as compared to 1 of every 11 DFR/IR incidents. On average, verbal threat in the context of rape incidents was less likely to be reported by college women than by general population women.

Exhibit 23. Verbal Threat Used During Rape General Population DAFR/IR (N=175 cases) and Forcible Rape (N=618 Cases)



Did the person who did this threaten to hurt you or someone else if you did not do what they wanted?

Exhibit 24. Verbal Threat Used During Rape -- DAFR/IR (N=150 cases) and Forcible Rape (N=176 Cases): College Sample



Did the person who did this threaten to hurt you or someone else if you did not do what they wanted?

Exhibits 25 and 26 indicate that a low percentage of forcible rapes involved drugs or alcohol or both in the general population sample and in the college sample. Among victims of DFR/IR, the vast majority of cases involved alcohol (98% in general population, 96% in college settings). Very few DFR/IR cases involved drugs only (2% in general population, 4% in college). Most involved alcohol only; 1 in 4 cases in the general population sample, and 1 in 6 cases in the college sample, involved both drugs and alcohol.

Exhibit 25. Drugs or Alcohol Involved During Rape -- DAFR/IR (N=175 cases) and Forcible Rape (N=618 Cases): General Population Sample

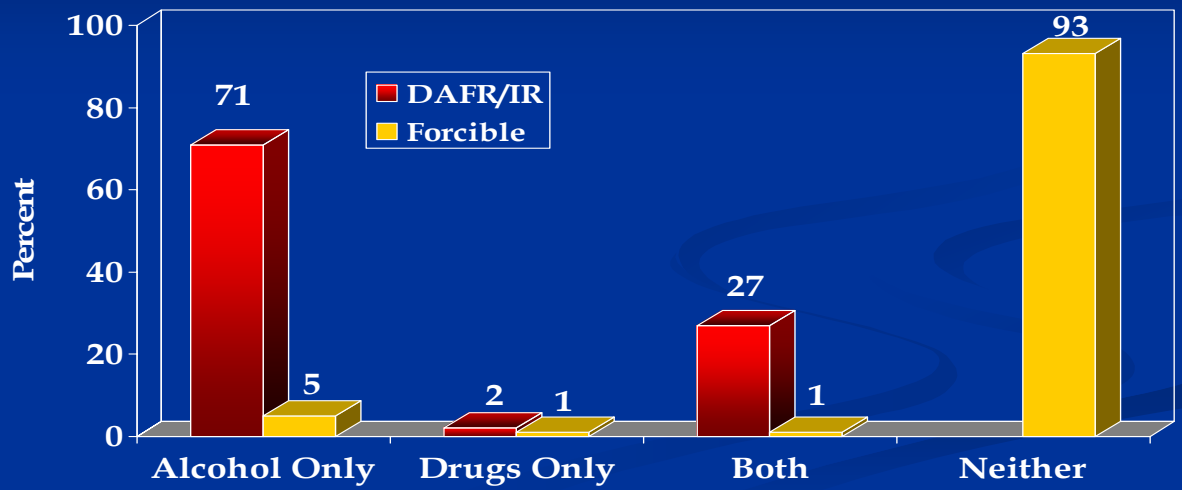
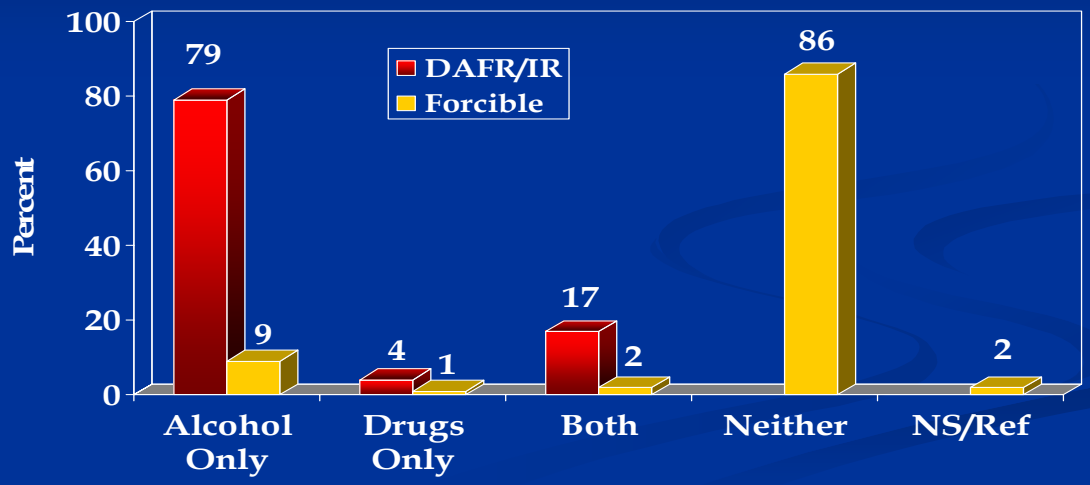
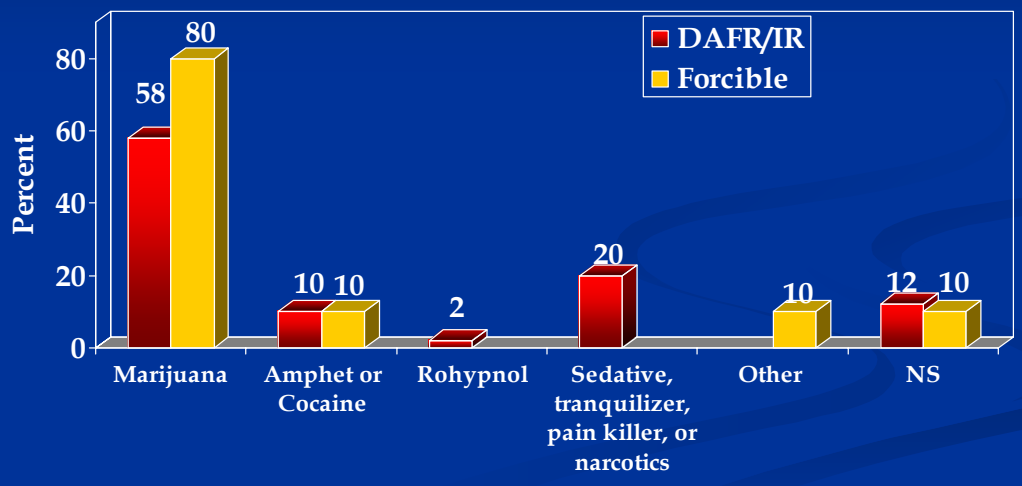


Exhibit 26. Drugs or Alcohol Involved During Rape -- DAFR/IR (N=150 cases) and Forcible Rape (N=176 Cases): College Women Sample



In cases of Drug-Facilitated and Incapacitated Rape, Which Drugs were Used?
Among those reporting any drug use there were both similarities and differences between DAFR/IR and forcible incidents. In both types of incident the more frequently reported drug was marijuana, reported by over half of women with DAFR/IR incidents and the vast majority of those with forcible incidents. Smaller percentages in each rape category reported use of

Exhibit 27. Which Drugs Taken During Rape -- DAFR/IR (N=50/175 cases) and Forcible Rape (N=10/618 Cases): General Population Sample

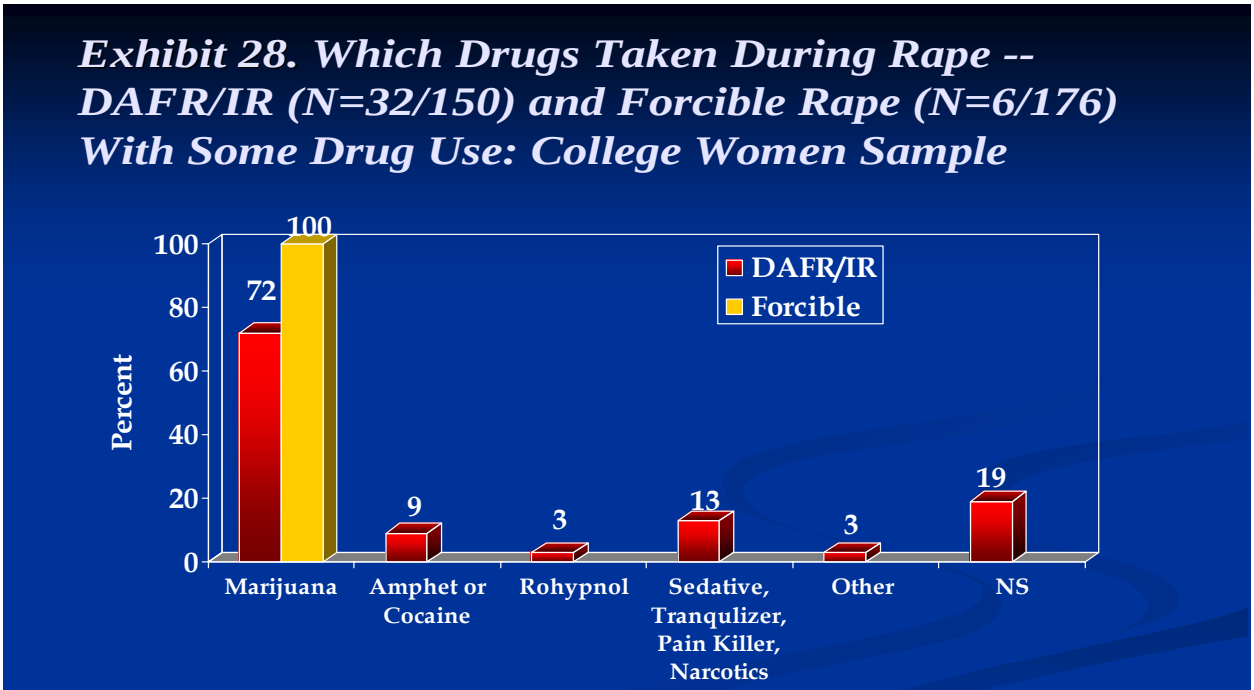


Note. Other substance was prescription NOS. Sedative also included muscle relaxer (NOS)

stimulant type drugs (2 incidents included cocaine and 3 included amphetamines) or were unsure of which type of drug had been ingested. Report of Rohypnol or sedative type drugs occurred only among those in the DAFR/IR group. As noted, the sedative class of drugs depicted here included tranquilizers, barbiturates, anti-anxiety medications such as Xanax, and pain killers such as Oxycontin and Percocet. The use of non-prescription or illicit narcotics was not reported. In most cases a single drug type was reported. Only one reported incident included use of Rohypnol specifically.

Similar patterns were observed when DAFR and IR incidents were examined separately. Marijuana was the most frequently used drugs with somewhat fewer incidents of DAFR (50%) that IR (68%) involving marijuana use. Stimulant drug use was relatively rare in each with 12.5% of DAFR incidents including such use and 8% of IR incidents. The 2 cocaine related incidents were among DAFR cases and 2 of the 3 amphetamine uses were among IR cases. Sedative type drug use was reported in a similar percentage of DAFR incidents (17%) and IR incidents (20%). The breakdown of sedatives included 2 reports of Quaaludes, 2 reports of Xanax, 2 reports of a combination of Percocet, Xanax, and Oxycontin, 2 barbiturate or sedative (NOS), 1 pain killer (NOS), and 1 muscle relaxer (NOS). A similar percentage of DAFR incidents (12.5%) involved unknown drugs compared to 8% of IR incidents. The one incident of Rohypnol use was reported as part of a DAFR incident.

Similar to the pattern observed in the general population sample, marijuana was the most frequently used drug within both forcible and DAFR/IR incidents (Exhibit 28). Within the college sample, marijuana was the only drug reportedly used during forcible incidents. Also similar to the pattern in the general population, use of sedative type or unknown drugs was restricted to the DAFR/IR incidents. As can be seen from the exhibit, the next most frequently used drugs within DAFR/IR incidents were either unknown drugs (19%) or sedative type drugs (13%). Two of the 3 incidents of stimulant drug use involved cocaine and 1, methamphetamine. Among the 4 incidents involving sedative use, 1 involved Xanax, 1 involved heroin, 1 involved Codeine, and 1 incident involved use of the herbal supplement Kava. As noted, 1 incident involved LSD use. Most incidents included reports of use of a single substance, however 1 case involved reported

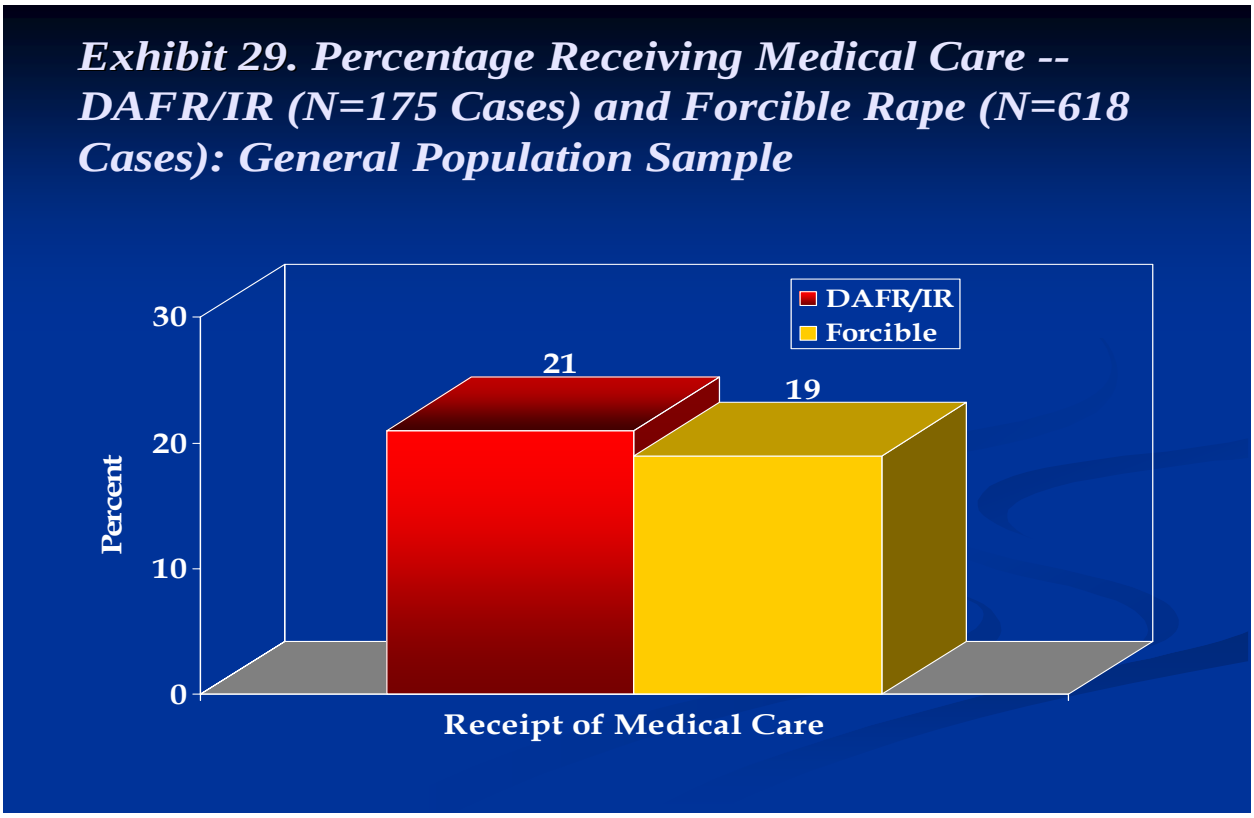


use of marijuana, heroin, and cocaine; 1 involved use of marijuana and Xanax; and 1 involved use of marijuana and acid. As in the general population sample, only 1 person reported use of GHB/Rohypnol. Thus, similar to findings in the general population sample, the majority of incidents involved use or misuse of prescription drugs rather than illicit drugs in cases in which it was a known substance.

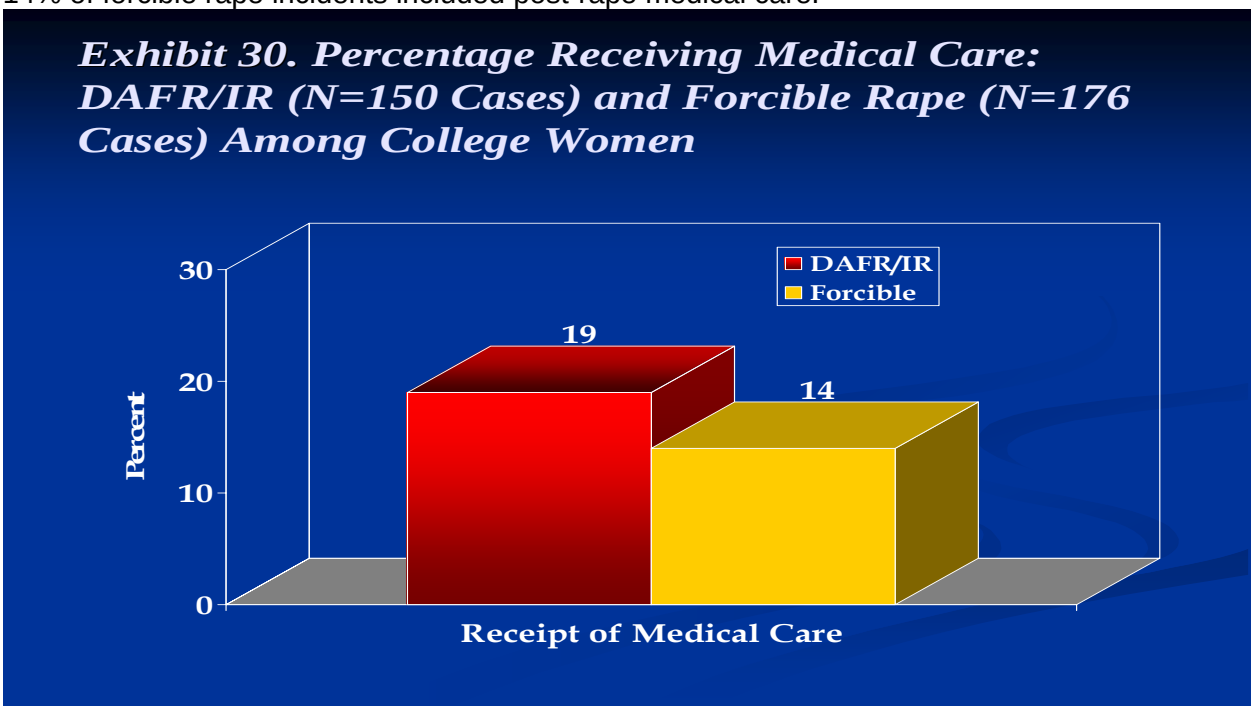
A comparison of DAFR and IR incidents indicated that they were similar in terms of types of drugs used. Marijuana use was relatively less frequent within DAFR incidents (63%) compared to IR incidents (81%). In terms of stimulant use, 2 DAFR incidents (12.5%) involved cocaine use and 1 incident (6%) of IR incidents involved amphetamine use. With regard to sedative use, there were 2 incidents of DAFR (12.5%) that included sedative use with one incident involving heroin and 1 involving Xanax. There were also 2 incidents of IR (12.5%) involving sedative use, 1 involving Kava and 1 involving codeine. The single incident involving GHB/Rohypnol was an IR incident. Finally, there a relatively greater percentage of DAFR incidents involved unknown drugs (31%) as compared to IR incidents (6%).

How many women seek medical care after a rape?

Only approximately one-fifth of rape victims reported receipt of post-rape medical care within the general population and proportions receiving care were similar for both DAFR/IR and Forcible incidents (Exhibit 29). Thus, despite a difference in rate of reporting of DAFR/IR incidents, medical related and perhaps drug-related concerns in some cases may affect medical care seeking behaviors.



Within the college sample (Exhibit 30), receipt of post-rape medical care was slightly higher following DAFR/IR incidents as compared to forcible incidents. Similar to findings in the general population sample, one-fifth of DAFR/IR incidents involved receipt of medical care whereas only 14% of forcible rape incidents included post-rape medical care.



What percentage of rape victims seeks help from victims' assistance agencies such as rape crisis centers or other agencies?

In approximately 15.4% of DAFR/IR incidents as compared to 20% of forcible rape incidents, women in the general population sample reported seeking help from an agency that provides assistance to victims of crime. Within the college sample, 14.7% of DAFR/IR and 21.6% of forcible incidents were followed by help seeking from an agency providing services to crime victims.

What are common concerns women have following a rape?

In the general population (Exhibit 31), victims of DAFR/IR report more medical concerns (getting HIV/AIDS or STDs, pregnancy) than do victims of FR. Social concerns (being blamed, family and others knowing) are roughly equal across both types of rape. For college women (Exhibit 32), getting HIV/AIDS or STDs is also higher for victims of DAFR/IR than for victims of forcible rape; however, pregnancy and social concerns are cited more by victims of FR than DFR/IR. College women also cited social concerns more than did women in the general population.

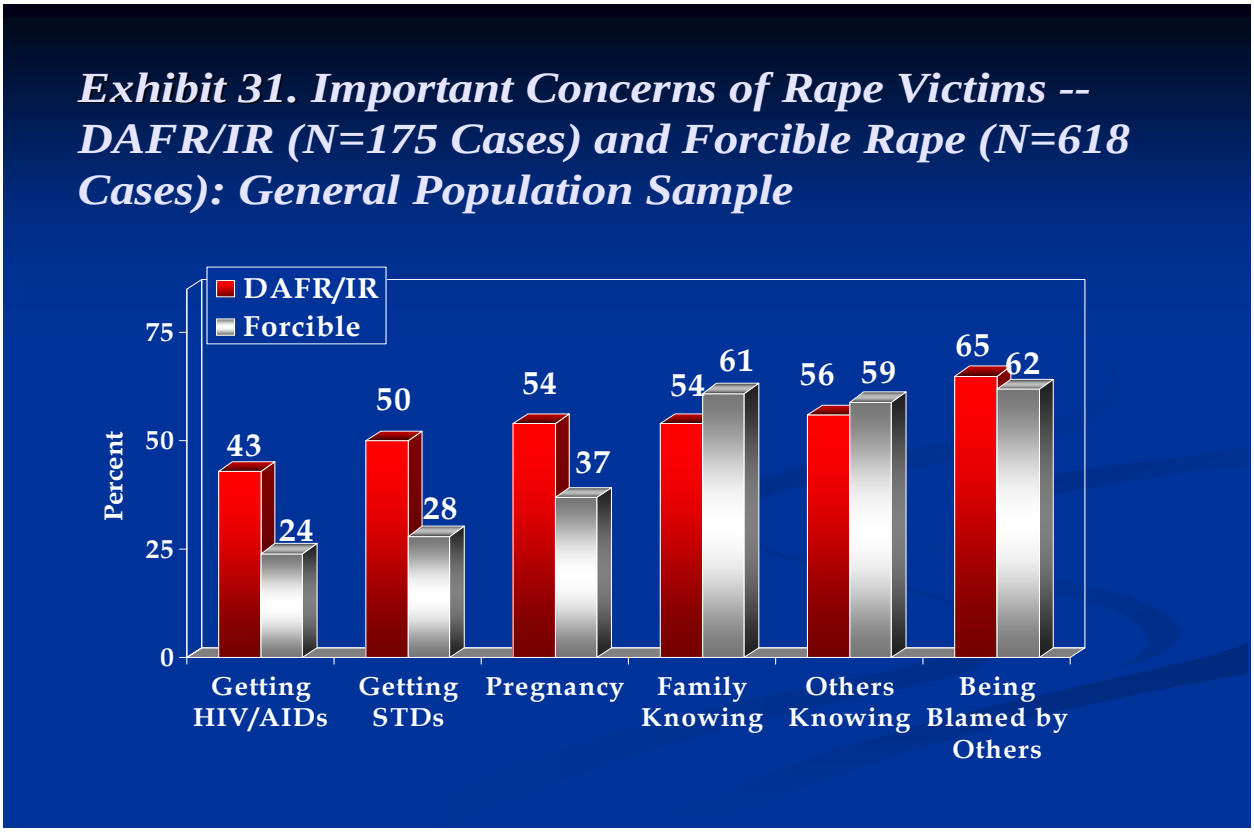
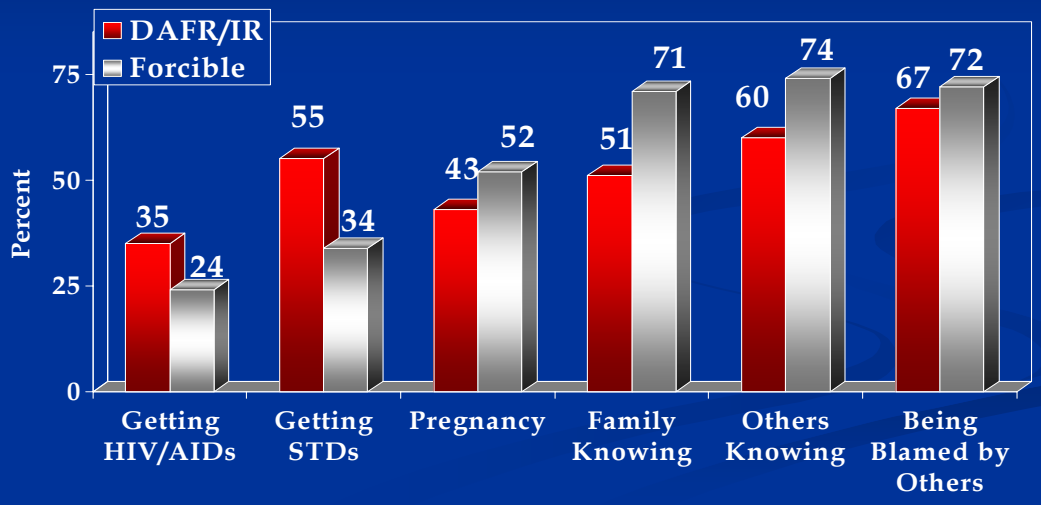


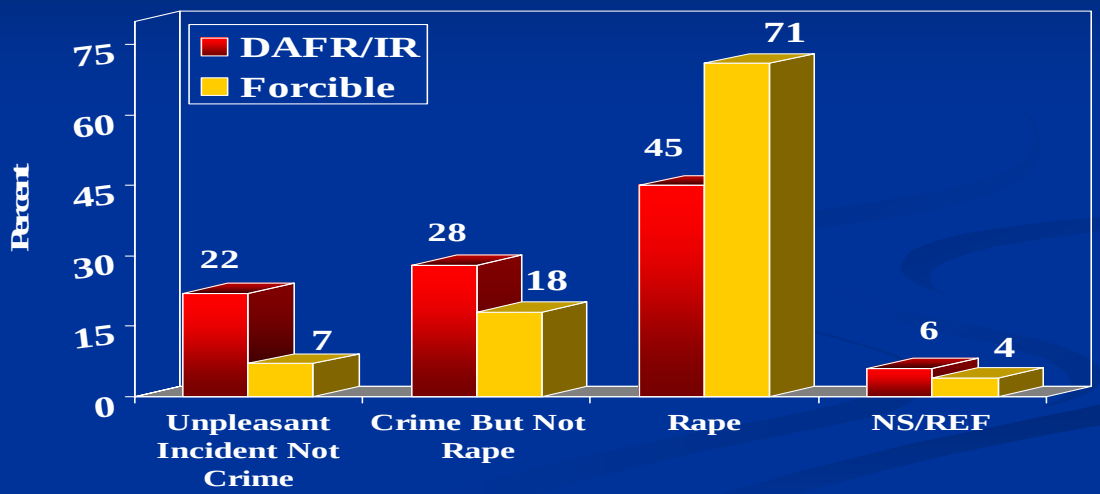
Exhibit 32. Important Concerns of Rape Victims -- DAFR/IR (N=150 Cases) and Forcible Rape (N=176 Cases): College Women Sample

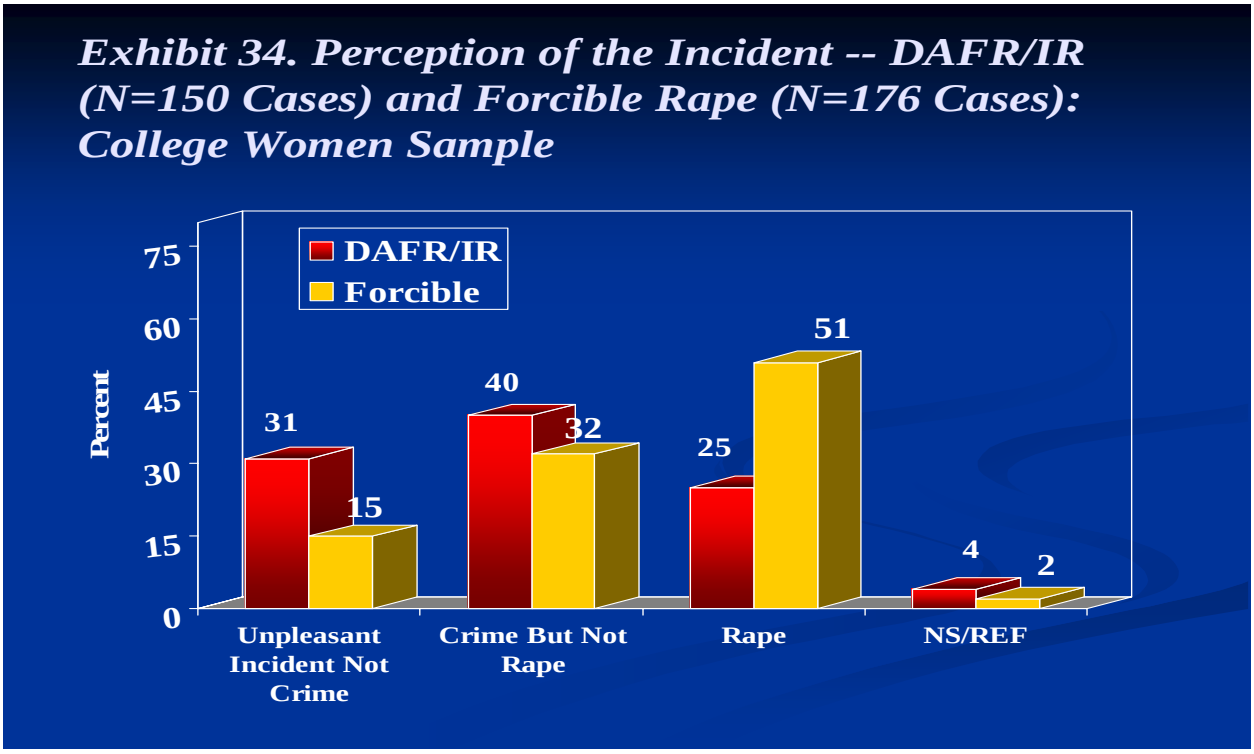


How are different types of rape perceived by victims?

Exhibits 33 and 34 show how DFR/IR and FR victims differ in their perceptions of the incident. In both samples, more victims of DFR/IR perceived the incident as "unpleasant but not a crime" or "a crime but not rape" than did victims of FR. However, more FR victims perceived the incident to be rape than did victims of DFR/IR in both samples. Overall, fewer college women defined their incident as rape and more perceived the event to be a crime other than rape or an unpleasant incident compared to women in the general population.

Exhibit 33. Perception of the Incident -- DAFR/IR (N=175 Cases) and Forcible Rape (N=618 Cases): General Population Sample





What are the responses to disclosures of rape by others within the full study samples? Participants were asked whether "a woman or girl ever directly told you that someone forced her to have sexual intercourse, oral sex, or anal sex when she didn't want to?" They were also asked separately whether "a woman or girl ever directly told you that someone had sexual intercourse, oral sex, or anal sex with her when she didn't want to after she was extremely high or passed out due to alcohol or drug use?" With regard to each type of rape participants were asked whether they encouraged the person to report the incident to the police or other authorities. Finally, participants were asked how likely they would be to encourage reporting of each type of rape if a friend disclosed this type of incident in the future.

Within the general population sample, 13.8% indicated that a friend had disclosed a DAFR/IR incident and of this group 76.8% encouraged reporting to the police or other authorities. Within the full general population sample, 85.8% said they would be very likely to encourage reporting of such an incident following a future disclosure while 11.4% said they would be somewhat likely, 2.2% said either somewhat unlikely or very unlikely and .6% said not sure. A total of 32.6% of women reported that a friend had disclosed a forcible rape incident and of this group 69% said they had encouraged the person to report to police or other authorities. In response to the question about future disclosure, 90.8% of those in the general population sample said they would be "very likely" to encourage reporting and 7.1% said they would be "somewhat likely" to encourage reporting, while .8% said they would be somewhat or very unlikely to encourage reporting and another 1.3% noted they were unsure

Within the college sample, 21.4% indicated that a friend had disclosed a DAFR/IR incident and of this group 74.2% encouraged reporting to the police or other authorities. Within the full college sample, 82.8% said they would be very likely to encourage reporting of such an incident following a future disclosure while 14.6% said they would be somewhat likely, 2.4% said either somewhat unlikely or very unlikely, .2% said not sure, and .1% refused. A total of 35.3% of women reported that a friend had disclosed a forcible rape incident and of this group 71.5% said they had encouraged the person to report to police or other authorities. In response to a question about future disclosure, 88.2% said they would be "very likely" to encourage reporting

and 10.4% said they would be "somewhat likely" to encourage reporting, while 1.3% said they would be somewhat or very unlikely to encourage reporting. Another .1% noted they were unsure and .1% refused.

What factors or changes were perceived as increasing the likelihood of reporting to police?

All participants within the general population and college samples were also asked a series of questions about the degree to which provision of different types of education or services or policy changes might be effective in increasing willingness to report to police. Within the general population sample, 93% indicated that public education about acquaintance rape would be either somewhat (48.4%) or very (44.6%) effective in increasing willingness to report; 95.3% indicated that expanding counseling and advocacy services for victims and their family members would be either somewhat (30.3%) or very (65%) effective; 94% indicated that availability of free pregnancy counseling for rape victims who get pregnant would be either somewhat (28.2%) or very (65.8%) effective; 96.4% indicated that providing confidential free testing for HIV/AIDS or sexually transmitted diseases would be somewhat (20.6%) or very (75.8%) effective; and 91.3% indicated that laws protecting victims' confidentiality and prohibiting disclosure of their names and addresses would be either somewhat (28.5%) or very (62.8%) effective.

Within the college sample, 95.9% indicated that public education about acquaintance rape would be either somewhat (72%) or very (23.9%) effective in increasing willingness to report; 97.4% indicated that expanding counseling and advocacy services for victims and their family members would be either somewhat (41.6%) or very (55.8%) effective; 97.1% indicated that availability of free pregnancy counseling for rape victims who get pregnant would be either somewhat (30.3%) or very (66.8%) effective; 97.9% indicated that providing confidential free testing for HIV/AIDS or sexually transmitted diseases would be somewhat (22.5%) or very (75.4%) effective; and 95.9% indicated that laws protecting victims' confidentiality and prohibiting disclosure of their names and addresses would be either somewhat (34.4%) or very (61.5%) effective.

What percentage of rape victims consult with others about reporting the incident and what percentage are encouraged to report the crime?

These questions were asked only of rape victims whose assaults were not reported by someone else (e.g. a parent) and are described here in reference to cases of each type (DAFR/IR or FR). Within the general population sample, there were 171 cases of DAFR/IR in which the victim may have chosen to report. In reference to these cases, others were consulted in 19.3% and encouragement to report was received in 45.5% of those cases. Of 580 FR cases in which the victim may have chosen whether to report the incident, others were consulted in 15.5% of cases and of these, encouragement to report was received in 55.6%.

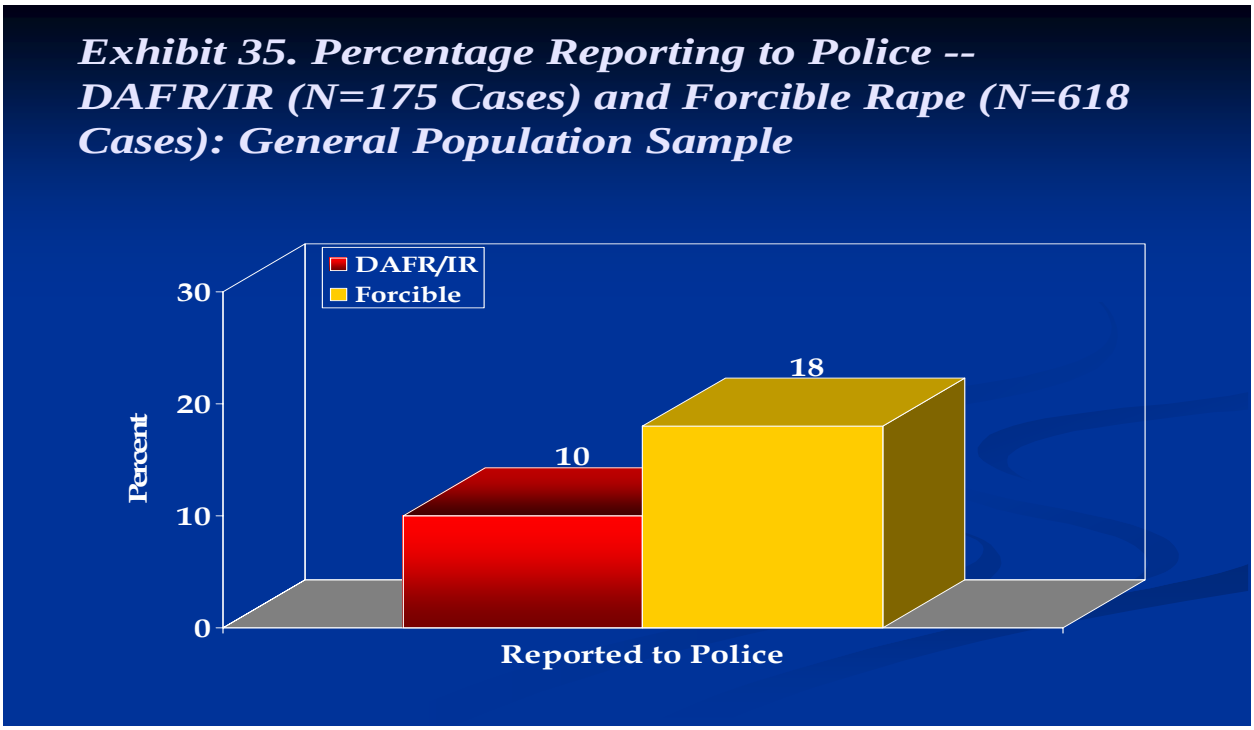
Within the college sample, among 148 cases of DAFR/IR in which the victim may have chosen to report, others were consulted in 36.5% of cases and of these, encouragement to report was received in 40.7%. Of 160 FR cases in which the victim may have chosen whether to report, others were consulted in 30% of cases and of these, 56.3% received encouragement to report.

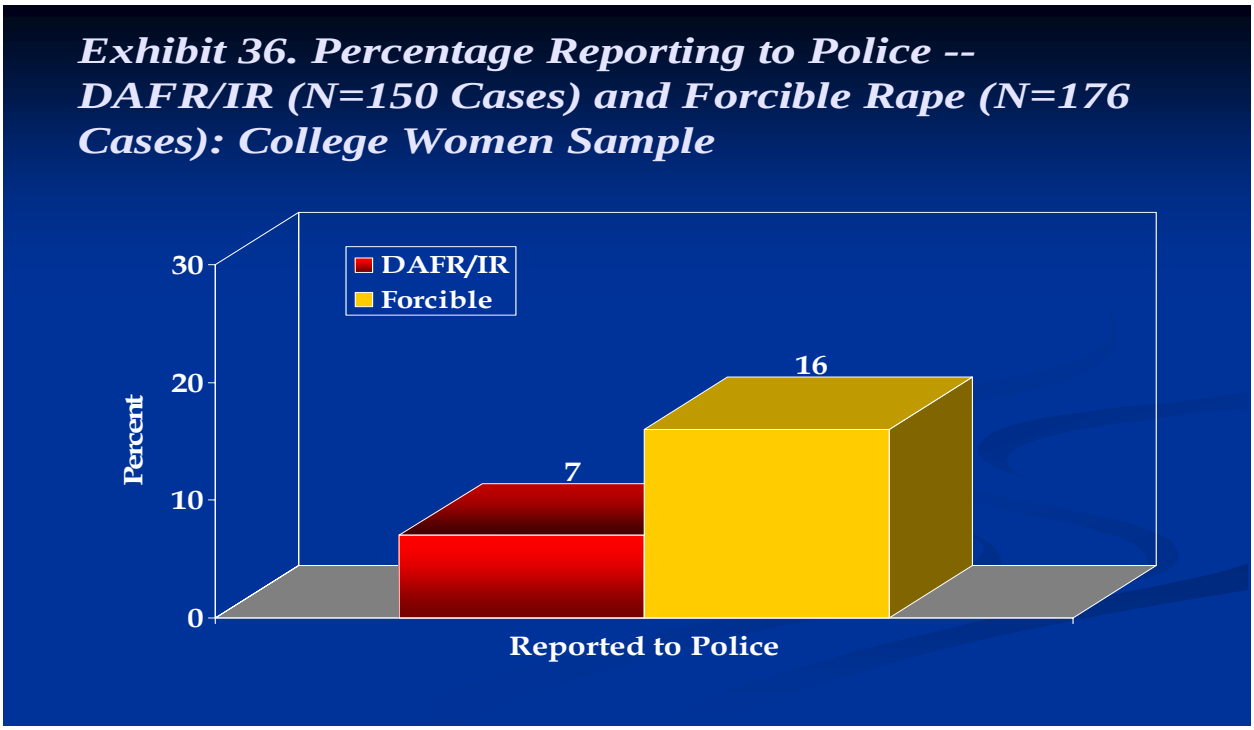
Results reported within the full sample and among rape victims about their experiences surrounding disclosure indicate that many women have had friends disclose both DAFR/IR and FR experiences and that they reportedly were very likely to encourage friends to report such incidents to police or other authorities. In addition, the vast majority of participants indicated that provision of education about acquaintance rape, expanding counseling and advocacy services for victims and family members, availability of pregnancy related counseling or services in relevant cases, provision of confidential and free HIV or sexually transmitted diseases testing would increase victims' willingness to report sexual assaults to police. Within the general

population sample, between 1 in 6 and 1 in 5 rape victims consulted with others about whether to report whereas approximately one third of those in the college sample consulted about reporting with regards to either DAFR/IR or forcible rape incidents. In both samples women indicated that they were encouraged to report forcible incidents about 56% of the time. A smaller percentage in both samples reported encouragement to report DAFR/IR incidents.

What percentage of rape cases is reported to law enforcement?

Exhibits 35 and 36 show the percentage of rape cases in the general population and in college settings that are reported to police. This is broken down by rape type. Both college women and women in the general population reported the incident to police with similar likelihood. However, in both samples victims of DFR/IR were less likely to report to police than were victims of forcible rape. Further, it is clear from these exhibits that the likelihood of reporting rape to the authorities has not meaningfully changed over the last two decades. Data from the NWS (1991) and NVAW (1995) indicated that between 15-20% of rapes were reported to law enforcement.





What factors are associated with reporting of rape to law enforcement?
Chi-square analyses were conducted to examine assault characteristics as predictors of reporting a most recent or only rape. In the general population sample (*n* = 526) 1 in 6 (15.8%) of these rapes was reported to police. Significant positive predictors (all $p < .05$) of reporting included verbal threat by the assailant (21.6% *vs.* 10.9%); injury during the incident (22.4% *vs.* 10.5%); perceived fear of death or injury during rape (24.2% *vs.* 7.5%); stranger *vs.* all other assailants (34.4% *vs.* 13.3%); concern about getting a sexually transmitted disease as a result of the assault (26% *vs.* 10%); concern about getting AIDS or HIV (24% *vs.* 12%); and person's outside the family knowing about the assault (20% *vs.* 11%). Variables inversely related to reporting included friend *vs.* all other assailants (7.8% *vs.* 17.7%); alcohol use during rape by the victim (10.5% *vs.* 18.2%). Acknowledgement of the incident as rape was also examined in relation to reporting. Almost two-thirds of women in the general population sample (63%) identified the incident as a rape. Women who identified the incident as a rape were significantly more likely to report the rape to authorities (21.4%) as compared to all others (6.2%).

In the college sample (*n* = 226), 11.5% reported the incident to police. Significant predictors (all $p < .05$) of reporting were physical force (15.5% *vs.* 4.8%); verbal threat (25.5% *vs.* 78%) injury (23.9% *vs.* 6.3%); perceived fear of death/injury during assault (24.1% *vs.* 7.6%); and concern about family knowing about the assault (17.1% *vs.* 4.1%). Similar to findings within the general population, alcohol use as part of the assault was inversely related to reporting (6.1% of cases involving alcohol use *vs.* 19.1% not involving alcohol use). Those who reported being too drunk or high to control their behavior during the incident were also less likely to report (3.5% *vs.* 19.6%). Degree of memory for the incident appeared to relate to reporting such that those who said they remembered the incident "extremely well" (22%) were more likely to report than those who said they remembered "very well" (6.7%). In terms of rape acknowledgement, 37% of women identified the assault as rape. Women who identified the incident as rape were significantly more likely to report the rape to authorities (26.5%) as compared to all others (2.8%).

What are the attitudes and opinions of women about reporting rape to law enforcement?

These questions were only asked of women whose assaults were not reported by others. As noted in Exhibits 35 and 36, a low percentage of women reported their rape to law enforcement. For this reason, sample size is small for identifying motivating factors around victims' decisions to report to law enforcement. Of these, the most common reason given by women for reporting was to prevent crimes against others (see Exhibits 37, 38, 39, and 40). Very few women reported the rape for the primary purpose of getting help, getting medical care, catching or finding the perpetrator, or punishing the perpetrator. Differences between DAFR/IR and forcible cases were unable to be tested due to small sample sizes.

Exhibit 37. Major Reason Reported to Police–DAFR/IR Rape (N=14/175) Cases: General Population Sample

Reason	N	%
To get help after the incident	1	7
To get medical care		
To prevent further crimes against self	3	21
Prevent crimes against others	6	43
Punish offender	1	7
Catch or find offender		
Because it was a crime	1	7
Not sure/other	2	14

Exhibit 38. Major Reason Reported to Police – Forcible Rape (N=71/618) Cases: General Population Sample

Reason	N	%
To get help after the incident	2	3
To get medical care	1	1
To prevent further crimes against self	7	8
Prevent crimes against others	22	31
Punish offender	6	8
Catch or find offender	9	13
Because it was a crime	11	15
Not sure/other	14	20

In the college sample, only 21 cases were identified that were reported to the authorities. Nearly half of these cases were reported for the primary purpose of preventing crimes against others. Only one was reported to prevent further crimes against oneself. None was reported for the primary purpose of punishing the offender (Exhibits 41 and 42).

Exhibit 39. Major Reason Reported to Police– DAFR/IR (N=8//150) Cases: College Women Sample

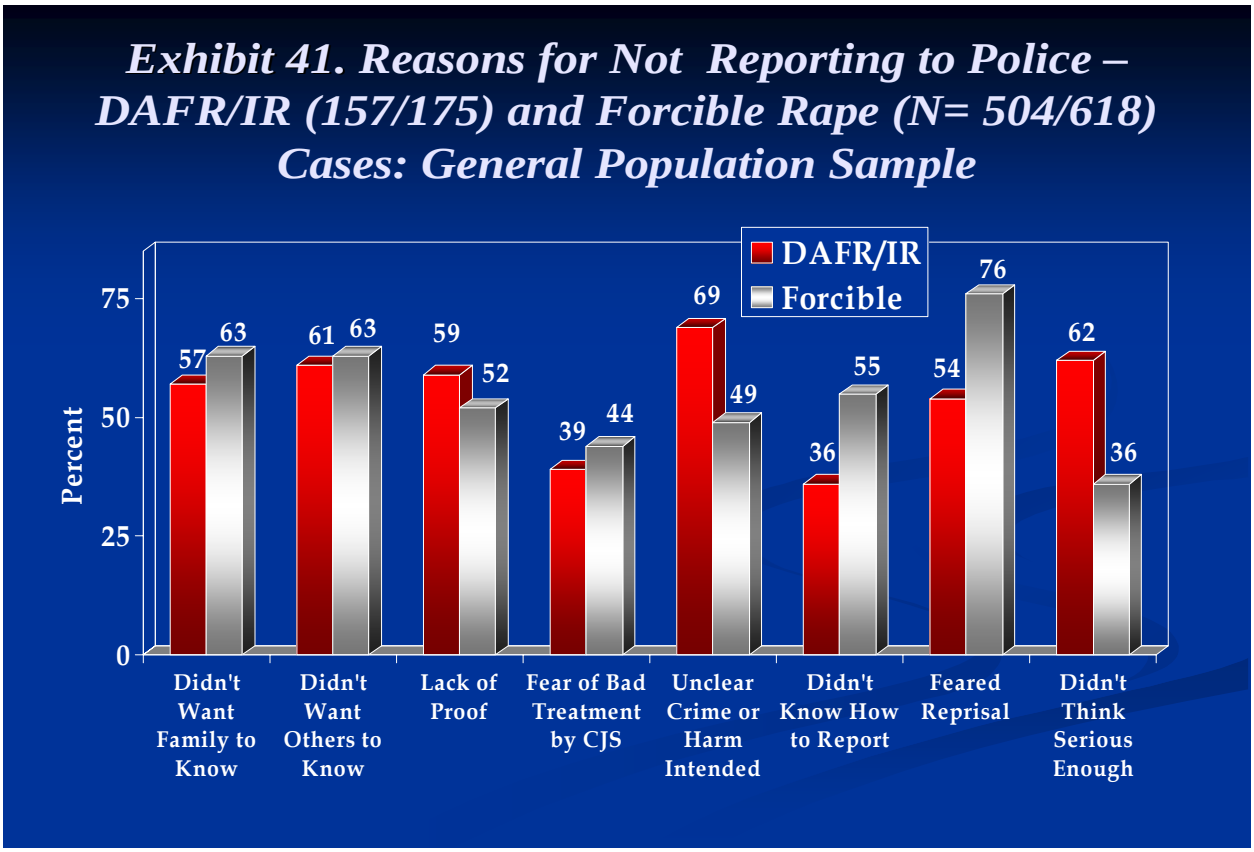
Reason	N	%
To get help after the incident		
To get medical care		
To prevent further crimes against self		
Prevent crimes against others	4	50
Punish offender	2	25
Catch or find offender		
Because it was a crime	1	13
Not sure/other	1	13

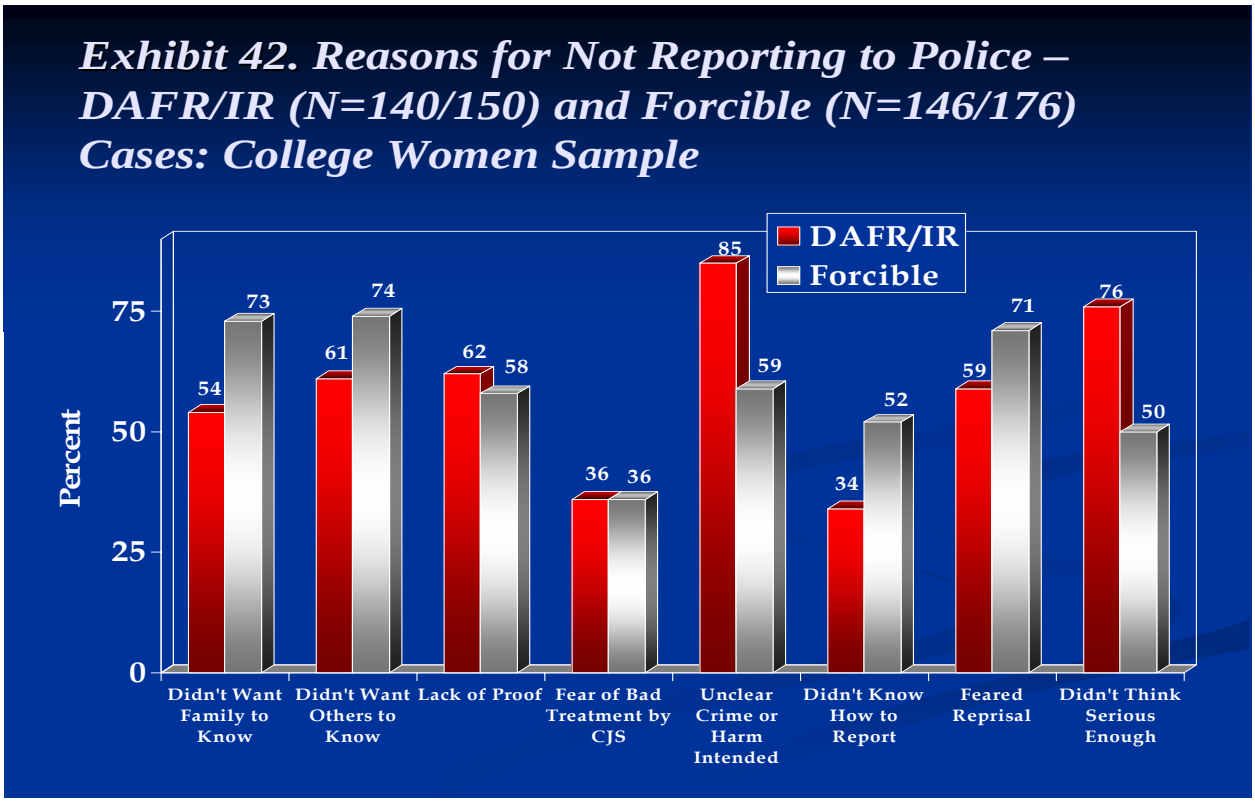
Exhibit 40. Major Reason Reported to Police–Forcible Rape (N=13/171) Cases: College Women Sample

Reason	N	%
To get help after the incident	1	8
To get medical care		
To prevent further crimes against self	1	8
Prevent crimes against others	5	38
Punish offender		
Catch or find offender		
Because it was a crime	2	15
Not sure/other	4	31

What are major barriers to reporting that women identified?

Exhibits 41 and 42 show the percentage of victims citing the main reason why they did not report the incident to police. In both samples and with regard to both types of rape, 50% or more endorsed responses related to not wanting family or others to know about the rap, lack of proof, and fear of reprisal by the assailant or others. In both samples, more victims of DAFR/IR cited “unclear if crime was committed” and ”didn’t think incident was serious enough” as a reason compared to victims of forcible rape. Additionally, college victims of DAFR/IR cited these two reasons at higher rates than did victims of DAFR/IR from the general population sample. Finally, a third or more of participants in each sample and with regard to each type of rape indicated that the main reason they did not report the incident was because they did not know how to report or because they feared they would be treated badly by police, lawyers, or other parts of the criminal justice system.





Disclosure, service-seeking, and reporting to police.
Willingness of rape victims to report the crime to police is critical to stopping perpetrators of assault, protecting society by preventing more assaults by serial perpetrators and redressing

harm done to the victim. One mechanism for possibly increasing reporting would be public education to reduce stigma surrounding rape and to educate about typical rape characteristics and what to do when someone discloses an assault. Friends and relatives may be the first individuals who are told of an assault and there response may be critical in terms of recommending health care and social services and contact with the criminal justice system. Research on disclosure of rape indicates that negative social reactions may be more common when victims report the assault to health care providers and police whereas perceived helpfulness of friends or rape crisis personnel has been associated with positive reactions to disclosure (Ullman, 1996). Ullman's (1996) findings indicate that just educating the public may be insufficient and that improving treatment within the criminal justice and medical systems will be critical in affecting willingness of victims to come forward and the helpfulness of such a step for victims. Results of the present study are consistent with this notion. The current study examined disclosure and reactions to disclosure primarily in reference to reporting to police. In addition, we assessed medical and other victim's service agency contact as well as actual reporting to police and barriers to doing so. As noted above, between 14% and 21% of those in the general population and college samples reported that a woman they knew had disclosed a DAFR/IR rape incident and approximately one-third of those in both samples knew someone who disclosed a forcible rape. The majority of participants said they encouraged the person to report to the police and that they would encourage reporting of such an incident in the future. Participants also believed that enhanced services and privacy protection might reduce barriers to reporting to police.

In terms of victims' direct experiences, others were consulted in the aftermath of 16% to 30% of cases and that encouragement to report was provided about half of the time. It was also clear that the vast majority of rape incidents were not reported to police or medical care providers or victim service agencies. Among most common reasons for nonreporting were not wanting family or others to know, fear of reprisal, lack of proof that the crime occurred. Being unsure that a crime was intended was frequently cited as a reason to not report DAFR/IR incidents. One third or more of those experiencing DAFR/IR incidents said they were unsure how to report. Finally, as noted above, at least one-third of rape victims said they did not report because they feared being treated badly by police or other parts of the criminal justice system. It is clear that in addition to public education about how to respond to rape disclosure and general education that may reduce rape victims' fears about responses of family and friends, education about DAFR/IR incidents might help victims understand that this is a type of rape. Lack of awareness about this type of incident may underlie at least in part the finding related to confusion about whether the incident was a crime or whether harm was intended. Public education can also address the issue of how to report an incident, who to contact, and what services are available. In addition to reporting to criminal justice agencies, with the advent of VAWA III for example, women will have the option of receiving medical services whether or not they report the crime to police and people will need to be educated about this option. Education about the type of evidence gathered or needed would also be helpful. What are also needed are changes in how victims are treated within the system so that secondary victimization does not occur. This might require additional training with police and CJS agents regarding improved treatment of rape victims, the prevalence of different types of rape including DAFR/IR incidents and the typical characteristics of such incidents. Based on findings cited by Ullman (1996) and results of the current study, it will be difficult for others to encourage reporting to police or other authorities without confidence in how rape victims will be treated and the types of services provided.

How common are mental health problems in victims vs. non-victims of FR, DFR, and IR?
Chi-square analyses were conducted to examine associations between histories of each type of rape and each type of mental health problem. In each sample, lifetime as well as past six month prevalence of PTSD and depression was significantly higher in association with each type of rape (all $p < .01$). Findings related to PTSD are displayed in (Exhibits 43 and 44), About 2 in 5 victims in the general population have ever met criteria for PTSD; 1 in 4 women meet criteria

currently. About half of all victims of rape in college samples met criteria for PTSD at some time in their lives; over one-third meet criteria currently. Current percentages for victims appear somewhat higher among college than general population women, but this may be a recency effect whereby younger (college) women have fewer years elapsed between the rape and interview, on average.

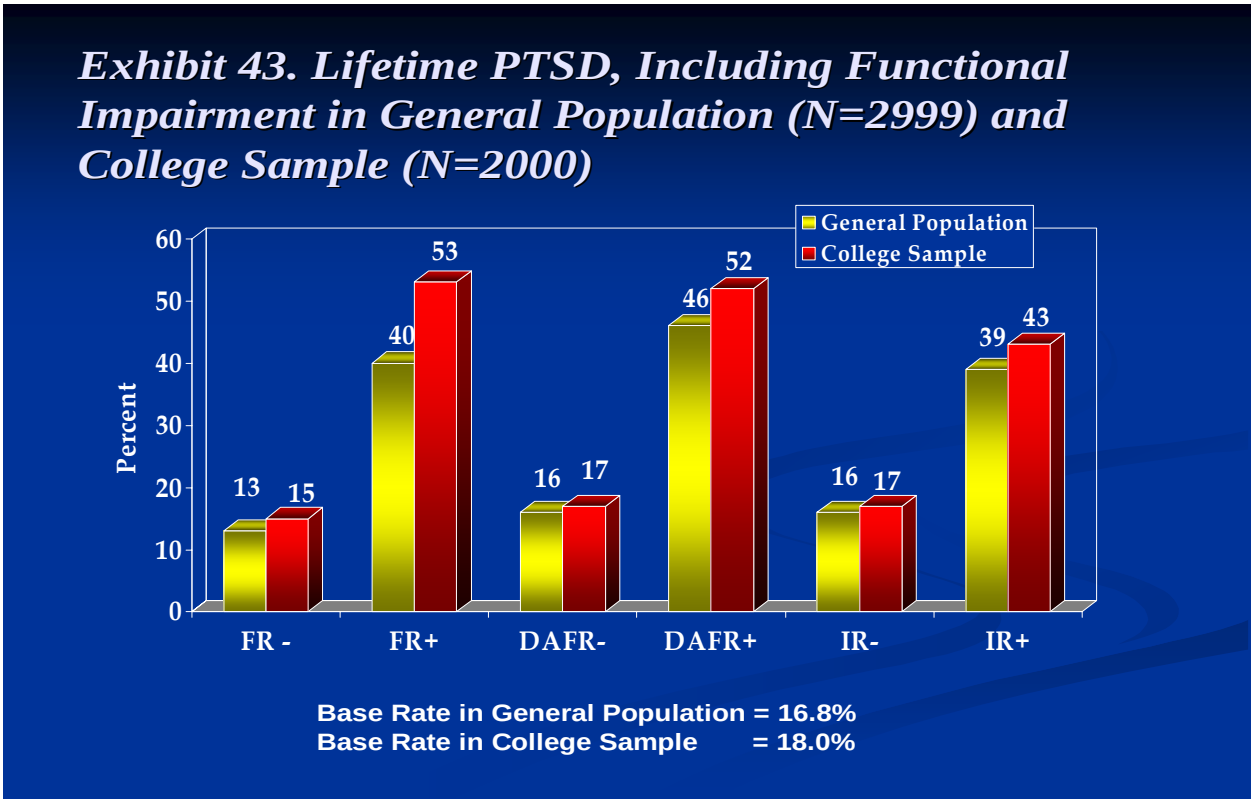
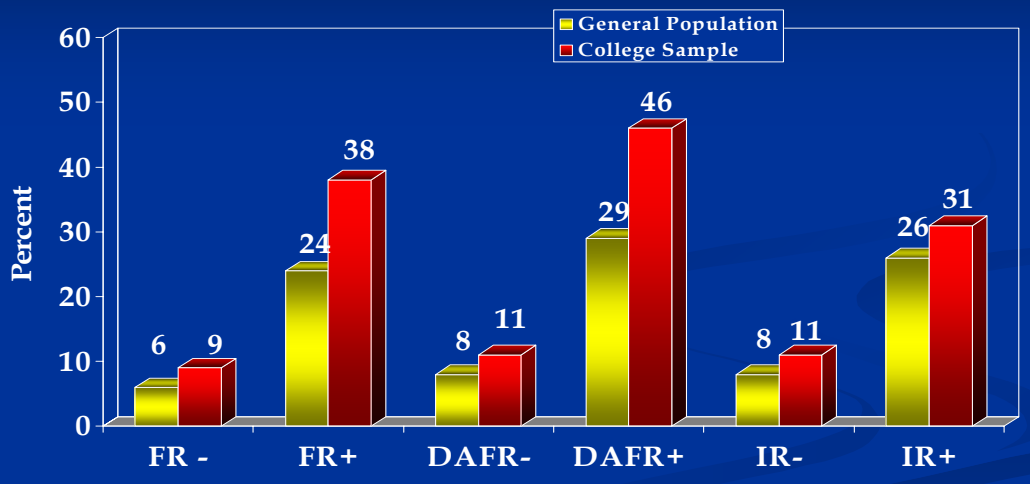
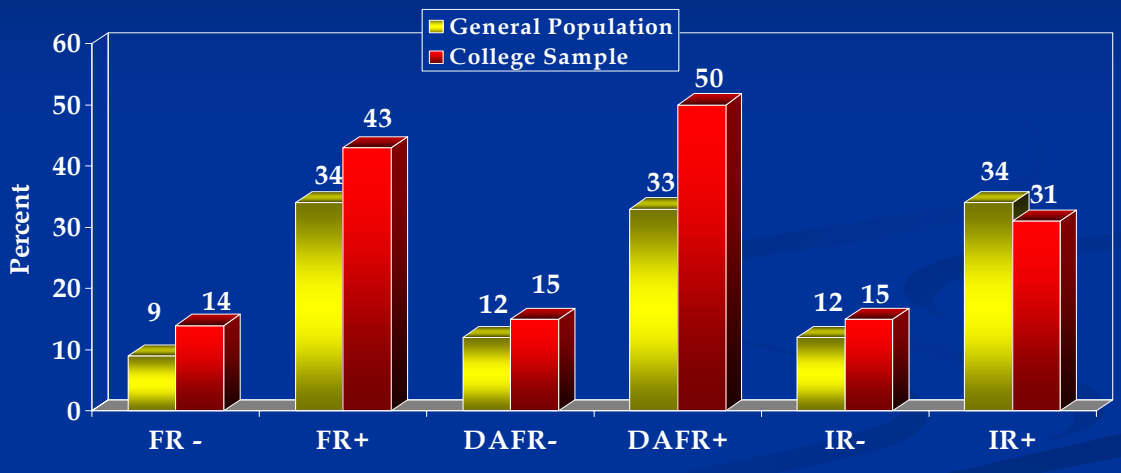


Exhibit 44. Current PTSD, Including Functional Impairment in General Population (N=3001) and College Sample (N=2000)



Base Rate in General Population = 8.8%
Base Rate in College Sample = 11.6%

Exhibit 45. Lifetime Depression, Including Functional Impairment in General Population (N=3001) and College Sample (N=2000)

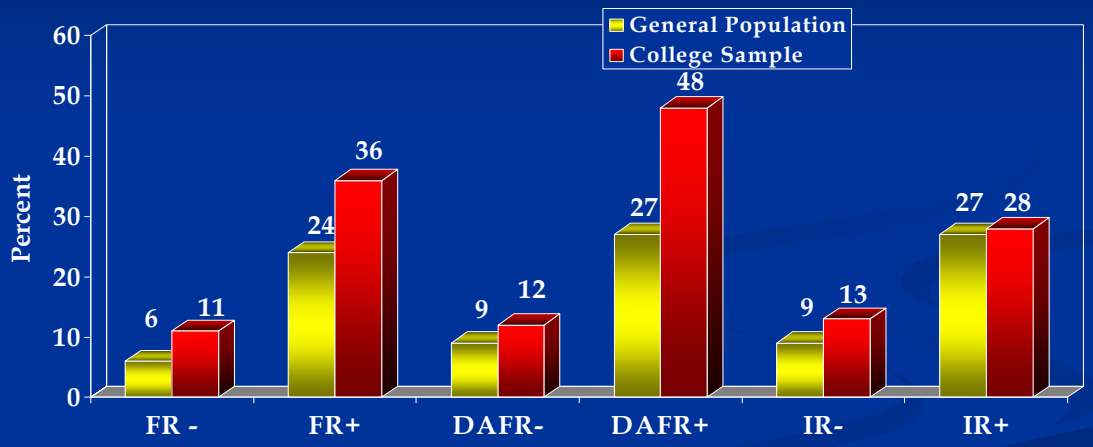


Base Rate in General Population = 12.8%
Base Rate in College Sample = 16.1%

Prevalence of lifetime and current major depressive episode associated with each type of rape history are displayed in Exhibits 45 and 46. Among college women, about 2 in 5 rape victims met lifetime criteria for depression, and over one-third met current criteria. In the general

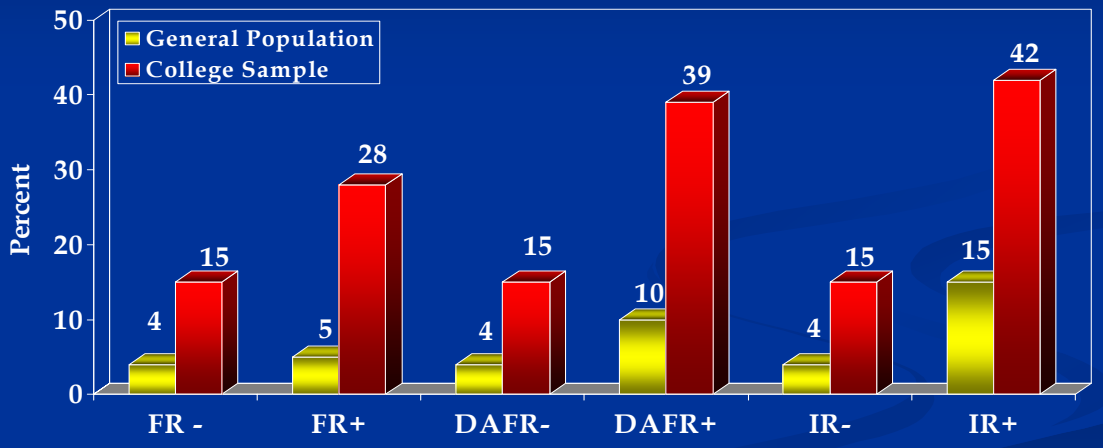
population, one third of rape victims met lifetime criteria for major depression, and 1 in 4 met current criteria.

Exhibit 46. Current Depression, Including Functional Impairment in General Population (N=3001) and College Sample (N=2000)



Base Rate in General Population = 9.1%
Base Rate in College Sample = 13.1%

Exhibit 47. Binge Drinking at Least Once Per Month (5 or More Drinks Per Occasion) General Population (N=2950) and College Sample (N=1956)



Base Rate in General Population = 4.3%
Base Rate in College Sample = 15.7%

In the general population sample, report of each type of past-year substance use and abuse was significantly higher (all $p < .05$) for women with a history of rape as compared to women without a history of rape, with the exception of past year binge drinking (i.e., at least monthly use of 5 or more drinks per occasion). For the college sample, prevalence of past year binge drinking, past year drug use and substance abuse was significantly higher (all $p < .05$) among women with each type of rape compared to women without that history (see Exhibit 47).

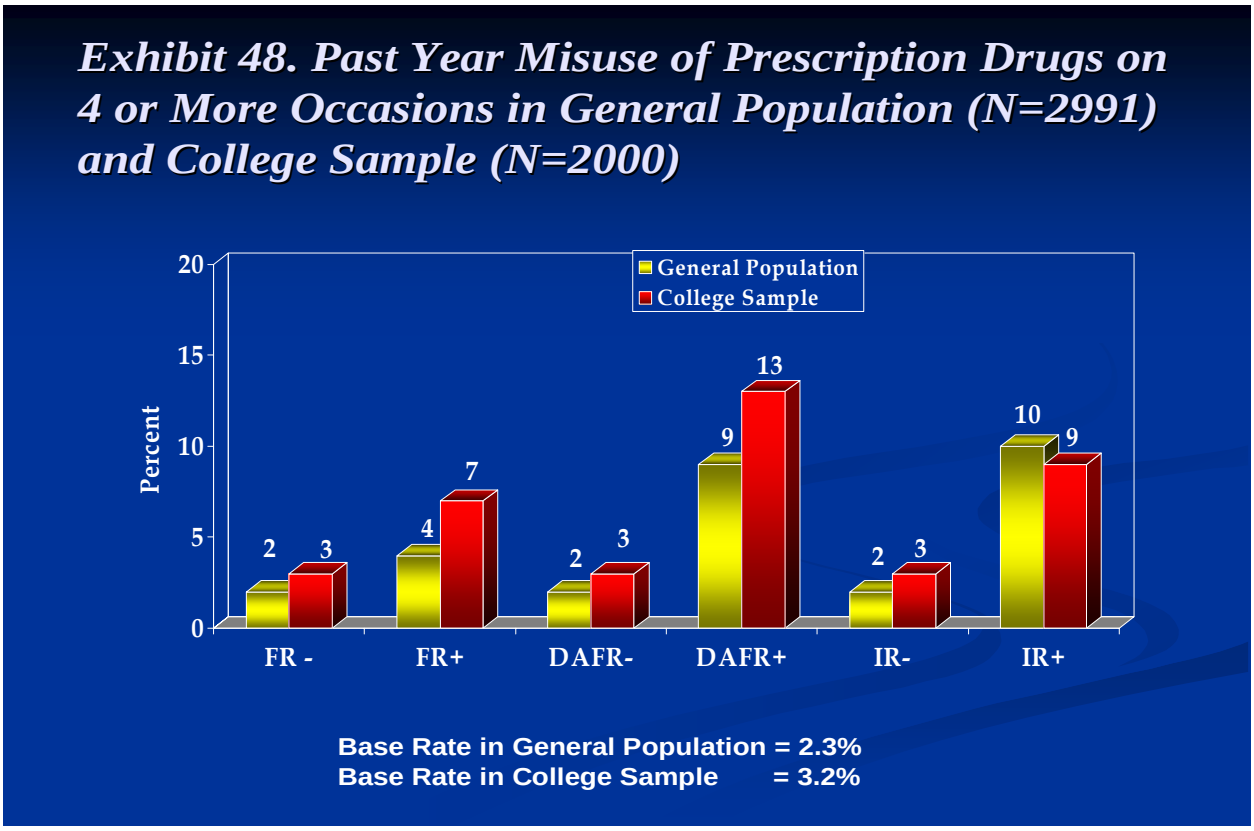
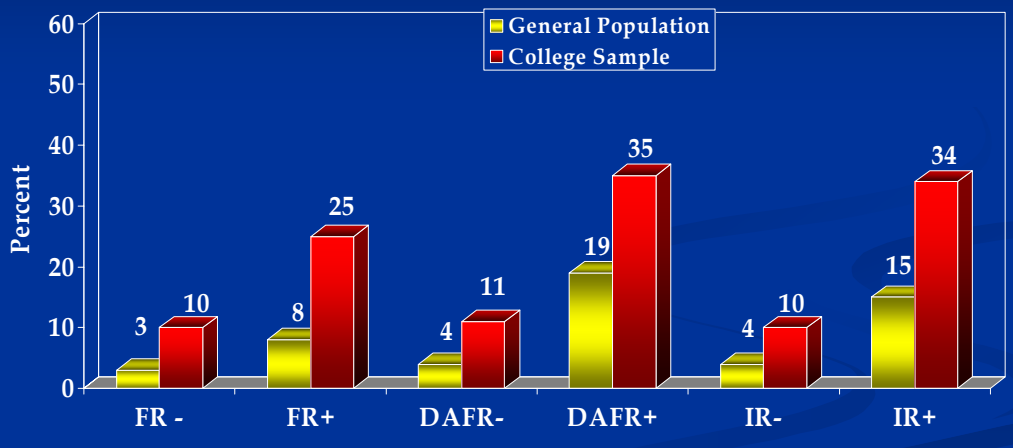


Exhibit 48 illustrates non-experimental use of prescription drugs. Prevalence was significantly higher among rape victims (especially among DFR and IR victims) as compared to non-victims.

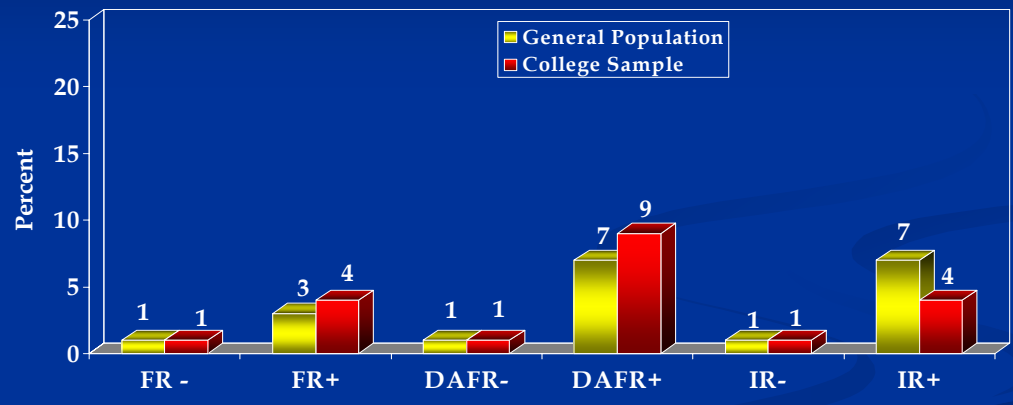
Exhibit 49. Past Year Use of Marijuana on 4 or More Occasions in General Population (N=3000) and College Sample (N=1999)



Base Rate in General Population = 3.9%
Base Rate in College Sample = 11.3%

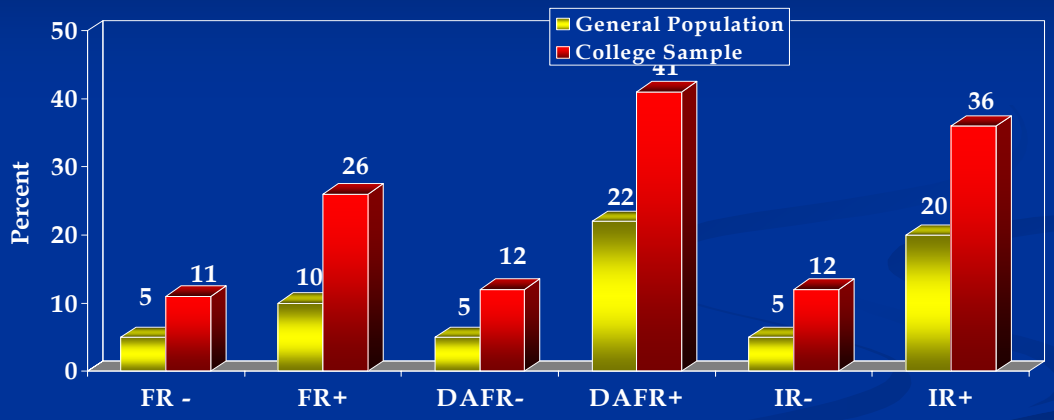
Exhibits 49 and 50 illustrate past-year non-experimental use of marijuana and other illicit drugs. With the exception of the association between other illicit drugs and history of IR rape which was not statistically significant, the percentage of women meeting criteria for non-experimental use (i.e., use on 4 or more occasions) was significantly higher among rape victims than non-victims, particularly for victims of DFR and IR ($p < .05$).

Exhibit 50. Past Year Use of Other Illicit Drugs (Excluding Marijuana and Prescription Misuse) on 4 or More Occasions



Base Rate in General Population = 0.9%
Base Rate in College Sample = 1.3%

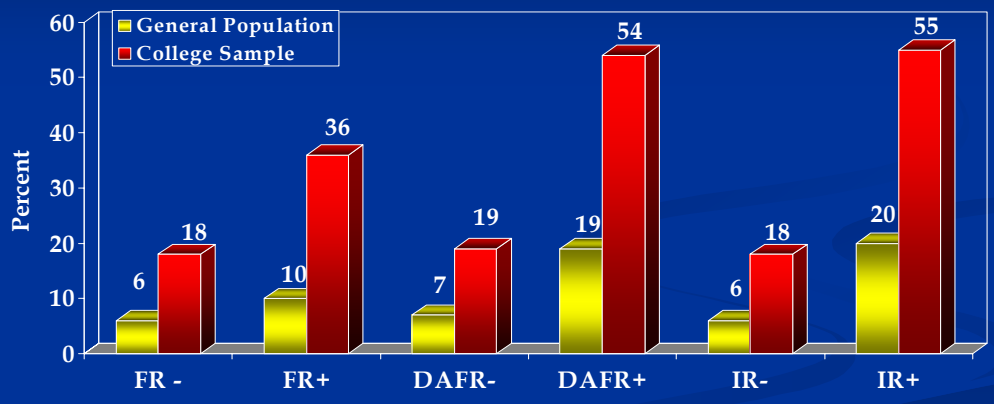
Figure 51. Past Year Use of Any Drug on 4 or More Occasions (Prescription Misuse, Marijuana, or Other Illicit Drugs)



Base Rate in General Population = 5.5%
Base Rate in College Sample = 12.6%

Exhibit 51 summarizes non-experimental use of any drug, based on breakdowns for specific types of drug use reported in Exhibits 48-50. Prevalence of any drug use was significantly higher in association with history of each type of rape within each sample (all $p < .01$).The pattern of findings is similar to that found in each of these previous exhibits. Exhibit 52 describes the prevalence of substance *abuse* among FR, DFR, and IR victims and non-victims in both samples. Past-year substance abuse was significantly higher for those with histories of each type of rape compared to those without such histories (all $p < .05$).

Figure 52. Past Year Substance Abuse in General Population (N=3000) and College Sample (N=2000)



Base Rate in General Population = 6.7%
Base Rate in College Sample = 19.8%

How many women (victims *vs.* non-victims of FR, DFR, IR) seek mental health services?
A total of 2992 women within the general population sample provided valid responses to a question asking about seeking help from a professional related to emotional problems. Among this group, 1136 or 38% had sought help for emotional problems at some point. Help-seeking was reported by significantly more women with history of forcible rape than those without forcible rape history (60.7% vs. 33.6%); among women with history of DAFR as compared to women without history of DAFR (62.9% vs. 37.4%) and among women with history of IR compared to women without history of IR (60.7% vs. 37.3%), all $p < .01$.

Among the sample of 2000 college students, 598 or 29.9% reported seeking help from a professional. Help-seeking was reported by significantly more women with a history of forcible rape compared to women without that history (55.7% vs. 27.4%). Help-seeking was also significantly higher among women with a history of DFR compared to women without that history (57.4% vs. 29.1%), and among women with a history of IR compared to women without that history (45% vs. 29.3%), all $p < .01$.

Conclusions

The data from this study provide important information regarding the lifetime prevalence, past year prevalence, characteristics, and mental health impact of rape among adult women residing in United States households as well as among United States female college students. In addition to providing comparison data about the extent to which the prevalence, characteristics, and impact of forcible rape have changed among adult women in the U.S. population, the study also provides the first and most comprehensive national data on the prevalence, characteristics, and impact of drug and alcohol facilitated rape and incapacitated rape among U.S. adult women and U.S. college women.

This study is not without limitations. First, a telephone survey is limited to the population of women who live in households with telephones. For this reason, the study does not capture the experiences of women who do not live in households with telephones (approximately 5% of the population). Second, our assessment procedures relied exclusively upon retrospective, self-report data. This methodology introduces potential recall biases that are difficult to avoid in large-scale epidemiological research. A third limitation is that study participants were only interviewed once. A more informative, but much more costly, study design would have involved longitudinal assessment of these participants with several assessment points over time. Fourth, due to cost restrictions associated with sample recruitment, we were unable to design the study to capture a large sample of women aged 18-24 years old, which would have provided a better opportunity for direct comparisons with the college women population. Because the two study samples differed considerably with regard to age groups, marital status, and income distributions, interpretations based on comparisons between these two samples must be made cautiously, with attention to these differences. Finally, although sample size was fairly large, sample sizes within minority groups were relatively small and limited the extent to which research questions could be answered within each of these groups.

The authors believe that these data address several important questions in the sexual assault, criminal justice, and mental health fields, and the authors also believe that the findings have implications for research and policy. Prior to presenting these implications, seven questions will be identified and addressed.

Question 1: Has the lifetime and past-year prevalence of forcible rape among adult women in the United States changed from 1991-2005?
Three general population studies have been conducted that used extremely similar methodology and virtually identical screening questions for forcible rape. The National

Women's Study (NWS; Kilpatrick, Edmunds, & Seymour, 1992; Resnick et al., 1993) found that the lifetime prevalence of forcible rape among U.S. adult women was 12.65%. These data from the NWS were collected in 1991. Tjaden and Thoennes (2000) reported that the lifetime prevalence of forcible rape among U.S. women in 1995 was 14.8%. The lifetime prevalence of forcible rape based on data collected in 2006 from adult women in the current study was 16.0%. These comparison data from NWS, NVAWS, and the current study suggest that the lifetime prevalence of forcible rape, (i.e., the proportion of U.S. adult women who have been victims of at least one forcible rape up until the point they were interviewed) has increased from 12.65% in 1991 to 16.1% in 2006. This represents a 27.3% increase over this 15 year period. If the burden of forcible rape upon U.S. adult women is defined as the proportion of them who have ever been forcibly raped, it is clear that the burden is greater now than it was in 1991 or 1995.

Past year prevalence of forcible rape is defined as the proportion of women who have been forcibly raped in the year prior to being interviewed. The NWS estimate of the past year prevalence of forcible rape among U.S. adult women was .71% (i.e. an estimated 7.1 women per 1000 were raped during the past year). The NVAWS past year prevalence estimate for forcible rape was .3%, or 3 women per 1000. The past year prevalence estimate of forcible rape from the current study was .74%, or 7.4 women per 1000. These comparison data on past year prevalence of forcible rape also indicate that there has been no reduction in the proportion of adult women who are forcibly raped each year over the past 15 years.

It is also important to note that the size of the U.S. population of adult women has increased from an estimate of 96,056,000 million in 1991 to 112,068,000 million in 2005. This means that the absolute number of adult women in the U.S. estimated to have ever been forcibly raped has increased from 12.1 million in 1991 to 18 million in 2006. To the extent that many rape victims continue to have problems long after they are raped, this indicates that the number of adult female rape victims who may need some assistance is 5.9 million larger today than it was in 1991. Similarly, this increase in the size of the 18 year old and older female cohort of the U.S. population means that the estimated number of women who have been forcibly raped during the past year has increased from 683,000 in 1991 to 829,000 in 2006.

Findings with regard to prevalence of rape among college students indicated that the prevalence of any type of rape observed in the current study was somewhat lower (11.5%) that the prevalence of 15.4% previously reported by Koss et al. (1987) and much lower than the prevalence of 20% reported by Brener et al. (1999). overall than that reported in some previous studies of representative college students. One difference between the current study and the previous studies (particularly the Brener et al., 1999 study) that may account for the difference in observed prevalence was the questions used to determine specific types of rape. Brener et al. used a fairly broad single item question asking whether an individual had ever "been forced to have sexual intercourse against your will". In the present study we asked separately about each element of rape using separate questions and required that the incident include vaginal, anal, or oral penetration that was unwanted and was either forced (included verbal threat, physical force, or injury) or due to intoxication to the point that the woman passed out or could not control the situation. The operational definitions used in the present study may yield a more conservative estimate of rape prevalence in college. Further support for the notion that this methodological factor may relate to the observed prevalence is that the estimated past year prevalence observed in the present study was very comparable to that observed by Fisher in the National College Women Sexual Victimization study (NCWSV) which used very similar screening questions to assess forcible rape. As described above, the past year prevalence of forcible rape in the current study was 3.23 compared to 2.95 estimated from the NCWSV (Fisher et al., 2000).

Question 2: Are Drug and Alcohol-facilitated Rape and Incapacitated Rape Important Types of Rape?

This study provides the first comprehensive national information about the lifetime and past year prevalence of these two types of rape among a national probability household sample of adult women and a national sample of U.S. college students. Findings indicate that 5.0% of U.S. adult women, or an estimated 5.6 million women, and 6.4% of female college students, or an estimated 375,000 college women, have been victims of drug and alcohol facilitated rape/incapacitated rape (DAFR/IR) sometimes during their lives. The study defined DAFR and IR rigorously, and it is clear that many adult women and female college students had experienced these understudied forms of rape. Had these forms of rape been excluded from the current study's estimates, the lifetime prevalence of any rape would have been reduced from 18.0% to 16.1% adult U.S. women and from 11.5% to 8.7% for college women. Excluding these types of rape from lifetime prevalence estimates produces a reduction of 11.8% for adult women and a 32.2% reduction for college women. By including DAFR and IR in rape prevalence estimates, an additional 2.2 million adult women and 164,000 college women who had ever been raped were identified who would not have been otherwise if the focus had been on forcible rape victims only.

Similar findings occurred for past year rape prevalence. Prevalence estimates for all rapes would have been reduced from 0.94% to 0.74% for adult women (a reduction of 27%) and from 5.15% to 3.23% (a reduction of 59.4%) had DAFR and IR rapes been excluded. By excluding these types of rape, our estimates of the numbers of adult women raped in the past year would have been reduced from 1.1 million to 829,000 and from 301,000 to 189,000 for college women.

The extent to which DAFR and IR were risk factors for mental health problems was comparable to the risk factor of forcible rape. This suggests that DAFR and IR result in comparable harm to the mental health of victims as the harm that produced by forcible rape. Thus, DAFR and IR are important not only on the basis of their prevalence; these types of rape are also important because of the harm they produce among victims.

Question 3: Which is the most prevalent problem: DAFR or IR?

As defined in the current study, the distinguishing feature that differentiates DAFR cases from IR cases is that the former involve a perpetrator who deliberately attempts to induce a state of intoxication and/or incapacitation in the victim via administering substances whereas the latter involves a perpetrator who takes advantage of a woman who has become intoxicated to the point of incapacitation voluntarily. In both cases, the perpetrator is acting in a predatory fashion, but DAFR has received considerably more attention because of cases involving rohypnol and similar substance. In this study, cases were classified as either DAFR or IR. If there was any element of DAFR, the case was classified as DAFR; if substance use was totally voluntary, the case was classified as IR.

Data from this study indicate that IR appears to be a more prevalent problem than DAFR for both adult women in the U.S. (2.8% *vs* 2.3% lifetime prevalence) and for college women (4.0% *vs* 2.7% lifetime prevalence). Thus, the highest rape risk situation for both adult women and college women is not being rendered intoxicated and incapacitated by others; it is being taken advantage by a sexual predator after she has become intoxicated voluntarily. This finding is similar to data reported by Testa and colleagues (2003).

Question 4: What is the highest risk substance used in DAFR and IR cases: Alcohol or other drugs?

The data from this study provide strong support for the contention that alcohol is, by far, the most frequently involved substance in both DAFR and IR cases. Of 70 adult women who had ever experienced DAFR, 66 (94.2%) involved alcohol and not other drugs. Of 85 adult women who ever experienced IR, 83 (97.6%) involved alcohol, not other drugs. A similar pattern occurred among college women. When drugs other than alcohol are involved in DAFR and IR, marijuana is the most likely drug to have been used. Based on these findings, it is clear that

heavy alcohol use poses a much higher risk for DAFR and IR than use of other drugs. The predominance of alcohol as the drug involved in DAFR and IR cases is consistent with previous findings of Testa et al. (2003). The significance of alcohol as a problem drug, particularly among men and women in college is also consistent with findings from the Harvard School of Public Health College and Alcohol Surveys (Wechsler et al., 2002) which reported that 41% of college women reported binge drinking and 25% reported having been drunk 3 or more times in the previous 30 days in the 2001 survey. Prevalence was higher on these measures for college men and the survey indicated that some of these measures of heavy drinking and drinking related harm were increasing over time.

Question 5: Has there been a major change in willingness to report rape cases to police over the past 15 years?

There are at least three ways to approach this question using data from the current study. First, it is possible to compare the proportion of forcible rape cases reported to police in the NWS and current study national household samples of U.S. women to see if the proportion of cases occurring throughout the victims' lifetime that were reported is different among these two cohorts of U.S. adult women. Lifetime cases include those that happened throughout a victim's life, so estimates of reporting of such cases may not reflect recent changes in reporting that are more likely to be detected among new cases. Keeping this limitation in mind, the NWS found that 16% of forcible rape cases were reported to police. The current study found that 18% of such cases had been reported to police. Thus, among two national cohorts of U.S. adult women sampled in 1991 and 2006, there appeared to be a very small increase in the proportion of forcible rape cases that women reported to police. Only 16% of forcible rape cases were reported to police by college women.

Second, although no trend data for reporting DAFR and IR cases are possible because the NWS did not collect data reporting these types of rape, study findings suggest that adult women and college women are even less likely to have reported DAFR and IR cases to police than they were to report forcible rape cases, 10% *vs* 18%; 7% *vs* 16% respectively for adult women and college women. These findings indicate that among national samples of adult women and college women drawn in 2006, considerably fewer than 20% of all rape cases were reported to police.

Third, an analysis of forcible rape cases from the NWS that occurred within the past five years vs those that happened longer than five years ago (Kilpatrick, 1990) found that the proportion of cases reported to police was related to the victim's age at the time the rape occurred but there was little evidence that reporting had increased after controlling for age at the time of rape. Comparing the proportion of forcible rape cases reported to police occurring during the five years before the NWS with those reported during the five years before the current survey would provide some estimate about whether there has been a shift in reporting of recent cases in the 15 years since the NWS data were presented and published. These data on reporting to police of forcible rape cases occurring within the five years prior to the NWS and current surveys suggest that there has been little change. Specifically, in the NWS, there were 54 forcible rape cases that occurred within 5 years, and 25.93% were reported to police. In the current study, 25.97% of the 77 cases occurring within the past five years were reported to police. Thus, the rate of reporting of recent forcible rape cases by adult women in the U.S. appears to have remained virtually unchanged over the past 15 years.

It should be noted that previous data from the NWS indicate that there is a direct relationship between a victim's age at the time she was raped and the likelihood she reported the crime to police (Kilpatrick, 1990). Child rape victims are less likely than adolescent rape victims who are less likely than adult rape victims to report to police. Given that the current study had a sample of adult women whose mean age was 45.6, most of the rape cases that occurred within the past five years were adult rape cases – not child or adolescent rapes. Therefore, it is not surprising

that the reporting rate for forcible rape cases occurring during the past five years was higher than the overall rate of 18% for all rapes because most of the past five years rapes were adult rapes.

Taken together, findings from the current study do not support the case that today's rape victims are more willing to report forcible rape cases than rape victims were 15 years ago. This is in contrast to data from the National Crime Victimization Study (NCVS) which indicate that 38.5% of all rapes or sexual assaults experienced by women were reported to police in 2005 (BJS, 2006, Table 93). The BJS estimates are not directly comparable to those from the current study for several reasons including use of a different sampling frame (i.e., age 12 and greater vs age 18 and greater) and the use of forcible rape screening questions in the NCVS that are much less sensitive than those used the current study (e.g., Fisher, Cullen & Turner, 2000; Kilpatrick, 2004). The latter difference is important, and Kilpatrick (2004) has argued that use of less sensitive screening questions results in the NCVS failing to detect a majority of forcible rape cases that occur each year. To the extent that the NCVS is not doing as good a job as it should in detecting rape cases, then the information the NCVS provides on reporting may be flawed because estimates do not include important rape cases that are missed due to inadequate screening.

In any case, the NCVS estimates on reporting rates for rape and sexual assaults have fluctuated wildly over the past 10 years. The percentage of rape and sexual assault cases experienced by female victims reported to police according to Bureau of Justice Statistics NCVS estimates for the years 1996-2005 were respectively 32.4%, 29.5%, 30.5%, 31.5%, 47.6%. 38.0%, 55.8%, 39.5%, 36.9% and 38.5%. The degree of this fluctuation does not inspire confidence that the NCVS is providing an accurate measure of the extent to which sexual assaults and rapes are being reported to police.

Nonreporting of forcible rape cases by adult women remains a major problem. Adult women are even less likely to have reported DAFR and IR cases than FR cases, and college women are less likely to have reported all types of rape than their adult female counterparts. The vast majority of all types of rapes still go unreported, confirming the need for policies that address barriers to reporting.

Question 6: Does rape increase risk for mental health problems, and are there major differences in risk for the different types of rape?

Study findings provided substantial support for the fact that rape victimization increases risk for all types of mental health problems included in the study. This was true among the sample of adult women and among the sample of female college students. Women who had been raped were significantly more likely than those who had not been raped to have ever developed the DSM-IV diagnosis of PTSD, and major depression. They were more likely to have repeated occasions of binge drinking, to have misused prescription drugs, and to have used marijuana or other illicit drugs during the past year before they were interviewed. They were more likely to have current PTSD, major depression, and substance abuse. These findings confirmed previous research that clearly demonstrates the extent to which rape is a major risk factor for PTSD (Kilpatrick et al., 1989; Resnick et al. 1993; Rothbaum et al., 1992; Kessler et al., 1995), depression (Frank & Stewart, 1984; Kilpatrick et al., 2003; Resick, 1993; Steketee & Foa, 1987), and substance use/abuse/dependence (Burnam et al., 1988; Kilpatrick et al., 1997; 2000; 2003; Miller, Downs, Gondali, & Keil, 1987; Miranda et al., 2002; Rheingold et al., 2004; Simpson & Miller, 2002). In addition, research indicates that drug use may increase subsequent risk of further assault (Kilpatrick et al., 1997; Testa et al., 2007). Thus the relationship between substance use and assault may be bidirectional, such that use may increase vulnerability to assault and may also be employed to reduce post-assault distress (for a review see Testa & Parks, 1996).

One of the most important findings from the current study was that the risk for mental health problems appears to be just as great for DAFR and IR as for forcible rape. DAFR and IR cases are viewed by many as less serious than forcible rape cases, partially because they are thought of as involving less violence and perhaps, because they involve the use of alcohol or other drugs by victims which increases the tendency to blame the victim. However, these types of rapes are equally harmful to victims as forcible rape, and they must be taken just as seriously by the criminal justice system and society in general.

Recommendations for Researchers

It is impossible to provide a comprehensive list of recommendations that emerge from this rich data set and findings. Therefore, recommendations are limited to the following major areas of research, policy, and practice.

Recommendation 1. Research on rape should be expanded to include all rape – not just forcible rape. It is important to measure DAFR and IR as well as FR. Other researchers interested in obtaining information about all types of rape should consider using the screening questions and classification procedures developed and used in this project as they appear to be feasible for use with adult women and female college students.

Recommendation 2. Longitudinal research is needed that determines the trajectory and temporal sequences among child victimization, family environment risk factors, alcohol and other drug use, and the three types of rape experiences (i.e., DAFR, IR & FR). Data from the current study indicate that risk for DAFR and IR begin in early adolescence whereas risk for FR begins during childhood. There is clearly a strong relationship between binge drinking, other drug use, substance abuse, and risk of DAFR and IR. Likewise, DAFR and IR may increase the risk of binge drinking, other drug use and substance abuse. The only way to establish the temporal sequence of these co-occurring problems is careful longitudinal research that follows young adolescents over time.

Recommendation 4. Research related to development of effective programs to prevent DAFR and IR is critical. Research to develop and evaluate effective prevention strategies with men is needed. Existing rape risk reduction programming aimed toward female college students has received mixed results at best and few options for empirically supported prevention programming exist for men (Breitenbecher, 2000 for review; Choate, 2003; Foubert & Newberry, 2006 Gidycz, et al., 2001). Given that the majority rapes are committed by men and that college males appear to be particularly susceptible to environments that condone the use of sexual coercion and alcohol, further research on treatment design, implementation, and outcomes is needed for programming targeting men (Carr & VanDeusen, 2004; Harford, Wechsler, & Seibring, 2002; Rennison, 2002). Broadly, programming should engage men in recognizing and addressing sexually coercive/aggressive attitudes and behaviors that are often legitimized by societal norms (DeKeseredy & Scwartz, 1998). Specifically, research and programming should address the effect of alcohol use (by both men and women) on a woman's ability to provide consent and discuss that rape by substance facilitation or incapacitation is rape and may have lasting negative impacts on women (Scwartz & Leggett, 1999). Prevention and intervention approaches focused on women who may be vulnerable to assault should also be developed and evaluated (e.g.. Hanson & Gidycz, 1993). Programs that include both rape prevention and alcohol education efforts on college campuses and in the general population could provide an integrated approach that might reduce problematic drinking and sexual assault simultaneously.

Recommendations for Policy and Practice

Recommendation 1. Major efforts should be made to encourage women to report cases of rape to police. As described previously in this report, there is no evidence that rape in America is a smaller problem than it was 15 years ago, and there is no evidence that women are more willing to report rape cases today than they were 15 years ago. Unreported cases cannot be addressed by the criminal justice system, and victims who do not report their rapes do not receive the services that might assist them as they attempt to recover. Despite concerted national efforts to address underreporting over the past 15 years, it appears that the problem still exists and requires our attention.

Our Nation and communities must re-double efforts to understand *why* victims are reluctant to report, work to reduce barriers to reporting, and sufficiently address their concerns about reporting so that they do actually report. As was the case 15 years ago, the concerns of rape victims provide important insights into why they don't report, including fear of reprisal; concerns about family and friends knowing; fear of bad treatment by the criminal justice system; not knowing how to report; and unclear that a crime occurred or that harm was intended. An obvious first step in reporting *any crime to* law enforcement, including rape, is a recognition that a crime occurred, or that a rape occurred. Data indicate that only 71 percent of victims in forcible rape cases correctly defined what happened to them as a rape. If a person doesn't know she was raped, *no* reporting, *no* access to services or support, *no* interventions and *no* apprehension of rapists are likely outcomes.

While 71 percent of forcible rape victims correctly defined what happened to them as a rape, only 45 percent of victims of DAFR and IR cases did so. Public education about what rape is, along with the important fact that a victim's use of alcohol or other drugs prior to a rape does *not* change the definition or act of rape, is needed. Such education should target whole communities, not just potential victims.

Over half of rape victims (55 percent) and over one-third of DAFR/IR victims (36 percent) indicate they didn't know how to report the crime, with similar data for college women (52 percent and 34 percent). This critical barrier to rape reporting can only be remedied by public education efforts – involving the news media, law enforcement (including campus police) and crime victim service providers – that clearly describe how to report rape, and the importance of doing so. In addition to addressing victims' concerns and lack of information about what defines a "rape," it may also prove useful to encourage reporting based on reasons victims tell us they *did* report, to augment the information obtained from reasons given why victims *don't* report. The small number of victims who did report indicated that their primary reasons for doing so were to prevent crimes against others; because it was a crime; and/or to catch or find the offender. This suggests that we should build on these altruistic motives by stressing the *positive public safety outcomes*, as well as positive individual outcomes, of reporting rape.

Without question, the low reporting rape for rape cases of all kinds is a major concern because it is impossible to solve cases, apprehend alleged offenders, or obtain convictions of guilty offenders unless cases are reported to police. Part of the problem clearly stems from women's failure to define certain types of events as rape even though they are so defined in the criminal codes. Another part of the problem is that many women do not report because they do not expect police to believe them and take their report seriously. These concerns appeared to be more pronounced for DAFR/IR cases than for FR cases. Also, our study did not address the extent to which police actually have these attitudes about victims, although media accounts in some high profile cases suggest that women's concerns are not totally groundless.

Changing the police and CJS cultures to be more supportive of victims and more understanding of their special concerns is not a simple task, but one way to start this change is to insure that police, prosecutors, and victim advocates have accurate information about the true nature and impact of DAFR, IR, and FR. Likewise, it is important that police and other CJS parties

understand that the harm to victims produced by DAFR and IR is no less than that produced by FR. In addition to providing data on these topics from this report in a user friendly form, it might also be useful to develop training materials that illustrate the issues described above.

Recommendation 2. Rape prevention efforts focused on reducing risk of DAFR and IR among female adolescents and adults should begin before the risk period for these types of rape begins. This means that educational efforts should start before girls are in high school. Being careful to avoid victim blame, these efforts should focus on the increased risk of attack by sexual predators in binge drinking situations. Media messages should provide information not just about risk of facilitated rape due to drug administration but to the more common threat of rape following inebriation due to voluntary and/or involuntary use of substances with a heavy emphasis on alcohol. Given the high prevalence of DAFR and IR among college women, colleges and universities should increase their rape prevention efforts. Prevention efforts should also focus on male adolescents and adults because they are the perpetrators in these cases.

Recommendation 3. Mental health professionals, especially those who work with female adolescents and women with substance abuse or dependence problems, should receive more training about the extent to which DAFR , IR, and FR are major risk factors for PTSD, depression, and substance use problems. They should also receive training in evidenced-based treatment for these rape-related mental health problems. Training should include how to screen for these types of rape experiences, how excessive substance use can increase risk of DAFR and IR, and the extent to which substance use problems are frequently comorbid with rape-related PTSD and depression.

Recommendation 4. Education about the true scope and characteristics of DAFR, IR, and FR cases should be provided to a variety of target audiences including the general public, victim advocates, other criminal justice system officials and jurors. Such information might reduce stigma and increase support for victims among friends and family members and the public at large and might also be directly helpful to victims.

Recommendation 5. Implement Public Education and Anonymous Reporting and Medical Care Related Policies to Increase Numbers of Women Receiving Acute Post-Rape Medical Care. The vast majority of rape victims never received medical care following the rape incident(s). Regardless of whether injury is present rape involves risk for negative health outcomes that include sexually transmitted diseases and unwanted pregnancy. As has previously been shown, reporting to police is the most significant predictor of who receives medical care (Resnick et al., 2000). Because only a small minority of all rape victims receives medical care there are many women who may have untreated medical problems or concerns. In addition, information gathered as part of medical center or hospital surveillance programs is restricted to those who are willing to report the crime within the criminal justice system rather than to more representative cases.

Along with education about rape itself and the different types of rape that can occur and the associated characteristics, public education should be provided to women about the importance of seeking health care after a rape. In addition, programs that allow for anonymous data gathering during the forensic exam should be developed and evaluated to see whether they should be universally adopted. Such programs are now being implemented within the military and changes in prevalence of post-rape medical care seeking within that system should be examined. Systems that allow for anonymous reporting or separation of the choice of whether to pursue legal action from the choice of whether to receive medical care may lead to increased numbers of rape victims seeking acute medical care. In such systems, forensic evidence is gathered at that time whether or not the victim decides to report the crime. Such a procedure does allow for decisions about reporting or prosecution to also be made at a later point. This

approach may allow for data gathering regarding more representative characteristics of rape and alleged perpetrators and may also serve an important public health function by potentially dramatically increasing the numbers of victims receiving preventive health care and thereby reducing longer term health care costs.

Changes in VAWA 2005 **http://www.usdoj.gov/ovw/regulations.htm** are directly related to the issue of anonymous reporting and provision off medical care independent of decisions about criminal justice participation. Prior to VAWA 2005, states had to pay for sexual assault forensic exams but they could require victims to report the assault and cooperate with law enforcement as a condition of payment. A major change within VAWA 2005 (H.R. 3402) http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=109_cong_bills&docid=f:h3402enr.txt.pdf is that states have to provide the exam and payment for the charges without requiring the victim to participate in the criminal justice system or cooperate with law enforcement. This policy takes effect January 9, 2009. Future research should evaluate the impact that this important policy change has in terms of the numbers of women who receive medical care and the percentage who choose to cooperate with CJS processes. It would also be important to study the impact of innovative programs already in place that currently allow sexual assault victims to remain anonymous while still collecting evidence (e.g. Konradi, 2003; Ledray & Kraft, 2001; Young et al., 1992). In such cases women can choose to change their minds about prosecution at a later point. This policy and such programs may lead to increased numbers of women receiving medical care because those who would choose not to report to the police could still receive free and specialized medical care. As noted by Young et al. (1992) the requirement to report to police may have discouraged some women from receiving medical care due to shame or other concerns. In addition, the possibility of anonymous data gathering would still allow for more accurate data gathering about representative rape cases and some anonymous data gathered might also facilitate investigative processes. Public education about the availability of such programs will also be needed to increase awareness of rape victims of their existence.

Recommendation 6. Modification of hospital and medical center assessment protocols is needed to improve systematic data gathering within these settings. Systematic assessment of drug and alcohol facilitation and incapacitation as components of all rapes is recommended within hospital and medical center programs that provide forensic medical care to victims in the aftermath of rape. While current assessment batteries routinely involve asking about voluntary use of drugs or alcohol they do not routinely include assessment of whether the victim believed she was given some substance (known or unknown) alone or in combination with voluntary use. In addition, specific questions are not routinely asked to determine whether the victim lost consciousness during the incident or whether she became so high or inebriated that she could not control her behavior or what was happening. Unless rape victims voluntarily report such information it is not currently routinely assessed. Modification of current hospital and medical center assessment protocols as well as rape crisis protocols to incorporate behaviorally specific questions about drug and alcohol facilitated and incapacitated as well as forcible rapes would allow for systematic data gathering within these settings. Specific questions such as those included within the current survey should be included in medical assessment protocols and a consistent battery of such questions should be administered at the state and national levels to gather information about prevalence of drug and alcohol facilitated and incapacitated as well as forcible rape incidents among women seeking post-rape medical care. Research to evaluate the impact of such changes in Sexual Assault Examiner protocols and training on criminal justice agents and agencies could then be usefully conducted to see whether there are increases in reported cases, arrest or conviction rates, and increased satisfaction by victims with treatment within the medical and criminal justice systems.

Recommendation 7. Routine screening for history of each type of rape should be conducted within primary healthcare settings. As noted above, most rape victims have never received acute post-rape medical care. Women who have never received medical care specific to a rape may have unaddressed concerns about some of the potential health effects that may have gone untreated (Resnick et al., 2000). Furthermore, a range of negative health problems and health risk behaviors are elevated among victims of sexual assault or other interpersonal violence (e.g., Rheingold et al., 2004). Other findings indicate that rape victims may have anxiety in the medical setting related to routine exams, obstetric or gynecological care (Rheingold et al., 2004). Given the significant impact that rape has upon both mental and physical health of victims, physicians and other medical care providers should receive training in how to sensitively assess for this history among their patients so that they can optimally address health care needs and education related to rape. Medical care providers should also be familiar with the ways that rape may affect mental and physical health and health care related behaviors (e.g., Kilpatrick et al., 1997; Koss & Heslet, 1992). They should also receive education about how to respond to patients with this history and when to refer patients for specialized mental health treatment. Physicians and other health care providers can address any longstanding concerns these patients may have about their health and can be influential in providing accurate information about rape prevalence and potential impact. Referring patients for needed specialized care such as substance abuse treatment may also reduce risk of future victimization. As such, health care providers should also address such behaviors with patients by including information about increased associated risk of rape victimization.

Recommendation 8. The U.S. Department of Justice should seriously consider improving its measurement and reporting of forcible rape, and it should expand measurement and reporting efforts to include DAFR and IR. As noted elsewhere (Kilpatrick 2004), governmental data on forcible rape cases each year are provided by the FBI Uniform Crime Reports and the Bureau of Justice Statistics NCVS. Both of these measures of forcible rape are flawed, and they produce substantial underestimates of the number of forcible rape cases that are reported to police (i.e., the FBI Uniform Crime Reports) and of all forcible rape cases that happen to girls and women age 12 and older (i.e., the NCVS). Neither the FBI Uniformed Crime Reports nor the NCVS attempts to measure DAFR or IR. Thus, neither of these measures provides the types of comprehensive data about all types of rape that are needed to drive sound public policy.

The Kilpatrick (2004) article provides considerable detail about the problems with both measures, and it provides several specific suggestions about how both measures can be improved. This information will not be repeated here. However, we do recommend that the NCVS conduct a pilot test using the screening questions used in this study which measured DAFR and IR as well as FR.

Previously, Kilpatrick (2004) had suggested that an improvement to the UCR would involve changing the FBI UCR definition of forcible rape to make use of the National Incident Based Reporting System (NIBRS) definition. The NIBRS, which is a redesign of the UCR program does include “carnal knowledge of a person, forcibly or against that person’s will where that person is incapable of giving consent because of his/her temporary or permanent mental or physical incapacity (Rantala & Edwards, 2000, p. 12) within the definition of rape. As noted by Kilpatrick (2004) the NIBRS definition of rape is not perfect but it is much better than the UCR definition. Unfortunately, only a small percentage of police jurisdictions in the U.S. currently use the NIBRS and only the UCR data on rape are released at the national level. Thus, Kilpatrick (2004) suggested that the FBI adopt the NIBRS definition of rape to replace the current inadequate UCR definition of forcible rape. We concur with this recommendation, although it will be necessary to clarify that incapacitation includes incidents that arise due to excessive alcohol or drug use, whether the use is voluntary on the victim’s part or involuntary.

In addition, it would be helpful to classify these types of rape as distinct from other types of mental or physical incapacity for consent given the prevalence of these specific causes of inability to consent. It could be helpful to specify these types of assault within the definition used in the UCR and NCVS to facilitate both law enforcement agencies gathering of such information as well as informing national statistics about this type of crime.

In conclusion, the authors of this report recognize that these recommendations may be controversial. As Kilpatrick (2004) observed about the suggestion to change the way the UCR defines rape:

"Although there are always those who resist making changes because of reverence for tradition as well as for other reasons, this is one change that is long overdue" (p.1231).

With respect to suggested changes in the NCVS, Kilpatrick (2004) concluded: "Making this change to the NCVS will be costly and will take some time to implement. However, it is difficult to justify the NCVS's current measurement of rape and sexual assault given the evidence that other screening questions are more sensitive by a large order of magnitude. The NCVS is the nation's chief measure of the past year's unreported rapes and sexual assaults. There is little justification for continuing to use screening questions that are not sensitive and fail to detect many cases" (p. 1231).

Why this matters is that many service providers and policy makers rely on the NCVS for information about changes in rape prevalence, rape rates, rape characteristics, and other indicators of our nations rape problem. We need to get this right because sound policy requires accurate information. We can, and we must, do better.

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Footnotes

[1] Note that these percentages add up to more than 100% because a sizeable proportion of rape incidents involved more than one of these three elements: force, drug- or alcohol-facilitation, or incapacitation.

[2] Several methodological procedures were used to maximize generalizability of the college women sample to the U.S. population of college women. These procedures are detailed on pages 10-11. However, whereas our general population sample maximized generalizability via the use of random-digit-dial (RDD) methodology and statistical weighting procedures to bring the sample in line with U.S. Census data, due to budgetary and practical issues we were unable to use RDD or weighting procedures for the college sample. Thus, the extent to which our college student sample is representative of the general population of U.S. college women is uncertain.