Published in final edited form as:

Violence Against Women. 2013 April ; 19(4): 486–502. doi:10.1177/1077801213487746.

College Women's Experiences With Rape Disclosure: A National Study

Lisa A. Paul¹, Kate Walsh², Jenna L. McCauley³, Kenneth J. Ruggiero³, Heidi S. Resnick³, and Dean G. Kilpatrick³

¹Northern Illinois University, DeKalb, IL

²Columbia University, NY

³Medical University of South Carolina, Charleston, SC, USA

Abstract

Disclosure of a rape to informal support sources (e.g., friends) is a relatively common experience, but it is not well understood. This study expands our limited knowledge of the characteristics and life experiences of disclosure recipients among a national sample of 2,000 female college students. Over 40% of respondents reported having received a rape disclosure, and more than two thirds of these recipients encouraged victims to formally report their rapes to the police or other authorities. Correlates of disclosure receipt and encouragement of reporting, including personal assault history, mental health history, and substance use, are presented and discussed.

Keywords

college students; disclosure recipients; rape disclosure

Rape is an all too common problem, with lifetime prevalence estimates of attempted or completed rape ranging from 11.5 to 17.6% (Kilpatrick, Resnick, Ruggiero, Conoscenti, & McCauley, 2007; Tjaden & Thoennes, 2000). Rape is particularly prevalent on college campuses, with one in 20 college women in a national sample reporting a rape experience within the last year (Kilpatrick et al., 2007). One in five female college students, including 26% of seniors, surveyed in an additional large sample from two universities reported a sexual assault experience (more broadly defined to include rape, attempted rape, and forced touching of a sexual nature) since entering college (Krebs, Lindquist, Warner, Fisher, & Martin, 2007).

Estimates of reporting rapes to formal agencies (e.g., police, medical professionals) are quite low, ranging from 5–33% (Fisher, Cullen, & Turner, 2000; Kilpatrick et al., 2007; Krebs et

© The Author(s) 2013

Corresponding Author: Dean G. Kilpatrick, Medical University of South Carolina, National Crime Victims Research and Treatment Center, 67 President St., 2 South MSC 861, Charleston, SC 29425, USA. kilpatdg@musc.edu.

Reprints and permissions: sagepub.com/journalsPermissions.nav

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

al., 2007; Rennison, 2002; Wolitzky-Taylor et al., 2010); however, sexual assault is much more commonly disclosed to informal support sources (e.g., peers, family members). Over two thirds of victims in previous studies reported disclosing the assault to at least one other person (e.g., Fisher, Daigle, Cullen, & Turner, 2003; Kilpatrick et al., 2007; Krebs et al., 2007; Rennison, 2002; Wolitzky-Taylor et al., 2011), most frequently friends and family members (Ahrens, Campbell, Ternier-Thames, Wasco, & Sefl, 2007; Fisher et al., 2003; Ullman & Filipas, 2001a). This rate of disclosure is encouraging, as the act can serve as a first step toward connecting victims to sources of support, medical care, and mental health services, and may facilitate formal reporting to the authorities (Ahrens et al., 2007; Ullman, 1996, 1999, 2010). Connection to services is particularly important when considering the low service utilization rates, especially mental health services, by sexual assault victims (Amstadter et al., 2010; George, Winfield, & Blazer, 1992; Ullman & Brecklin, 2002). Further, disclosure can also result in the rape victim receiving emotional support (Ahrens et al., 2007; Andrews, Brewin, & Rose, 2003; Filipas & Ullman, 2001; Ullman, 1999, 2000, 2010; Ullman & Filipas, 2001b). Formal rape reporting takes on unique significance, as it is the only means through which perpetrators can be identified and prosecuted, thus helping to connect the crime with punishment for the individual and society (Allen, 2007) and reducing rape prevalence (Kilpatrick, Edmunds, & Seymour, 1992). Further, formal reporting provides estimates of rape prevalence (Allen, 2007), which can influence policy decisions and local interventions (Skogan, 1976); of note, though, these are often underestimations of the scope of rape in both the general population and on college campuses given underreporting (e.g., Allen, 2007; Fisher et al., 2003; Rennison, 2002).

Despite these potential benefits of supportive disclosure experiences, victims' trajectories of mental health outcomes may be influenced in positive or negative ways depending upon the nature of the disclosure experience. For example, if a rape victim discloses the rape to a peer and this disclosure is met by a negative response (e.g., blaming statements, distraction, trying to take control), the victim's recovery may be negatively affected (Ullman, 1996; Ullman & Filipas, 2001b). Negative reactions are more commonly reported from formal support providers, including the police, than from informal support providers (e.g., Filipas & Ullman, 2001; Ullman, 1996; Ullman & Filipas, 2001a). Taken together, then, disclosure of a rape has the potential to provide victims with needed assistance and support, and may improve post-assault outcomes; however, the disclosure recipient must be prepared to respond in a supportive manner. The majority of research in this area has focused on the impact of the disclosure experience on rape victims (e.g., Ullman, 2010). Significantly less work has examined characteristics of disclosure recipients, particularly informal support providers, despite evidence suggesting that victims are most likely to disclose to these informal providers, especially friends (e.g., Ahrens et al., 2007; Fisher et al., 2003).

Given the aforementioned research showing that sexual assault is a notable problem on college campuses and victims are most likely to disclose to their friends (Ullman, 2010), surveying college students about their experiences of receiving rape disclosures is an essential way to begin gathering more information about this important topic. Research in this area is scarce, but the few existing studies show that receipt of a disclosure is a relatively common experience for students, and that disclosure recipients could benefit from some support and assistance with regard to the process. With respect to prevalence, one in

three female, and one in five male, undergraduate students at a northeastern university reported receiving a sexual assault disclosure from a friend (Banyard, Moynihan, Walsh, Cohn, & Ward, 2010). This finding is consistent with an earlier study in which approximately one third of undergraduates attending a southeastern university reported receiving a disclosure (Dunn, Vail-Smith, & Knight, 1999).

The majority of these students reported generally positive perceptions of the disclosure experience and felt they were able to support the victim. However, 20 to 40% of respondents, both male and female, also reported concern with how to respond appropriately (Ahrens & Campbell, 2000; Banyard et al., 2010), and a subgroup of students surveyed reported engaging in unsupportive behaviors (e.g., blaming the victim; Ahrens & Campbell, 2000; Dunn et al., 1999). Notably, a substantial number of respondents who reported that they felt they were helpful to the victim also endorsed personal distress in response to the experience (Ahrens & Campbell, 2000; Banyard et al., 2010), indicating that college students who receive disclosures are not only in need of information, but at times may need support themselves. Importantly, the generalizability of these findings is restricted due to the narrow sampling frames used (i.e., students at a single university) and outcomes assessed.

The current study seeks to address some of these limitations by evaluating rape disclosure experiences and their correlates within a national sample of female college students. Limited prior research is available to guide the selection of potential correlates of disclosure receipt and encouragement of reporting. Research from our group (Paul et al., 2013) examined correlates of disclosure receipt among a sample of women in the general population and found that women who reported receiving a disclosure of sexual assault were more likely to report a personal history of sexual assault, mental health problems, and substance use and abuse than women who did not report receiving a disclosure; similar correlates were identified for encouragement of reporting. Given these findings, as well as the overlap between some of these variables and identified risk factors for, and correlates of, rape (e.g., substance abuse, history of sexual assault; Abbey, 2002; Gidycz, Orchowski, King, & Rich, 2008; Kilpatrick et al., 2007; Messman-Moore, Coates, Gaffey, & Johnson, 2008), these characteristics were also examined in this sample of college women. These variables were assessed to address two research questions: (a) What sociodemographic and life experience variables are associated with receipt of a rape disclosure? and (b) What sociodemographic and life experience variables are associated with encouraging the victim to formally report her rape?

Method

Participants

Participants in the study were respondents to a telephone-based survey regarding the prevalence and characteristics of forcible rape (FR; i.e., rape by the use of force or threat of force) and drug- and alcohol-facilitated or incapacitated rape (DAFR/IR; i.e., rape when the victim is too intoxicated or high to consent, or is passed out subsequent to voluntary or involuntary substance use). This group was selected from the American Student List, which is comprised of approximately six million students attending an estimated 1,000 universities in the United States. A list sample of 17,000 college women, representing 253 schools and

47 states, was purchased for this study in order to approximate the national census representation of college women. The sample was released to be contacted in proportion to the national census representation to ensure sufficient representation of this population; the final sample was comprised of 2,000 survey respondents.

Procedure

This survey, the National Women's Study (NWS)—Replication, was conducted in 2006 by female interviewers using computer-assisted telephone interviewing (CATI) technology. After the purchased sample was divided into nine geographic regions, women were called in proportion to the national census representation of college women in order to ensure that this sample was representative of the population of female college students in the United States. The interviewers worked for Schulman, Ronca, and Bucuvalas, Inc. (SRBI), a national surveying firm, and were trained in the sensitive nature of the survey. The survey was delivered in English. If more than one woman resided in the home that was called, the woman whose birthday was most recent, and who was attending a 4-year college or university, was selected for participation. Whenever possible, the interview took place at the time of respondent selection; otherwise, an interview time was scheduled or blind callbacks were made on different days of the week and at different times. A minimum of five callbacks were made prior to excluding a given phone number. Among those screened eligible to participate, 73.5% completed interviews.

Upon beginning the study, participants were asked if they were in an environment in which they could respond openly and freely; a later interview was scheduled if participants did not feel that they could answer in this manner. Participants were then provided with a description of the study and verbal consent was obtained. All participants completed the same screening questions and additional inquiries were made based on participants' endorsement of certain experiences. In order to increase the accuracy and honesty of participant responses, questions were close-ended and behaviorally specific. Interviews lasted an average of 20 min, and all procedures were approved by the Institutional Review Board of a major medical university.

Measures

Sociodemographics—Participants provided information about their sociodemographic characteristics (e.g., age dichotomized by median split at 19 years, ethnicity dichotomized as White vs. minority, on-campus vs. off-campus housing).

Disclosure History—Participants were asked, "Has 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?" and this was referenced as a FR disclosure. They were also asked, "Has 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?" and this was referenced as a DAFR/IR disclosure. Following both of these questions, participants were asked if they encouraged the rape victim to report the assault to "the police or other authorities." Of note, these experiences were not mutually exclusive; women could report receiving both a disclosure of FR and a disclosure of DAFR/IR.

Life Experiences—Participants were asked to provide information about their own history of sexual assault (see McCauley, Ruggiero, Resnick, Conoscenti, & Kilpatrick, 2009 and Zinzow et al., 2010 for further information regarding this assessment), as well as their mental health history. Symptoms of posttraumatic stress disorder (PTSD) and major depression were assessed using the modules from the original NWS, which are shown to be psychometrically sound with respect to both reliability and validity (Kilpatrick et al., 2003; Resnick, Kilpatrick, Dansky, Saunders, & Best, 1993). Participants' responses were examined to determine whether or not they ever met criteria for either of these disorders consistent with the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed.; DSM-IV; American Psychiatric Association [APA], 1994); functional impairment in one or more important domains was required. An additional query assessed participants' receipt of mental health services for emotional concerns for any reason during their lifetime.

Participants were also asked about their past-year substance use using the assessment module from the NWS. More specifically, participants were asked whether they engaged in binge drinking (i.e., five or more drinks in one sitting, at least 12 times in the past year), marijuana use on four or more occasions in the past year, and illicit drug use (e.g., cocaine, club drugs) on four or more occasions in the past year. The cutoff point of four or more occasions of use was required to classify participants as engaging in nonexperimental illicit drug use, approximating the criteria for significant use included in the Diagnostic Interview Schedule (Kilpatrick, Acierno, Resnick, Saunders, & Best, 1997; Robins, Helzer, Cottler, & Goldring, 1988). Participants' responses were then evaluated to determine whether or not they met diagnostic criteria for substance abuse within the past year, consistent with the DSM-IV (APA, 1994). More specifically, if participants endorsed recurrent substance use despite problems in any of the following areas, they were classified as meeting substance abuse criteria: (a) failure to fulfill major role obligations at work, school, or home; (b) physically hazardous situations; (c) legal problems; or (d) social and interpersonal problems.

Statistical Analyses

Descriptive, bivariate, and multivariate analyses were used to describe disclosure recipients with respect to sociodemographic characteristics (e.g., race, socioeconomic status) and life experiences (e.g., personal sexual assault history, mental health history), and these domains were assessed with respect to two general outcomes: receipt of a disclosure and whether or not the support provider encouraged the victim to report the assault. This latter outcome was included to provide additional descriptive information about the disclosure experience, given the dearth of research in this area as well as the important role that informal support providers can play with respect to encouraging assault reporting (e.g., Kilpatrick et al., 2007; Patterson & Campbell, 2010) and the important role of reporting (Allen, 2007; Kilpatrick et al., 1992). Given that the FR and DAFR/IR groups were not mutually exclusive and a substantial proportion of participants reported receiving both types of disclosure (i.e., $r = .50$), both groups were combined for all analyses.

Results

Descriptive and Bivariate Analyses for Disclosure Recipients

Overall, 41.5% ($n = 827$) of women in the sample reported disclosure receipt. The average disclosure recipient was White (76.5%), older than 19 (51.4%), employed (61.7%), from a family with an annual household income greater than US\$60,000 (51.6%), unmarried (97.7%), an underclassman (58.2%), and lived on campus (87.3%). Nearly one quarter (23.0%) reported a personal history of rape, one-fifth (20.6%) met criteria for lifetime diagnosis of major depression, one quarter (25.9%) met criteria for a lifetime diagnosis of PTSD, one quarter (26.7%) met criteria for past-year substance abuse, and more than one third (38.9%) reported ever seeking professional help. With respect to substance use, one-fifth (21.4%) reported at least monthly binge drinking in the past year, 15.0% reported using marijuana four or more times in the last year, 2.3% reported using illicit drugs four or more times in the past year. Correlations between study variables are provided in Table 1.

Bivariate analyses revealed a statistically significant difference in age and employment status such that disclosure recipients were more likely to be older than 19 years and employed when compared to nonrecipients. Disclosure recipients were also more likely than nonrecipients to have a history of rape, lifetime PTSD, lifetime major depression, past-year substance abuse, engage in binge drinking at least monthly in the past year, and engage in nonexperimental marijuana and other illicit drug use in the past year, and to report ever seeking professional help. No other statistically significant associations were found for receipt of a rape disclosure. The results of these analyses are presented in Table 2.

Multivariate Analyses for Disclosure Recipients

Adjusted odds ratios for sociodemographic and life experience characteristics of encouragement of any type of rape reporting are presented in Table 3, along with the results of a logistic regression including sociodemographic (i.e., age and employment) and personal history variables as predictors of disclosure receipt. The logistic regression analysis including a history of PTSD, major depression, substance abuse, marijuana use, other illicit drug use, binge drinking, sexual assault, and seeking professional help, controlling for significant sociodemographic variables (i.e., age, employment status), was conducted with respect to receipt of a rape disclosure. Results revealed that being employed, ever meeting PTSD criteria, binge drinking at least monthly in the past year, substance abuse in the past year, ever experiencing sexual assault, and ever seeking professional help were significantly positively associated with receiving any rape disclosure.

Descriptive and Bivariate Analyses for Encouragement to Report Rape to Authorities

An overwhelming majority, 72% of recipients ($n = 597$), reported encouraging the victim to report her rape to authorities. The average encourager was White (77.2%), older than 19 (52.3%), employed (61.5%), from a family with an annual income greater than US\$60,000 (50.8%), unmarried (98.0%), an underclassman (56.6%), and lived on campus (86.8%). Almost one third (29.1%) met criteria for lifetime PTSD, 20.9% met criteria for lifetime major depression, and more than one quarter (27.5%) met criteria for past-year substance abuse. With respect to past-year substance use, 20.8% reported at least monthly binge

drinking, 13.4% reported nonexperimental marijuana use, and 1.3% reported nonexperimental other illicit drug use. Nearly one quarter (23.8%) reported a history of rape, and more than 41.0% reported ever seeking professional help.

Those who encouraged any reporting to authorities were more likely to be older than 19 and employed when compared to those who did not encourage victim reporting. Participants who encouraged any type of reporting were more likely to have their own rape histories, meet lifetime criteria for PTSD, meet lifetime criteria for major depression, meet past-year substance abuse criteria, engage in at least monthly binge drinking in the past year, engage in nonexperimental marijuana use in the past year, and have ever sought professional help. The results of these analyses are presented in Table 2.

Multivariate Analyses for Encouragement to Report Rape to Authorities

Adjusted odds ratios for sociodemographic and life experience characteristics of encouragement of any type of rape reporting are presented in Table 3, along with the results of a logistic regression including sociodemographic (i.e., age and employment) and personal history variables as predictors of encouragement to report any type of rape to authorities. This analysis revealed that being employed, meeting lifetime criteria for PTSD, meeting past-year substance abuse criteria, engaging in binge drinking at least monthly in the past year, having a personal history of rape, and ever seeking professional help were significantly positively associated with encouragement to report any type of rape. Ever meeting criteria for major depression was significantly negatively associated with encouragement to report any type of rape.

Discussion

Rape is prevalent among college women and many victims disclose their rape to friends and family rather than, or in addition to, reporting to authorities (e.g., Fisher et al., 2003; Starzynski, Ullman, Filipas, & Townsend, 2005). Supportive responses to disclosure and encouragement of reporting by disclosure recipients may have beneficial effects on victim adjustment and post-rape outcomes (Ahrens et al., 2007; Andrews et al., 2003). Despite disclosure recipients' potential for positively affecting victim recovery, there is a paucity of empirical information regarding college women's experiences with receiving rape disclosures. The current study examined: (a) the prevalence of rape disclosure receipt among a national sample of college women, (b) sociodemographic and personal history characteristics related to the receipt of rape disclosure, and (c) characteristics associated with the encouragement of the victim to formally report her rape.

A significant portion, 41.5%, of college women reported receiving a rape disclosure. This prevalence of disclosure receipt is slightly higher than those found in smaller, nonnational samples of college students (e.g., Banyard et al., 2010; Dunn et al., 1999). Disclosure recipients were, by and large, socio-demographically representative of the general female student population at 4-year colleges and universities.

It is promising that over two thirds of disclosure recipients stated that they encouraged reporting the rape to authorities, given the unique benefits of reporting (e.g., identifying

perpetrators, informing crime rates). The current study was limited by its lack of a more comprehensive assessment of whether this encouragement prompted a true report and the outcome of those reports; however, this would be a logical extension of the current study and should be considered in future research. Recipients' high rate of encouragement of reporting may be reflective of recipients' prior personal experiences with criminal reporting or interactions with and perceptions of authorities; however, data detailing the recipients' prior legal experiences, or the extent and result of the encouragement of reporting, were not collected. Prior research with disclosure recipients indicates that most felt that they were supportive of the victim (Banyard et al., 2010), and conversely, more disclosing victims reported that their informal disclosure recipient provided a positive and supportive response, as opposed to a negative response (Ahrens et al., 2007). Research with rape victims has identified the mobilization of formal support, including the encouragement and facilitation of reporting, as a positive reaction from disclosure recipients (Ahrens et al., 2007).

Yet, despite the information gained from the gestalt of research in this area, the measurement of "encouragement of reporting" has continued to lack assessment of specific behaviors—such as provision of contact numbers, accompaniment of the victim during the reporting process, and provision of information regarding the criminal justice system. Assessing the behavioral extent of encouragement to report, as well as actual reporting behaviors, is an avenue for future research. Given that the study did not clarify who may be included as "other authorities," and encouragement to report to other individuals was not assessed, these topics should be clarified in future research. Further, it must be acknowledged that victims may choose to not report, despite available encouragement and social support. This decision may be influenced by a number of factors, including victims' beliefs that the perpetrator will not be apprehended and prosecuted, or that the police do not need to be bothered with a report of the rape (e.g., it is a private matter, worry about being blamed, insufficient evidence of the rape; Allen, 2007; Fisher et al., 2003). These victim concerns documented in prior research underscore the importance of creating more supportive environments for victims to help to address some of these concerns.

Disclosure recipients were significantly more likely than nonrecipients to have had a rape experience themselves, report regular binge drinking behavior, meet criteria for past-year substance abuse, have a lifetime history of PTSD and have sought help for emotional concerns. Given that the majority of disclosing victims report doing so as a means of seeking support (Ahrens et al., 2007), the finding that disclosure recipients were more likely than nonrecipients to have their own rape, substance use, and mental health histories may reflect a decision to disclose to someone whom they know, or perceive, has had similar experiences. In fact, some of the disclosure experiences captured by our assessment may have been precipitated by a disclosure by the respondent. It may also be possible that these variables are reflective of a shared high-risk environment or lifestyle that includes heavy drinking or use of illicit substances. There is currently no literature that directly speaks to rape victims' selection process for disclosure recipients. The inclusion of a wider range of potential correlates of disclosure receipt and encouragement of reporting (e.g., social involvement), as well as qualitative data regarding the context of disclosure, are important for continuing to expand our knowledge regarding the process of disclosure, including the process by which victims select disclosure recipients.

Prior research indicates that receipt of a rape disclosure can be an emotionally difficult experience for women—leading to feelings of anger at society and/or the perpetrator, distress, and increased personal safety concerns—with emotional distress being significantly greater among disclosure recipients with their own victimization history (Banyard et al., 2010). The current study did not specifically assess disclosure recipients' emotional response to the disclosure, although such research is needed as this area of research continues to develop. Further, there is a dearth of information related to the impact of rape disclosure on existing mental health problems (specifically, PTSD symptoms) experienced by recipients; this is also a viable target for further examination. Finally, although the time elapsed between the assault and disclosure was not assessed in this survey, it is important to include in future research, as this variable may also have an impact on both victims and those to whom they disclose.

Results from this study extend previous research among college women who have received a rape disclosure by: (a) providing national estimates of the prevalence of disclosure receipt and of those recipients' encouragement of formal reporting among this population, and (b) examining sociodemographic and personal history variables (i.e., mental health, substance use, trauma history, and service seeking) associated with disclosure receipt and encouragement of reporting. The relatively high numbers of women reporting receipt of a rape disclosure further highlight the importance of refinement, evaluation, and effective dissemination of psychoeducational interventions addressing appropriate responses to a sexual assault disclosure.

As an example, Banyard et al. (2004, 2007) developed and evaluated a sexual violence prevention program based on a community of responsibility model that has shown promising effects in its initial controlled trial. Participants in both the full (three 90-min psychoeducational sessions including role plays) and abbreviated (one 90-min psychoeducational session) prevention intervention demonstrated lower rape myth acceptance, as well as greater efficacy, knowledge, willingness to help victims, and appreciation of the “pros” of helping to prevent the rape by intervening in risky situations (Banyard et al., 2007). As initially presented by Banyard and colleagues (2004, 2007), the bystander education intervention did not specifically address appropriate responses to rape disclosure, nor did it address the role of informal support providers/ disclosure recipients in encouraging reporting of the assault and facilitating service connection.

However, it seems that disclosure recipients across settings would likely benefit from direct assistance in learning how to best respond to a rape disclosure, both for the victims' well-being, as well as their own. Recent data indicate that a notable portion (20%) of disclosure recipients felt that they did not know enough to be helpful or know what to do for the victim (Banyard et al., 2010), and a substantial number of disclosure recipients also reported distress regarding the disclosure experience (Ahrens & Campbell, 2000; Banyard et al., 2010). Thus, an intervention to raise awareness of potentially helpful and positive responses may create a more supportive environment for victims and may also benefit disclosure recipients by helping them to effectively manage their distress. Interventions may include a number of different components, including rape-related education, training in empathic listening skills, and information about coping skills and emotional self-management. Such

efforts may be particularly useful for individuals with their own victimization histories, given the additional difficulties this group may experience (Banyard et al., 2010). Although such efforts would likely benefit multiple populations (e.g., young women, police officers, crisis line workers), they are particularly applicable to the college population, given relatively high rates of sexual assault and disclosure receipt in this setting.

The current study is not without notable limitations in addition to the aforementioned targets for future research. All data included in this study were self-reported, introducing the potential for inaccuracy due to recall biases and the influence of social desirability, particularly for questions regarding encouragement of reporting. Second, the current study asked if women had “ever” received a rape disclosure, whereas other variables assessed both lifetime (e.g., PTSD, help-seeking) and past-year time frames (e.g., substance abuse). Further, all assessment was cross-sectional in nature. Therefore, the current study cannot make definitive statements regarding whether some independent variables preceded, coincided with, or occurred subsequent to (e.g., substance abuse), disclosure receipt—all statistically significant variables are correlates, and not predictors, of rape disclosure receipt. Third, only women were interviewed for the current study and were required to have a landline telephone, thus limiting the generalizability of findings by excluding college men and college women without landline telephone access (e.g., cell phone only). Finally, as noted previously, several outcomes of interest were broadly measured, such as encouragement of reporting, and should be assessed with more behaviorally specific measures, as well as with additional variables that may impact one’s likelihood of disclosure receipt in subsequent research.

In sum, there is a notable prevalence of sexual assault and rape disclosure receipt among college women, and previous research shows that disclosure recipients do not always feel prepared to respond supportively, and may be personally distressed by the experience. Thus, it is important to continue research in this understudied area in order to learn more about the experience of disclosure recipients, with an aim to develop and evaluate interventions to improve informal support provision for both the victim and the disclosure recipient.

Acknowledgments

Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This study is supported by National Institute of Justice Grant #2005-WG-BX-0006 (PI: Kilpatrick) and National Institute of Mental Health Grant #T32MH18869 (PI: Kilpatrick). Views expressed herein are those of the authors and do not necessarily reflect those of NIJ or respective institutions.

Biographies

Lisa A. Paul, PhD, is an Assistant Professor at Northern Illinois University. Her primary research interests are in trauma, including sexual assault disclosure and the development and dissemination of empirically supported and theoretically grounded online interventions.

Kate Walsh, PhD, is a postdoctoral fellow in the Department of Epidemiology at Columbia University. Her research interests include risk factors for and outcomes of sexual trauma, including PTSD, substance abuse, sexual risk behaviors, and emotion dysregulation.

Jenna L. McCauley, PhD, is assistant professor with the Department of Psychiatry and Behavioral Sciences at the Medical University of South Carolina. Her research focuses on trauma and substance misuse across the lifespan, as well as the development and dissemination of interventions addressing these problems.

Kenneth J. Ruggiero, PhD, is associate professor of Psychiatry at MUSC's National Crime Victims Research and Treatment Center. He received his BA from SUNY Buffalo and MA and PhD from West Virginia University. He is principal investigator on four ongoing federally funded grants. One is funded by the National Institute of Mental Health to develop and evaluate a brief Web-based Intervention for disaster-affected adolescents and families using randomized controlled trial designs with population-based samples. The others are Department of Homeland Security and VA Merit grants to develop online resources to support the mental health of firefighters and Veterans.

Heidi S. Resnick, PhD, is professor of Clinical Psychology at the Medical University of South Carolina and a senior investigator at the National Crime Victims Research and Treatment Center. She has conducted epidemiological and treatment outcome research related to prevalence, characteristics, behavioral and mental health impact of sexual assault and other traumatic events.

Dean G. Kilpatrick, PhD, is a distinguished university professor of Clinical Psychology at the Medical University of South Carolina who has achieved international recognition for his work in the area of traumatic stress with particular emphasis on victims of sexual assault, other violent crimes, disasters, and terrorism. He is director of the National Crime Victims Research and Treatment Center as well as of the Charleston Consortium Clinical Psychology Internship Program. He also serves as the vice-chair for research in the Department of Psychiatry and Behavioral Sciences. He has received several national awards for his work.

References

- Abbey A. Alcohol-related sexual assault: A common problem among college students. *Journal of Studies on Alcohol*. 2002; 14:118–128.
- Ahrens CE, Campbell R. Assisting rape victims as they recover from rape: The impact on friends. *Journal of Interpersonal Violence*. 2000; 15:959–986.
- Ahrens CE, Campbell R, Ternier-Thames NK, Wasco SM, Sefl T. Deciding whom to tell: Expectations and outcomes of rape survivors' first disclosures. *Psychology of Women Quarterly*. 2007; 31:38–49.
- Allen WD. The reporting and underreporting of rape. *Southern Economic Journal*. 2007; 73:623–641.
- American Psychiatric Association. *Diagnostic and statistical manual of mental disorders*. 4. Washington, DC: Author; 1994.
- Amstadter AB, Zinzow HM, McCauley JL, Strachan M, Ruggiero KJ, Resnick HS, Kilpatrick DG. Prevalence and correlates of service utilization and help seeking in a national college sample of rape victims. *Journal of Anxiety Disorders*. 2010; 24:900–902. [PubMed: 20620018]

- Andrews B, Brewin CR, Rose S. Gender, social support, and PTSD in victims of violent crime. *Journal of Traumatic Stress*. 2003; 16:421–427. [PubMed: 12895025]
- Banyard VL, Moynihan MM, Plante EG. Sexual violence prevention through bystander education: An experimental evaluation. *Journal of Community Psychology*. 2007; 35:463–481.
- Banyard VL, Moynihan MM, Walsh WA, Cohn ES, Ward S. Friends of survivors: The community impact of unwanted sexual experiences. *Journal of Interpersonal Violence*. 2010; 25:242–256. [PubMed: 19506165]
- Banyard VL, Plante EG, Moynihan MM. Bystander education: Bringing a broader community perspective to sexual violence prevention. *Journal of Community Psychology*. 2004; 32:61–79.
- Dunn PC, Vail-Smith K, Knight SM. What date/acquaintance rape victims tell others: A study of college student recipients of disclosure. *Journal of American College Health*. 1999; 47:213–219. [PubMed: 10209915]
- Filipas HH, Ullman SE. Social reactions to sexual assault victims from various support sources. *Violence and Victims*. 2001; 16:673–692. [PubMed: 11863065]
- Fisher, BS.; Cullen, FT.; Turner, MG. The sexual victimization of college women. Washington, DC: U.S. Department of Justice, National Institute of Justice; 2000.
- Fisher BS, Daigle LE, Cullen FT, Turner MG. Reporting sexual victimization to the police and others: Results from a national-level study of college women. *Criminal Justice and Behavior*. 2003; 30:6–38.
- George LK, Winfield I, Blazer DG. Sociocultural factors in sexual assault: Comparison of two representative samples of women. *Journal of Social Issues*. 1992; 48:105–125.
- Gidycz CA, Orchowski LM, King CR, Rich CL. Sexual victimization and health-risk behaviors: A prospective analysis of college women. *Journal of Interpersonal Violence*. 2008; 23:744–763. [PubMed: 18272723]
- Kilpatrick DG, Acierno R, Resnick HS, Saunders BE, Best CL. A 2-year longitudinal analysis of the relationships between violent assault and substance use in women. *Journal of Consulting and Clinical Psychology*. 1997; 65:834–847. [PubMed: 9337502]
- Kilpatrick, DG.; Edmunds, CN.; Seymour, AK. Rape in America: A report to the nation. Arlington, VA: National Victim Center and Medical University of South Carolina; 1992.
- Kilpatrick, DG.; Resnick, HS.; Ruggiero, KJ.; Conoscenti, LM.; McCauley, J. Drug-facilitated, incapacitated, and forcible rape: A national study. Washington, DC: U.S. Department of Justice, National Institute of Justice; 2007. NCJ 219181
- Kilpatrick DG, Ruggiero KJ, Acierno R, Saunders BE, Resnick HS, Best CL. Violence and risk of PTSD, major depression, substance abuse/dependence, and comorbidity: Results from the national survey for adolescents. *Journal of Consulting and Clinical Psychology*. 2003; 71:692–700. [PubMed: 12924674]
- Krebs, CP.; Lindquist, CH.; Warner, TD.; Fisher, BS.; Martin, SL. The campus sexual assault (CSA) study. 2007. Retrieved from national criminal justice reference website: <http://www.ncjrs.gov/pdffiles1/nij/grants/221153.pdf>
- McCauley JL, Ruggiero KJ, Resnick HS, Conoscenti LM, Kilpatrick DG. Forcible, drug-facilitated, and incapacitated rape in relation to substance use problems: Results from a national sample of college women. *Addictive Behaviors*. 2009; 34:458–462. [PubMed: 19162407]
- Messman-Moore TL, Coates AA, Gaffey KJ, Johnson CF. Sexuality, substance use, and susceptibility to victimization: Risk for rape and sexual coercion in a prospective study of college women. *Journal of Interpersonal Violence*. 2008; 23:1730–1746. [PubMed: 18349349]
- Patterson D, Campbell R. Why rape survivors participate in the criminal justice system. *Journal of Community Psychology*. 2010; 38:191–205.
- Paul, LA.; Walsh, K.; McCauley, JL.; Ruggiero, KJ.; Resnick, HS.; Kilpatrick, DG. Characteristics and life experiences associated with receiving a rape disclosure within a national telephone household probability sample of women. 2013. Manuscript submitted for publication
- Rennison, CM. Rape and sexual assault: Reporting to police and medical attention, 1992–2000. 2002. Retrieved from Bureau of Justice Statistics website: <http://bjs.ojp.usdoj.gov/content/pub/pdf/rsarp00.pdf>

- Resnick HS, Kilpatrick DG, Dansky BS, Saunders BE, Best CL. Prevalence of civilian trauma and posttraumatic stress disorder in a representative national sample of women. *Journal of Consulting and Clinical Psychology*. 1993; 61:984–991. [PubMed: 8113499]
- Robins, L.; Helzer, J.; Cottler, L.; Goldring, E. NIMH diagnostic interview schedule. St. Louis, MO: Washington University Press; 1988. (Version 3, revised)
- Skogan WG. Citizen reporting of crime: Some national panel data. *Criminology*. 1976; 13:535–549.
- Starzynski LL, Ullman SE, Filipas HH, Townsend SM. Correlates of women's sexual assault disclosure to informal and formal support sources. *Violence and Victims*. 2005; 20:417–432. [PubMed: 16250409]
- Tjaden, P.; Thoennes, N. Full report of the prevalence, incidence, and consequences of violence against women: Findings from the National Violence Against Women Survey. Washington, DC: Centers for Disease Control and National Institute of Justice; 2000. (NCJ 183781)
- Ullman SE. Social reactions, coping strategies, and self-blame attributions in adjustment to sexual assault. *Psychology of Women Quarterly*. 1996; 20:505–526.
- Ullman SE. Social support and recovery from sexual assault: A review. *Aggression and Violent Behavior*. 1999; 4:343–358.
- Ullman SE. Psychometric characteristics of the social reactions questionnaire: A measure of reactions to sexual assault victims. *Psychology of Women Quarterly*. 2000; 24:257–271.
- Ullman, SE. Talking about sexual assault: Society's response to survivors. Washington, DC: American Psychological Association; 2010.
- Ullman SE, Brecklin LR. Sexual assault history, PTSD, and mental health service seeking in a national sample of women. *Journal of Community Psychology*. 2002; 30:261–279.
- Ullman SE, Filipas HH. Correlates of formal and informal support seeking in sexual assault victims. *Journal of Interpersonal Violence*. 2001a; 16:1028–1047.
- Ullman SE, Filipas HH. Predictors of posttraumatic stress disorder symptom severity and social reactions in sexual assault victims. *Journal of Traumatic Stress*. 2001b; 14:369–389. [PubMed: 11469163]
- Wolitzky-Taylor KB, Resnick HS, McCauley JL, Amstadter AB, Kilpatrick DG, Ruggiero KJ. Is reporting of rape on the rise? A comparison of women with reported versus unreported rape experiences in the national women's study-replication. *Journal of Interpersonal Violence*. 2011; 26:807–832. [PubMed: 20522886]
- Zinzow HM, Resnick HS, McCauley JL, Amstadter AB, Ruggiero KJ, Kilpatrick DG. The role of rape tactics in risk for posttraumatic stress disorder and major depression: Results from a national sample of college women. *Depression and Anxiety*. 2010; 27:708–715. [PubMed: 20602431]

Table 1

Correlations Between Study Variables.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Received disclosure	—	.78***	.03	.04*	.08***	-.01	.03	.04	.10***	.17***	.15***	.16***	.14***	.10***	.07**	.27***
2. Encouraged reporting		—	.03	.06*	.06**	-.02	.04	.04	.09***	.19***	.13***	.15***	.10***	.05*	.002	.22***
3. Race			—	-.07**	.05*	-.01	.02	.02	-.06**	-.04	.06**	.07**	.13***	.04	.05*	.02
4. Age				—	.04	.36***	.39***	.50***	.08***	.07***	-.04	.11***	-.02	-.01	-.02	.14***
5. Employed					—	-.02	.21***	.05*	.02	.03	-.002	.03	.007	-.007	-.02	.03
6. Married						—	.10***	.36**	-.01	.01	-.05*	.04	-.001	-.03	-.02	.05*
7. Upperclass							—	.29***	.01	.01	-.05*	.04	.001	-.06**	.005	.03
8. Campus								—	.07**	.06**	-.005	.09**	.01	.01	.02	.13***
9. Depression									—	.52***	.10***	.30***	.02	.11***	.06**	.22***
10. PTSD										—	.13***	.30***	.04	.06**	.03	.27***
11. Substance abuse											—	.08**	.32***	.30***	.15***	.20***
12. Help seeking												—	.003	.12***	.05*	.18***
13. Binge drinking													—	.32***	.16***	.15***
14. Marijuana use														—	.29***	.19***
15. Illicit drug use															—	.09***
16. Rape																—

Note. PTSD = Symptoms of posttraumatic stress disorder.

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

Table 2

Socio Demographic and Life Experiences Associated With Disclosure Receipt and Reporting Encouragement.

	Disclosure recipient		Encouraged reporting	
	%Yes (n)	%No (n)	%Yes (n)	%No (n)
Race	$\chi^2 = 1.8, p = .18$		$\chi^2 = 2.2, p = .14$	
White	76.5% (633)	73.9% (867)	77.2% (461)	74.1% (1039)
Non-White	23.5% (194)	26.1% (306)	22.8% (136)	25.9% (364)
Age	$\chi^2 = 7.3, p < .01$		$\chi^2 = 6.8, p < .01$	
19 and younger	48.6% (402)	54.7% (642)	47.7% (285)	54.1% (759)
Older than 19	51.4% (425)	45.3% (531)	52.3% (312)	45.9% (644)
Year in School	$\chi^2 = 1.3, p = .26$		$\chi^2 = 3.3, p = .07$	
Fresh/sophomore	58.2% (481)	60.7% (712)	43.4% (259)	39.1% (548)
Junior/senior	41.8% (346)	39.3% (461)	56.6% (338)	60.9% (855)
Family income	$\chi^2 = 1.2, p = .27$		$\chi^2 = .007, p = .93$	
<US\$60,000	43.4% (328)	46.1% (474)	44.8% (246)	45.0% (556)
>US\$60,000	56.6% (427)	53.9% (555)	55.2% (303)	55.0% (679)
Residence	$\chi^2 = 3.2, p = .08$		$\chi^2 = 3.5, p = .06$	
On campus	87.3% (722)	89.9% (1054)	86.8% (518)	89.7% (1258)
Off campus	12.7% (105)	10.1% (119)	13.2% (79)	10.3% (145)
Marital status	$\chi^2 = .07, p = .80$		$\chi^2 = .56, p = .45$	
Married	2.3% (19)	2.5% (29)	2.0% (12)	2.6% (36)
Unmarried	97.7% (808)	97.5% (1141)	98.0% (585)	97.4% (1364)
Employment	$\chi^2 = 12.5, p < .001$		$\chi^2 = 6.9, p < .001$	
At least part-time	61.7% (510)	53.7% (629)	61.5% (367)	55.1% (772)
Unemployed	38.3% (317)	46.3% (542)	38.5% (230)	44.9% (629)
Rape history	$\chi^2 = 141.4, p < .001$		$\chi^2 = 99.1, p < .001$	
Yes	23.0% (190)	5.1% (60)	23.8% (142)	7.7% (108)
No	77.0% (637)	94.9% (1113)	76.2% (455)	82.3% (1295)
Lifetime PTSD	$\chi^2 = 59.3, p < .001$		$\chi^2 = 71.6, p < .001$	
Yes	25.9% (214)	12.4% (146)	29.1% (174)	13.3% (186)
No	74.1% (613)	87.6% (1027)	70.9% (423)	86.7% (1217)
Lifetime depression	$\chi^2 = 21.3, p < .001$		$\chi^2 = 15.1, p < .001$	
Yes	20.6% (170)	12.9% (151)	20.9% (125)	14.0% (196)
No	79.4% (657)	87.1% (1022)	79.1% (472)	86.0% (1207)
Past-year substance abuse	$\chi^2 = 42.6, p < .001$		$\chi^2 = 31.5, p < .001$	
Yes	26.7% (221)	14.9% (175)	27.5% (164)	16.5% (232)
No	73.3% (606)	85.1% (998)	72.5% (433)	83.5% (1171)
Binge drinking	$\chi^2 = 40.7, p < .001$		$\chi^2 = 19.3, p < .001$	
Yes	22.0% (177)	11.3% (130)	21.2% (124)	13.3% (183)
No	78.0% (629)	88.7% (1020)	78.8% (460)	86.7% (1189)
Marijuana use	$\chi^2 = 19.9, p < .001$		$\chi^2 = 4.0, p < .05$	

	Disclosure recipient		Encouraged reporting	
	%Yes (n)	%No (n)	%Yes (n)	%No (n)
Yes	15.0% (124)	8.6% (101)	13.4% (80)	10.3% (145)
No	85.0% (702)	91.4% (1072)	86.6% (516)	89.7% (1258)
Illicit drug use	$\chi^2 = 11.0, p < .001$		$\chi^2 = .01, p = .92$	
Yes	2.3% (19)	.6% (7)	1.3% (8)	1.3% (18)
No	97.7% (807)	99.4% (1166)	98.7% (588)	98.7% (1385)
Help seeking	$\chi^2 = 49.8, p < .001$		$\chi^2 = 46.5, p < .001$	
Yes	38.9% (322)	24.2% (284)	41.0% (245)	25.7% (361)
No	61.1% (505)	75.8% (889)	59.0% (352)	74.3% (1042)

Note. PTSD = Symptoms of posttraumatic stress disorder.

Table 3
Logistic Regression Analyses Predicting Any Disclosure Receipt or Encouragement of Reporting.

	Receipt of disclosure				Encouragement to report			
	Est.	SE	OR	95% CI	Est.	SE	OR	95% CI
Age (above 19 years)	0.16	.10	1.2	0.96–1.4	0.16	.11	1.2	0.95–1.4
Employment (employed)	0.28**	.10	1.3	1.1–1.6	0.22*	.11	1.2	1.0–1.5
PTSD (ever)	0.51**	.15	1.7	1.2–2.2	0.69***	.15	2.0	1.5–2.7
Major depression (ever)	–0.19	.16	0.82	0.60–1.1	–0.35*	.17	0.71	0.51–.98
Substance abuse (past year)	0.32*	.13	1.4	1.1–1.8	0.38**	.14	1.5	1.1–1.9
Drug use (4+ past year)	0.93	.55	2.5	0.87–7.5	–0.40	.49	0.67	0.26–1.7
Marijuana use (4+ past year)	0.01	.17	1.0	0.72–1.4	–0.18	.18	0.84	0.59–1.2
Binge drinking (12+ times past year)	0.53***	.14	1.7	1.3–2.2	0.36*	.15	1.4	1.1–1.9
Sexual assault (ever)	1.3***	.17	3.8	2.7–5.2	1.00***	.15	2.7	2.0–3.7
Sought professional help (ever)	0.45***	.11	1.6	1.3–2.0	0.47***	.12	1.6	1.3–2.0

Note. PTSD = Symptoms of posttraumatic stress disorder.

*
 $p < .05$.

**
 $p < .01$.

 $p < .001$.