Deconstructing Incidents of Campus Sexual Assault: Comparing Male and Female Victimizations

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Abstract

Research on campus sexual assault (CSA) has almost exclusively drawn on self-report data, examined undergraduates (i.e., students aged 18-24), and focused on female victimization. The few studies which included male CSA victims generally had fewer than 100 male subjects, which makes important statistical analyses difficult. To build upon prior literature and expand knowledge on male CSA victimization, we analyzed more than 5,000 incidents of CSA that were reported to police from across the United States using National Incident-Based Reporting System data (NIBRS; 1993-2014). We expanded victim age ranges to include those 17 to 32 years old and investigated more male CSA victimizations than prior work to date, approximately 350 incidents. Comparisons of male victim versus female victim CSA incidents, estimated via multivariate logistic regression, revealed several important patterns. Although both male and female victims were approximately 19 years old on average, perpetrators who assaulted females tended to be 23 years old while those assaulting males were on average 29. While 1% of CSA perpetrators offending against female victims were themselves female, 17% of perpetrators offending against male victims were female. Finally, CSA incidents with male victims were more likely to include multiple offenders, but less likely to involve stranger or Black perpetrators and also less likely to result in injuries relative to CSA incidents with female victims. Implications are discussed in terms of policing practices, and we pose new questions to the field regarding the study and prevention of CSA.

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Introduction

Sexual victimization on college and university campuses remains a pervasive and important social problem. Campus sexual assault (hereafter, CSA) is an increasingly prominent concern among policy makers, researchers, and the public (O'Connor & Kingkade, 2016; Rubin, 2015). The increasing prominence is driven, in part, by the accumulation of decades of research showing consistently high rates of sexual victimization among college students. One of the most recent national estimates found that while enrolled in college more than 23% of women suffered an unwanted sexual act and 11% reported being raped (Cantor et al., 2015). These prevalence estimates are similar to those found in prior studies of CSA published throughout the last several decades (for a review, see Fedina, Holmes, & Backes, 2016; Koss, Gidycz, & Wiskiewski, 1987). Such numbers imply that sexual assaults, ranging from unwanted fondling to completed rape, occur relatively frequently on college campuses around the United States.

The increased concern is also tied to the fact that college attendance has grown over time, thus expanding the number of potential victims which emerge from this specific social institution. Just over 40% of 18- to 24-year-olds in the United States were attending college in 2014, the most recent year for which statistical data are available.¹ While the U.S. Department of Education estimates around 10 million students attended college in 1970, 40 million attended a college or university in 2014. These are the highest enrollment rates since statistical tracking began in 1970 (U.S. Department of Education, 2016). This growth is even more pronounced among female students as their enrollment in college now surpasses that of men, in particular, among Black and Hispanic females (Lopez & Gonzalez-Barrera, 2014). In short, there is an increasing number of young adults who are or will be exposed to a college environment and the risk of sexual assault.

Defining Characteristics of Sexual Assaults on College Campuses

Research on CSA has shown some similarities to sexual assault patterns found in the broader community; for example, women are victimized more often than men and assaults by strangers are relatively rare (Fedina et al., 2016; Finley & Corty, 1993; Fisher, Cullen, & Turner, 2000; Krebs, Lindquist, Warner, Fisher, & Martin, 2007; Miller & Marshall, 1987). However, within the literature, there are important distinctions suggesting that CSA may, at times, be different than sexual assaults occurring in the community. Those distinctions are most pronounced in terms of the use of alcohol and the gender of victims.

Scholars have found that consumption of alcohol is pervasive among college students (Presley, 2002) and a prominent correlate of CSA (Abbey, 2002), although the mechanisms through which victim and/or offender alcohol consumption contributes to CSA are complex and multifaceted. Regardless of the specific pathways, there is resounding consistency in the literature concluding it is a large and robust risk factor among college students (Abbey, 2002; Abbey, Wegner, Woerner, Pergram, & Pierce, 2014; Cantor et al., 2015; Mohler-Kuo, Dowdall, Koss, & Wechsler, 2004; Zawacki, Abbey, Buck, McAuslan, & Cinton-Sherrod, 2003). For example, research has found that up to 50% of sexual assault perpetrators were consuming alcohol at the time of the sexual assault (Abbey, 2002; Koss, 1988). In addition, Krebs et al. (2007) found that 77% of the college victims of rape and 23% of the college victims of sexual battery involved incapacitation (e.g., alcohol intoxication). In contrast, only about 37% of sexual assaults are estimated to involve use of alcohol or drugs in the general population (Greenfeld, 1998). Therefore, continuing to assess perpetrator alcohol use in relation to sexual assaults that are committed on college campuses is of critical importance.

A second prominent distinction in relation to college locales is tied to victim gender. While research and our understanding of the sexual victimization of college men "lags far behind that of college women," there are some data sources that indicate increased risk of sexual assault for men while in college (Hamby, 2014, p. 154). To illustrate, Sinozich and Langton (2014) drew on the National Crime Victimization Survey (hereafter, NCVS) to compare college with noncollege victims of sexual assault. Men aged 18 to 24 who were not enrolled in college accounted for 4% of the rape or sexual assault victimizations in the NCVS. In contrast, male victimizations accounted for 17% of the sexual assaults among students enrolled in college. In addition, while investigating two universities, Krebs et al. (2007) found a 3.7% prevalence rate of completed sexual assault for male victims during college years. This is much higher than national estimates of lifetime prevalence (1.5%) of male respondents in general who were sexually assaulted (Black et al., 2011). Therefore, while women are typically the vast majority of CSA victims, survey data indicate that men's experience of CSA needs continued investigation.

Context of CSAs When Comparing Men's and Women's Self-Reports

Relatively little is known about the similarities and differences between male and female victims of CSA. This is in part due to a dearth of studies focusing on males or comparisons of victim gender. But it is also due to small sample sizes of male victims among the few studies attempting to do so. While they are still informative, the small samples preclude the use of statistical tools (e.g., multivariate analyses) that would better illuminate what factors distinguish incidents of CSA (e.g., see Flack et al., 2008; Krebs et al., 2007). With that said, the research to date suggests several factors which may be important for understanding the similarities and differences between male and female victimization on campus.

Alcohol Comparisons

Alcohol use appears to be a prevalent factor in both male and female sexual victimization on campus. Research thus far has found no substantive or statistically significant differences in alcohol use by male versus female victims on campus (Howard, Griffin, & Boekeloo, 2008; Kaysen, Neighbors, Martell, Fossos, & Larimer, 2006). In contrast, there is some evidence suggesting offender use of alcohol may be different. Banyard and colleagues (2007) found that 72% of perpetrators with male victims and 65% of perpetrators with female victims were under the influence of alcohol. Hines, Armstrong, Reed, and Cameron (2012) also found that male victims were more likely to report that perpetrators were under the influence of alcohol (men, about 88%, and women, about 67%). These differences were not statistically significant in either study, although the small sample sizes implied there was likely too little power to generate reliable tests. Thus, these findings are suggestive but it remains unclear whether alcohol consumption by offenders is different between male and female incidents of CSA.

Perpetrator Comparisons

Surprisingly, much of the comparison literature does not report the sex of the perpetrator (see, for example, Banyard et al., 2007; Flack et al., 2007). Given the focus of prior literature on heterosexual women as CSA victims, one may assume that many of the comparison studies are assessing CSAs in regard to heteronormative sexual victimizations. Hines et al. (2012) is one exception in that they did measure offender sex finding that male CSA victims were significantly more likely to be sexually assaulted by a female.

Victim-Offender Relationship Comparisons

Stranger victimizations are rare among sexual crimes in general, and this remains true among CSA incidents. According to data from the NCVS, CSA victims were roughly four times more likely to be sexually assaulted by someone they knew versus a stranger (Baum & Klaus, 2005). However, it is important to note that stranger assaults account for a far larger portion of attacks on campus than in the general public. Walsh, Banyard, Moynihan, Ward, and Cohn (2010), for example, found that stranger victimizations accounted for 34% of sexual assaults among college students. In contrast, they account for approximately 10% of attacks in the general population (Williams & Bierie, 2015). Research also suggests that the risk of assault by a stranger may be different for male and female CSA victims (Hines et al., 2012). According to Hines and colleagues (2012), male college students were approximately twice as likely to be assaulted by a stranger compared with their female counterparts.

Crime Characteristic Comparisons

Two important, although understudied, crime characteristics in comparison studies are the use of force and injury. Based on nationally representative data, the majority of students reported no weapon, a form of force, being used by the offender during a rape or sexual assault (Baum & Klaus, 2005). Interestingly, but perhaps due to small sample sizes, comparison research has found no statistically significant differences in terms of whether the perpetrator used physical force (Hines et al., 2012). Compared with female victims, it appears rare though that physical force is used against male victims (Banyard et al., 2007; Krebs et al., 2007; Palmer, McMahon, Rounsaville, & Ball, 2010). To date, very few comparison studies have examined physical injuries as a result of a CSA, but work from Hines and colleagues (2012) indicated that there may be no significant difference between a male and female victim's sustained injuries. Because sexual assault has the potential to result in victim injuries, further analysis of these CSA characteristics will inform responses to these incidents that involve force, such as weapon use, or injury.

Type of Sexual Assault

Limitations (e.g., small sample sizes) continue to persist in understanding how men are sexually victimized at college locations. In turn, this restricts the types of statistical tests that can compare CSA incidents and the type of sexual assault perpetrated against the victim (i.e., a male victim or a female victim). The following studies have begun to provide a foundation to better understand the type of sexual assault perpetrated against male CSA victims. Flack et al. (2007) uncovered that 7% of their male students experienced unwanted intercourse and 18.3% experienced forced fondling. Reporting a similar finding, Krebs et al. (2007) found that 6% of their male sample reported an attempted or completed sexual assault since entering college. Almost 4% experienced a completed sexual assault (Krebs et al., 2007). Moreover, at least one self-report study found high percentages of men reporting unwanted sexual experiences, ranging from being pressured by a partner to being physically forced to have intercourse (Palmer et al., 2010). Given these limited number of findings though, additional knowledge is still needed in regard to the type of sexual assault perpetrated against men at college locations and in comparison with the type of sexual assaults perpetrated against female CSA victims.

Gaps in the Literature

Gaps in the literature provide opportunities to contribute to the overall understanding of CSA. As discussed, there is relatively little use of police data in relation to CSA, and no research to date uses the National Incident-Based Reporting System (hereafter, the NIBRS). There is a critically important caveat though when using police data to better understand CSA. Reported CSA is the exception rather than the norm. For example, only a minority (i.e., around 20%) of college students report their victimization to police or other officials (Sinozich & Langton, 2014). This mirrors what we know about reporting in the general public; sexual assault is rarely reported to police in general (Truman & Langton, 2015) and even less so among college students (Fisher, Daigle, Cullen, & Turner, 2003; Sinozich & Langton, 2014). Keeping this caveat in

mind, analyzing police data is still important given that it has the potential to speak more clearly and authoritatively to criminal justice agencies who seek empirical and scholarly accounts of the cases they will be required to respond to in the field. It can also help law enforcement agencies understand the cases which they will specifically be asked to address (e.g., investigate). The NIBRS, particularly due to its great size and detail, is a vital source for this kind of information.

Second, there is far less research to date which examines male victims of sexual assault on campus relative to female victims. In a systematic review, only 12 of 34 empirical studies of CSA included males in their sample (Fedina et al., 2016). Moreover, those that did include males had exceptionally small sample sizes which ranged from a low of 15 (Howard et al., 2008) to a high of 84 victims (Krebs et al., 2007). These small samples preclude most statistical tools that would be useful in describing, modeling, or otherwise building a rich empirical understanding of male CSA events. The few studies which do include male victims suggest that male college students face relatively exceptional risk of assault. That is, males on campuses appear to be at a higher risk of victimization than other places or periods during their lives.

Third, self-report surveys have been strategically designed to capture sexual assaults committed, primarily, against undergraduates. Given their sheer magnitude on college campuses, this makes sense. But research suggests CSA may also be problematic for people on campus that fall outside this age range. For example, Cantor et al. (2015) found that 33.1% of female graduate students and 20.3% of male graduate students have experienced a sexual assault since becoming a student at the university. Their definition was broad, including sexual touching as well as traditional rape (i.e., forceful penetration). A sizable minority of these crimes, however, fell into the latter category—11% of female graduate students reported a completed rape. As our understanding of CSA perpetrated against traditionally aged students (i.e., 18-24 years) has grown, the field has come to a point in which there is an increasing need to study larger age ranges. Expanding empirical studies to include these victims may lead to new insight about the sexual assaults that occur on college campuses.

Finally, relatively little work to date has examined sexual assault within the specific context of the campus location itself. For example, of the studies included in the Fedina et al. (2016) review, only one study examined campus locations specifically, college dorm room settings (see Howard et al., 2008). A more recent study has also presented new information on campus locations (Cantor et al., 2015). Collectively, these two studies reinforce the assertion that campus locations themselves are an important lens through which to study sexual assault. As such, there is a need for more studies that investigate on-campus sexual assaults to better understand their features. The NIBRS again is an ideal tool in this regard, because it allows the location of the college campus to be isolated and further analyzed.

The Current Study

The current study attempted to address these gaps in the literature. In doing so, we used data that record sexual assaults reported to police which occurred at college or

university locations across the United States and over a 20-year period. We provided descriptive information about the victims, offenders, and incident details. In providing this description, we placed special emphasis on describing differences between incidents involving male versus female victims. To this end, this research asked the following two research questions:

Research Question 1: What are the characteristics of CSA incidents that come to the attention of the police?

Research Question 2: Of the CSA incidents reported to the police, what offender, victim, and crime characteristics distinguish incidents of CSA that are perpetrated against male victims versus those perpetrated against female victims?

Method

This research used NIBRS data covering the years 1993, the first year a male CSA victim was recorded, through 2014. The NIBRS contains expanded incident-level data on sexual assaults occurring on college and university campuses that are then reported to the Federal Bureau of Investigation (FBI) by participating police departments.² Because the research focus here is on incidents of sexual assault that took place at a college or university, we only analyzed sexual assault incidents that are coded within the NIBRS as taking place at a "college/university" location. It is important to note that incidents do not represent separate instances of sexual assault; that is, there could be more than one sexual assault within an incident. Within this data set though, approximately 92% of incidents with male victims and 94% of incidents with female victims involved one sexual assault.³ As discussed further below, we also limited the age of victim and offender. With these criteria, there were 5,476 incidents of CSA to investigate.

Dependent Variable

To construct a detailed and comparative picture of incidents of sexual assault on college campuses, we created a binary variable that separated incidents of CSA by type of victim reported in the incident: an incident with a male victim or an incident with a female victim. Incidents with female victims accounted for approximately 94% of the sample (n = 5,129), and incidents with male victims accounted for approximately 6% of the sample (n = 347).

Independent Variables

All of the independent variables were also analyzed at the incident-level. Although the NIBRS records items at the individual-level (e.g., age of the offender), individual-level offender and victimization data are summarizations of these characteristics. For example, age represents the average age of all offenders in the incident. The same would apply to incidents that had more than one victim and so on. These characteristics are discussed further below.

Offender characteristics. We included the following incident characteristics of the offender: if the perpetrator was under the influence of alcohol during the incident (0/1), the number of offenders involved in the incident (a continuous measure),⁴ race, sex, and age of the offender (a continuous measure). The analyses excluded any incidents that had an offender below the age of 17 or above age 65. We recognized that such individuals may represent a unique population beyond the scope of the study (e.g., young teenagers on campus) or that there may be possible transcription errors (e.g., some offenders were coded to be 90 or older). Pertaining to the upper offender age cap, while research suggests faculty may be more prone to stay in academics post typical retirement age (Dorfman, 2000, 2002), we presumed that faculty over the typical retirement age would be rare on most campuses and rarely present in forcible sexual assaults. Race was a series of mutually exclusive binary variables (0/1): White/ Hispanic (omitted comparison category), Black, and other. White and Hispanic categories are recorded in the NIBRS together as one measure for offenders. This error cannot be corrected. We also captured whether more than one race was present in the CSA incident (0/1). Sex was measured using a binary variable for male or female (0/1). A measure was also included to indicate whether offenders of more than one sex were present in the CSA incident (0/1).

Victim characteristics. Victim incident characteristics included the number of sexual assault victims in the incident (a continuous measure),⁵ age (a continuous measure), race, and victim–offender relationship. Because the NIBRS does not have a code designating a sexual assault victim as a student, we relied on victim age as a proxy measure. First, we set the minimum age of victims to 17 years old and the maximum age at 32 years old. According to the National Center for Education Statistics (2014), roughly 5% of college students enrolled in the fall of 2013 were under the age of 18. Therefore, this restriction allowed us to assess CSA in relation to those potential victims who were college freshman, but excluded in prior work which limited study to those aged 18 and above. In addition, based on data from the National Science Foundation (2014) and the Survey of Earned Doctorates, the average age of doctorate recipients for all fields was age 32. Because our focus was on CSA victimization on campuses for these student-based age ranges, we attempted to eliminate CSAs which may occur on campuses but are beyond this scope. For example, we excluded ages that would proxy small children who may have been molested while in a campus day care facility.

Victim race was a series of mutually exclusive binary measures (0/1): White (omitted comparison category), Black, Other, and Hispanic. A measure was included to capture whether victims of multiple races were present in the CSA incident (0/1). The NIBRS records over 20 victim–offender relationship categories. These were collapsed into five victim–offender categories which mirrored the Krebs et al. (2007) CSA study: significant other (e.g., boyfriend or girlfriend, homosexual relationship,⁶ spouse), friend, acquaintance (omitted comparison category), other (e.g., employer), and stranger.

Crime characteristics. Crime incident characteristics indicated whether a weapon was used in the CSA incident (0/1), if the victim was injured (0/1), and the type of sexual

assault used by the perpetrator. The types of sexual assault included in the analysis were those defined as forcible sexual assaults in the NIBRS: rape, sodomy, sexual assault with an object, and forcible fondling. These were binary measures that were not mutually exclusive and allowed to be additive in the model.

Analytical Strategy

The NIBRS data were first analyzed to describe all incidents of sexual assault reported to police that occurred at college and university locations. Table 1 reports these descriptive statistics and bivariate logit comparisons. The information in this table is primarily used to build context around the latter multivariate model. The statistical tests, for example, are informative, but any difference, or lack thereof, may easily be biased due to omitted variables. Next, we ran the full multivariate model, the binary logistic regression, to assess the differences between incidents while controlling for all other items in the model. This allowed us to predict the odds of an event occurring (Long & Freese, 2006); here (1) the odds of an incident involving a male victim versus (0) the odds of an incident involving a female victim (see Table 2). Given that log-odds have little substantive meaning, we transformed the log-odds into odds ratios to assess the effect size (Fleiss, 1994; Pampel, 2000). Likewise, because of the comparative aim of this research, odds ratios are presented and interpreted for incidents that had female victims. Given the lack of comparative studies in the literature, this allowed the odds ratios, as comparative indexes, to illustrate relative differences in incidents of CSA dependent on the type of victim, a male or female victim.

Results

Descriptive Overview of Incidents of CSA

Incidents of sexual assault reported to police, as expected, increased during the academic year and declined during vacation periods. Figure 1 shows the cumulative distribution by month of CSA incidents reported to law enforcement during the years of 1993 through 2014. As Figure 1 illustrates, the largest percentage of CSAs incidents were reported in October for both male and female victims. This is typically the second full month of the fall semester (e.g., for colleges and universities on a semester system). CSA incidents reported to the police that involved male victims also peaked in October (11.82%) and January (10.95%), possibly suggesting the beginning of *each* semester may be a time males are at higher risk to experience CSA. In general, the largest percentages of police-reported CSA incidents with female victims occurred in September (12.89%), October (13.80%), and November (10.16%). This reflects trends found in other research (see, generally, Flack et al., 2008; Krebs et al., 2007).

Description of CSA incidents with male victims. Overall, 6% of the CSA incidents involved male victims. Eight percent of the incidents involved alcohol use by the perpetrator. Within the incidents, perpetrators were on average about 29 years old, mostly White

			Male victim		Female victim	
	Minimum	Maximum	M or %	SD	M or %	SD
Victim sex	0	I	6%	0.24	94%	0.24
Independent variables						
Perpetrator under the influence of alcohol	0	Ι	8%	0.28	16%***	0.36
Number of offenders	I	8	1.14	0.50	1.13	0.50
Offender age (years)	17	65	28.76***	12.22	23.35	8.99
Offender Race						
White/Hispanic	0	I	75% ****	0.43	63%	0.48
Black	0	I.	21%	0.41	34%***	0.47
Other race	0	I	2%	0.16	3%	0.16
Multiple races	0	I	2%	0.12	1%	0.10
Offender sex						
Male	0	I	83%	0.38	98% ****	0.13
Female	0	I	17%***	0.37	1%	0.11
Offenders of both sex present	0	I	1%	0.08	<1%	0.07
Number of sexual assault victims	I	14	1.11	0.60	1.08	0.47
Victim age (years)	17	32	19.62*	3.50	19.32	2.75
Victim race						
White	0	I	80%	0.40	79 %	0.41
Black	0	1	14%	0.35	16%	0.37
Other	0	1	3%	0.18	3%	0.16
Hispanic	0	I	5%	0.21	3%	0.18
, Multiple races	0	I	2%**	0.14	1%	0.08
Victim–Offender Relationship						
Significant other	0	I	3%	0.16	5%*	0.22
Friend	0	I.	8%	0.27	11%	0.31
Acquaintance	0	I	48%	0.50	47%	0.50
Other	0	I.	35%***	0.48	26%	0.44
Stranger	0	I	7%	0.25	11%**	0.32
Weapon used	0	I	61%	0.49	63%	0.48
Victim injured	0	I	8%	0.27	17%***	0.38
Sexual assault strategy						
Rape	0	I	8%	0.27	47%***	0.50
Sodomy	0	I.	25%***	0.43	4%	0.19
, Sexual assault with an obiect	0	1	4%	0.20	4%	0.20
, Forcible fondling	0	I	64%***	0.48	46%	0.50

Table 1. Descriptive and Bivariate Statistics of Incidents of Campus Sexual Assault That Hada Male Victim or Female Victim: The NIBRS 1993-2014, N = 5,476.

Note. The bivariate statistics indicate when an offender, victim, or crime characteristics is positively associated with predicting a campus sexual assault incident that has either a female or male victim. Due to rounding, not all categories may equal 100. NIBRS = National Incident-Based Reporting System. * $p \le .05$. ** $p \le .01$. *** $p \le .001$.

		CSA	CSA
	Coefficient (SE)	Male victim	Female victim*
Perpetrator under the influence of alcohol	ns		
Number of offenders	0.29* (0.15)	1.34	0.74
Offender age (years)	0.03**** (0.01)	1.04	0.90
Offender race			
Black	−0.74**** (0.158)	0.47	2.11
Other race	ns		
Multiple races	ns		
Offender sex			
Female	2.64**** (0.22)	14.02	0.07
Offenders of both sex present	-0.07*** (0.87)	0.48	15.03
Number of sexual assault victims	ns		
Victim age (years)	ns		
Victim race			
Black	ns		
Other	ns		
Hispanic	ns		
Multiple races	1.18* (0.58)	3.27	0.31
Victim–Offender Relationship			
Significant other	ns		
Friend	ns		
Other	ns		
Stranger	-0.74** (0.25)	0.48	2.10
Weapon used	ns		
Victim injured	-0.52* (0.24)	0.59	1.69
Sexual assault strategy			
Rape	−4.58 **** (1.22)	0.01	97.21
Sodomy	ns		
Sexual assault with an object	−2.99 ** (1.21)	0.05	20.05
Forcible fondling	-2.77* (I.22)	0.06	15.92

Table 2. Binary Logistic Regression Predicting Incidents of Campus Sexual Assault That Had a Male Victim or Female Victim (n = 5,051).

Note. Reference groups are White (perpetrator race), male (offender sex), White (victim race), and acquaintance (i.e., victim–offender relationship). For comparison purposes, odds ratios are shown for incidents of CSA committed against female victims at college/university locations. CSA = campus sexual assault.

* $p \le .05. **p \le .01. ***p \le .001.$

(75%), and mostly male (83%). Male victims within the incidents were on average about 20 years old and mostly White (80%). About 50% of the perpetrators identified in the incidents were acquaintances of the victim. Over half of the CSA incidents against male victims involved a weapon (61%), but these primarily consisted of



Figure 1. Percentage of Incidents of Campus Sexual Assault (CSA) by month as reported to law enforcement: The NIBRS 1993-2014.

Note. Across the 12 months, the percent total equals 100%. This table shows the number of incidents of sexual assault that took place at college locations. It does not distinguish between incidents that may consist of more than one sexual assault per incident. Overall, 94% of the incidents with male victims involved one sexual assault and 92% of the incidents with female victims involved one sexual assault. CSA = campus sexual assault; NIBRS = National Incident-Based Reporting System.

personal weapons (e.g., hands, feet, and physical restraint). Only 7% of male victim incidents had a weapon present, such as a knife or firearm. Less than 10% of the incidents resulted in a male victim sustaining an injury. Finally, within incidents, forcible fondling (64%) was the most common form of sexual assault committed against male CSA victims, followed by forcible sodomy (25%), forcible rape (8%), and forcible sexual assault with an object (4%).

Comparisons to CSA incidents with female victims. There were some important similarities between incidents that had male victims and those that had female victims. On average, for example, male victims were of similar age to female victims in the CSA incidents ($\mu = 19.62$; female victims, $\mu = 19.32$). Although these differences were statistically significant (p < .01), they were not substantively meaningful. While reporting a sexual assault to police can be delayed, this result would imply that the sexual assault victimization occurred for both male and female victims roughly during their freshman or sophomore year in college, depending on when they began their collegiate career (e.g., starting college between ages 17 and 19).

The data showed many distinctions in these incidents, particularly with respect to offender characteristics. Incidents with male victims were significantly more likely to involve perpetrators who were classified in the "other" relationship category (35% vs. 26% for female victims, p < .001). Within this category, the largest victim–offender

relationship was "otherwise known" (data not shown). This could imply that the perpetrators were other members of the campus community (i.e., teacher, coach, residential advisor), but given that these specific codes are not available in the NIBRS caution should be used to assess the status of these otherwise known relationships. In comparison, incidents with female victims were significantly more likely to involve significant others (5% vs. 3%, p < .05) or strangers (11% vs. 7%, p < .01). In general, perpetrators in the CSA incidents were mostly White although incidents with male victims were significantly more likely to have White perpetrators (75%) compared with incidents with female victims (63%, p < .001). Furthermore, incidents with female victims were significantly more likely to have Black perpetrators (34%) compared with incidents with male victims (21%, p < .001).

Pertaining to perpetrator sex, CSA incidents with male victims were more likely to have female perpetrators compared with incidents with female victims (17% vs. 2%, p < .001). It is important to note that 83% of the CSA incidents with male victims had male perpetrators. Thus, the CSAs reported to police tell us that most offenders were male regardless of the victim's gender. Distinctions were also prominent with respect to victim characteristics in the incident. In CSA incidents with female victims, the victim was more likely to be injured (17%) compared with incidents with male victims (8%, p < .001). Likewise, the type of sexual assault used by perpetrators in the CSA incidents differed for male and female victims. CSA incidents with male victims were more likely to involve sodomy (25% vs. 4%, p < .001) and forcible fondling (64% vs. 46%, p < .001) whereas incidents with female victims were significantly more likely to involve a perpetrator that was under the influence of alcohol (16%) compared with incidents with male victims were twice as likely to involve a perpetrator that was under the influence of alcohol (16%) compared with incidents with male victims were twice as with male victims with male victims (8%, p < .001).

Multivariate Logistic Regression

CSA incidents with male victims. The number of offenders, offender age, offender sex, and victim race were positively associated with predicting CSA incidents involving male victims. First, as the number of offenders increased, the odds the CSA incident involved a male victim relative to a female victim were 1.34 times greater, holding all variables constant (p < .05). Therefore, as the number of offenders increased in the incident, the odds the victim was a female decreased. Second, for each additional year an offender aged, the odds the CSA incident involved a male victim relative to a female victim were 1.04 times greater, holding all variables constant (p < .001). Although the odds ratio appears small, it is important to note it refers to a movement in the independent variable for each 1 year increase in offender age. The impact is far more pronounced when interpreted in terms of larger age intervals (e.g., a difference of 5 or 10 years). The third major finding related to the sex of the perpetrator in the incident. Offender sex had the strongest influence on predicting CSA incidents involving male victims. If a female was the perpetrator in the incident, the odds the victim was a male relative to a female were 14.02 times greater, holding all variables constant (p < .001). Therefore, female perpetrated CSA incidents decreased the odds the victim

was female. Finally, victim race distinguished incidents with male victims. Independent of the number of perpetrators, CSA incidents with multiple race groups increased the odds that the incident involved a male victim relative to a female victim.

CSA incidents with female victims. Offender sex had the greatest influence on predicting CSA incidents with a female victim: If the perpetrator was male, the odds the CSA incident involved a female victim relative to a male victim were 14.02 times greater, holding all other variables constant (p < .001). Male perpetrated CSA incidents therefore decreased the odds the CSA incident involved a male victim. Having offenders of both sexes present (e.g., a male and a female offender) also increased the odds by 15.03 that the victim would be female relative to a male, holding all other variables constant (p < .01). This incident characteristic therefore decreased the odds the victim was male. Finally, if the perpetrator was Black relative to White, the odds the incident involved a female victim relative to a male victim were 2.11 times greater, holding all other variables constant (p < .001). CSA incidents with Black perpetrators therefore decrease the odds the victim was male.

Pertaining to victim characteristics, the relationship status of stranger increased the odds of a female being victimized in the CSA incident. If the CSA incident involved a stranger perpetrator, the odds the incident involved a female victim relative to a male victim were 2.10 times greater, holding all other variables constant (p < .01). Stranger perpetrations therefore decreased the odds that the CSA incident involved a male victim. In regard to crime incident characteristics, victim injury and the type of sexual assault were positively associated with female victim relative to a male victim signature to a female victim relative to a male victim injury, the odds it involved a female victim relative to a male victim were 1.69 times greater, holding all other variables constant (p < .05). CSA incident involving victim injury therefore decrease the odds the victim was male. Rape, sexual assault with an object, and forcible fondling all increased the odds of a female victim while decreasing the odds the victim was a male. If the CSA incident involved rape, sexual assault with an object, or forcible fondling, the odds the victim was a female versus a male were 97.21, 20.05, and 15.92 times greater, holding all other variables constant (p < .001, p < .05, p < .05).

Discussion

To paint as complete of an empirical picture as possible and also inform policing policy and practices, descriptive information that stems from using a variety of methods, data sources, and sampling frames is needed about the characteristics of sexual assaults that occur in specific locations, here, the college and university campus. To complement prior CSA work, this study drew on a less commonly explored data set, the NIBRS, which is the nation's largest publicly available incident-level data set on crimes reported to police, to compare CSA incidents perpetrated against male and female victims in relation to offender, victim, and crime characteristics. It also expanded the age ranges of victims and offenders to include new populations that are important parts of college institutions. From these analyses, several findings emerged. First, 6% of CSA incidents reported to police involved male victims. The prevalence was even greater when excluding forcible fondling (i.e., 8% of all forcible sex crimes other than forcible fondling involved a male victim). This incidence estimate is lower than that found by Sinozich and Langton (2014) using the NCVS in which 17% of college sexual offense victims were male. The lower estimate is not surprising given that this research relies on police reports whereas the NCVS relies on self-reports of victimization. Because of the stigma surrounding male victims of sexual assault, official data underreport male victims more so than self-report surveys (Fisher & Pina, 2013). Moreover, both historically and contemporarily, there is cultural resistance generally, and even among college students, to the idea that men can be victims of sexual assault and rape, particularly by female perpetrators (Chapleau, Oswald, & Russell, 2008; Struckman-Johnson & Struckman-Johnson, 1992).

The analysis identified several similarities between male and female victims within CSA incidents. For example, there were no statistical differences in perpetrator alcohol use in the incidents involving male or female victims at the multivariate level. This mirrors findings in self-report studies (see, for example, Banyard et al., 2007; Baum & Klaus, 2005; Hines et al., 2012). However, unlike those earlier studies, the prevalence of perpetrator substance use was far lower. This might reflect a pattern found in prior research which indicates students are less likely to report sexual assaults if there is alcohol involved (see, for example, Fisher et al., 2000, 2003).

The analysis also identified several distinctions between incidents with male and female victims, of which perpetrator sex was especially significant. While female perpetrators were the minority in CSA incidents overall, they were significantly more likely to perpetrate CSA against male victims. This resonates with self-report surveys such as Hines and colleagues (2012) that found 20% of their male respondents were sexually assaulted by a female. To date, there is little scholarship on the prevalence and policy implications associated with female sexual offending on campus, although a review of the literature suggests that females on college campuses can be sexually aggressive (Anderson & Savage, 2005). Based on this review, female college students have been found to use various tactics against male college students, such as coercion, abuse, force or threats of force, and alcohol, to get them to participate in unwanted sexual activity (Anderson, 1998; Anderson & Sorensen, 1999; Feibert & Tucci, 1998; Larimer, Lydum, Anderson, & RTurner, 1999; O'Sullivan & Byers, 1993). These findings imply that there are females who sexually offend on college campuses and that this group of offenders is an important group to identify, study, and understand.

The analysis also uncovered patterns in regard to victim gender and perpetrator age. Incidents with male victims compared with female victims involved older offenders. In CSA incidents involving male victims, just over 41% of perpetrators were 17 to 22 years old (compared with 64% targeting females), 20% were between 23 and 32 years old (compared with 15% targeting females), and the remaining 40% were 33 years or older (compared with 21% targeting females). It appears, at least for CSA incidents reported to police, sexual exploitation by older perpetrators presents an important element of risk for college males and, in turn, an important topic for future research. Future research should explore whether these older perpetrators are affiliated with the

college or university institution and what this means for prevention and police response. In general, while the NIBRS reinforces the need to continue to understand CSA victimization among undergraduate age groups, it also encourages the inclusion of other age groups. A sizable minority of incidents involved victims over the age of 23 indicating that those older than the traditional college age (e.g., 17-22) are at risk for sexual assault as well.

Policy Implications

These findings have important implications for policy and practice. First, our analysis used police incident reports spanning over 20 years. This analysis illustrated the types of incidents that come to the attention of the police on college campuses. This is important information for law enforcement as research has shown victims are more likely to report to police than school officials (Moore & Baker, 2016). In addition, because of the size of our sample, we were able to make statistical comparisons between incidents that involved forcible sexual assaults perpetrated against both male and female victims. The finding that 6% of incidents involve a male victim suggests that law enforcement should be sensitive to this group as potential targets. Similarly, while rarer, the possibility that females may be aggressive and assault both males and females should be incorporated into law enforcement training. To date, much of the strategies and policies have focused on protecting female victims from male offenders (see, for example, McCaughey & Cermele, 2015). While important, given this is the likeliest combination of victim and offender, it ignores the notion that males can be and are victimized and females can be and are offenders. Therefore, as police train (e.g., using tools such as simulated sexual assault interviews where officers portray victims, perpetrators, and responding officers) expanding the type of victim and perpetrator (i.e., female or male) may improve performance in the field (see, for example, Lonsway, Welch, & Fitzgerald, 2001). Likewise, these data suggest that campus police may benefit from intensive prevention efforts on campus during the first months of each semester. Prevention is called for at any time of the year, but perhaps surging resources during these high risk periods is warranted.

Policy makers should also be attuned to the differences CSA incidents that involve male and female victims. Incidents with male victims were more likely than incidents with female victims to involve older perpetrators. Given a large percentage of these sexual assaults involved perpetrators known to the offender, this may indicate that males are likely to be victimized by someone other than their peers. Likewise, our data and analyses also speak to the issue of gender in sexual assault on campuses generally. The finding that, over a period of more than 20 years, 94% of sexual assaults reported on college campuses had a female victim indicates that females are much more likely to be assaulted and report their assault to the police than males. However, that 6% of incidents had a male victim also indicates that a nontrivial portion of assaults have male victims. Given what is known about stigma associated with male sexual assault victims (Fisher & Pina, 2013), it is likely that substantially more than 6% of incidents involve a male victim. Policy makers should continue to recognize that CSA is a

problem that largely involves male perpetrators and female victims, at the same time developing programs that address male victims and female perpetrators alike. This information on gender and age may help local law enforcement as well as universities as they plan for prevention and response strategies to crimes which will be reported.

Limitations

NIBRS has many strengths, such as the ability to include CSAs reported to police (not just those resulting in arrest), coverage of more than 30% of the United States, and broad definitions of sexual assault alongside details about victims, offenders, and incidents. However, the NIBRS also has important limitations. The most significant weakness of the NIBRS is that the majority of CSAs are not reported to the police. These data cannot, and should not, be used to describe the underlying population of sexual assault offenders or victims because most incidents are not reported, and those that are reported are likely different from the underlying population of assaults. With that said, police data are important for other reasons. They help law enforcement plan for the type of cases they will be asked to respond to (e.g., how to train police), and it also offers a comparative point for those using survey data. That is, by contrasting patterns in the NIBRS to other data in the field, researchers may be able to discover more information about the contexts of sexual assault on college campuses and the characteristics of those that are reported to law enforcement.

In addition, while the NIBRS allows us to isolate the college/university location of the sexual assault incident, there is no measure within the NIBRS to determine whether or not the victim was a college student or any other role within the university system. Like other researchers, we used age as a proxy measure for these statuses. This is likely correct most of the time, but there is the possibility that there is also some error (e.g., some victims and offenders are not associated with the university at all). Moreover, these data do not allow identification of sexual assaults among college students which occur off campus. Even though research indicates a large proportion of CSA occur on campus and on residential campuses (see, for example, Fisher et al., 2000; Fisher, Sloan, Cullen, & Lu, 1998; Mohler-Kuo et al., 2004; Peters, 2012; Stotzer & MacCartney, 2015), it is likely that the patterns tied to victim gender here could be different in other locations off campus. Finally, we lacked some contextual information that others have found important in the study of sexual assaults. For example, the NIBRS does not include an indicator of whether the victim was using alcohol. It will be important for future research that continues to explore victim gender and expanded age-groupings of victims and offenders to include these measures as well.

Conclusion

Despite these limitations, this study suggests some important steps for CSA scholarship in the coming years. First, it reinforces the lessons learned from other work (i.e., surveys of college students) and that college and campus environments are important CSA risk factors for men as they are for women given that male victimization on campus seems to be substantially higher compared with that of community samples. Second, it suggests that sexual assault is common enough among individuals on college campuses aged 23 and older and that future research should pay special attention to these victims as well. Future research should continue to investigate and compare CSA committed against men and women, perpetration by both men and women, and also explore diverse age categories to capture CSA that extends beyond the undergraduate years. Likewise, future research should attempt to identify how often and under what conditions these assaults represent abuse by those in a position of trust or power (e.g., teacher, teaching assistant, supervisor, coach). These relationships are not present in the NIBRS, but perhaps they should be added in the future. Overall, by continuing to address CSA, we can better understand these variations in victimization and offending as they have implications for responses to offenders, victims, and surrounding communities. By expanding the horizons of CSA scholarship along these lines, the field is likely to give voice to more victims and gain greater insights for doing so.

Authors' Note

The views and opinions of this research do not necessarily represent those of the U.S. Department of Justice or any component therein.

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Notes

- U.S. Department of Commerce, Census Bureau, Current Population Reports, Series P-25, Nos. 1000, 1022, 1045, 1057, 1059, 1092, and 1095; 2000 through 2009 Population Estimates, retrieved from http://www.census.gov/popest/data/national/asrh/2011/index. html; and 2010 through 2014 Population Estimates, retrieved from http://www.census.gov/ popest/data/national/asrh/2014/index.html. (This table was prepared September 2015.)
- There are 6,115 law enforcement agencies that submit crime data to the National Incident-Based Reporting System (NIBRS) representing about 33% of all agencies that also report to the Uniform Crime Reports (Federal Bureau of Investigation [FBI], 2012).
- 3. Sensitivity analyses were run to account for incidents that had more than one sexual assault

in the incident. Substantively, the results remained the same; therefore, all incidents that occurred on a college or university location remained in the analysis.

- 4. Within these data, 91% of the campus sexual assault (CSA) incidents had one perpetrator, 7% had two perpetrators, and about 2% had three or more offenders.
- 5. Within these data, 93% of the CSA incidents had one victim, 6% had two victims, and about 1% had three or more victims.
- 6. Only 12 incidents had the victim–offender relationship coded as homosexual within the NIBRS (four incidents with female victims and eight incidents with male victims); therefore, we could not assess this CSA victim–offender relationship category separately as prior work has suggested (see, for example, Porter & Williams, 2011).

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