

Still Second Class: Sexual Harassment of Graduate Students

Psychology of Women Quarterly
2016, Vol. 40(3) 364-377
© The Author(s) 2016
Reprints and permission:
sagepub.com/journalsPermissions.nav
DOI: 10.1177/0361684316644838
pwq.sagepub.com



Marina N. Rosenthal¹, Alec M. Smidt¹, and Jennifer J. Freyd¹

Abstract

We surveyed 525 graduate students (61.7% females and 38.3% males) regarding their exposure to sexual and gender-based harassing events. Thirty-eight percent of female and 23.4% of male participants self-reported that they had experienced sexual harassment from faculty or staff; 57.7% of female and 38.8% of male participants reported they had experienced sexual harassment from other students. We explored the relation between sexual harassment and negative outcomes (trauma symptoms, campus safety, and institutional betrayal) while also considering associations with other types of victimization (sexual assault, stalking, and dating violence) during graduate school. Our results update and extend prior research on sexual harassment of graduate students; graduate-level female students continue to experience significantly more sexual harassment from faculty, staff, and students than their male counterparts, and sexual harassment is significantly associated with negative outcomes after considering other forms of victimization. Leaders in the academic community and therapists can apply these findings in their work with sexually harassed students to destigmatize the experience, validate the harm, and work toward preventing future incidents. A podcast conversation with the author of this article is available on PWQ's website at <http://pwq.sagepub.com/site/misc/Index/Podcasts.xhtml>

Keywords

sexual harassment, sex bias/sexism, education, college and professional

Many female graduate students experience sexual harassment from fellow students and/or faculty/staff; prevalence rates for sexual harassment in graduate education have remained relatively consistent for several decades. McKinney, Olson, and Satterfield (1988) found that 35% of female graduate students had experienced sexual harassment at their current institution (in comparison to 9% of male graduate students surveyed). Fitzgerald and colleagues (1988a) similarly reported that as many as 30% of graduate women experienced “unwelcome seductive behavior” from their professors. High rates of student-reported victimization correspond with reports from faculty members; Fitzgerald, Weitzman, Gold, and Omerod (1988b) found that 37% of surveyed male faculty members indicated attempting to initiate a personal or sexual relationship with a student. Cortina, Swan, Fitzgerald, and Waldo (1994) found even higher rates of sexual harassment among female graduate students in their sample, with 53% indicating at least one sexually harassing behavior from an instructor or professor. Cortina et al. (1994) also found that the likelihood of sexual harassment increased over time, and students who had been enrolled longer were more likely to have experienced harassment.

Sexual harassment victimization is typically measured using behavioral scales, such as the Sexual Experiences Questionnaire (SEQ; Fitzgerald et al., 1988a) that ask participants to identify whether they have experienced specific

types of harassment (e.g., unwanted discussion of personal or sexual matters or crude sexual remarks). In two different samples, Fitzgerald and colleagues (1988) found that the majority of female graduate students who experience one or more types of sexual harassment did not label their experiences as sexual harassment. While 19.6% of graduate women in the first sample and 27% of graduate women in the second sample were recipients of “unwanted sexual attention,” only 7.5% of the first sample and 15.9% of the second sample responded affirmatively when asked directly whether they had been sexually harassed. Cairns and Hatt (1995) revealed similar rates in response to the question “Have you been sexually harassed during your graduate program?” They reported 9.3% ($n = 45$) of graduate women and 2.4% ($n = 11$) of graduate men responded affirmatively. This gap—between the number of students who respond affirmatively to behavioral items about sexual harassment and the number of students who respond affirmatively when asked whether they have been sexually harassed—may reflect a

¹ Department of Psychology, University of Oregon, Eugene, OR, USA

Corresponding Author:

Marina N. Rosenthal, Department of Psychology, University of Oregon, 1227 University of Oregon, Eugene, OR 97403, USA.
Email: mnr@uoregon.edu

lack of understanding by students on what constitutes sexual harassment or may be the consequence of underreporting.

Although some studies include male participants (Cairns & Hatt, 1995; McKinney, Olson, & Satterfield, 1988), other research studies exclude men from analyses or ask only about men's sexual harassment perpetration experiences. Yet men's experiences of and reactions to sexual harassment may differ in important ways from women's. For example, men may experience sexual harassment (that potentially challenges their masculinity) as particularly anxiety-provoking (Berdahl, Magley, & Waldo, 1996). In addition, while women report mostly male-perpetrated sexual harassment, men tend to report both male and female perpetrators (Stockdale, Visio, & Batra, 1999). Although women are sexually harassed more frequently, men and women both experience negative posttraumatic outcomes after sexual harassment; Street, Gradus, and Stafford (2007) found that sexual harassment significantly predicts depression, posttraumatic stress disorder symptoms, and diminished general mental health for both men and women.

Several studies look more closely at sexual harassment in specific types of graduate programs. Schneider, Baker, and Stermac (2002) found that 75% of female graduates and 68% of male graduates of a doctoral program in psychology had experienced at least one type of sexual harassment from a male faculty member during graduate school. Thirty-two percent of female graduates and 43% of male graduates had experienced at least one type of sexual harassment from a female faculty member (Schneider, Baker, & Stermac, 2002). In a different study, responses from 1,314 fourth-year medical students revealed that 10.2% of male and 27.5% of female medical students surveyed had personally experienced gender discrimination or sexual harassment during their residency selection process (Stratton, McLaughlin, Witte, Fosson, & Nora, 2005). Shinsako, Richman, and Rospenda (2001) compared the sexual harassment experiences of medical residents to graduate students (from a variety of disciplines) and found that 38% of medical residents experienced sexual harassment in their workplace, in comparison to 54.9% of graduate students. Female medical students reported the highest rates of harassment. Although this side-by-side comparison is intriguing, Shinsako et al. (2001) do not provide any information about who perpetrated students' experiences of sexual harassment. Perpetrators may have been fellow students, supervisors, or even patients in the case of the medical residents.

Most comprehensive existing research on the prevalence of sexual harassment in graduate education was conducted more than 20 years ago, does not include male participants (Fitzgerald et al., 1988; McKinney et al., 1988), or fails to use behavioral questions to assess harassment (Cairns & Hatt, 1995). On the other hand, some studies (Schneider et al., 2002; Stratton et al., 2005) look closely at experiences within specific disciplines but are inconsistent in their methodology or lack important details about their definition of harassment (e.g., Shinsako, Richman, & Rospenda, 2001). Most previous research measures faculty-perpetrated harassment and not

harassment by students. Additional research is needed to assess whether sexual harassment rates remain the same for women, whether men's experiences are similar to women's, and how common student harassment is in comparison to, and in addition to, faculty harassment.

Consequences of Sexual Harassment

Avina and Donohue (2002) show that sexual harassment may predict posttraumatic stress symptoms and decreased well-being. Sexual harassment frequency is positively correlated with the severity of posttraumatic symptoms (i.e., flashbacks, nightmares, hyperarousal; Ho, Dinh, Bellefontaine, & Irving, 2012; Palmieri & Fitzgerald, 2005) and also with other outcomes including depression, physical symptoms (i.e., nausea or sleeplessness), and overall psychological distress (Ho et al., 2012; McDermut, Haaga, & Kirk, 2000; Roosmalen & McDaniel, 2008). Moreover, posttraumatic symptoms linked to sexual harassment may persist even when controlling for additional trauma history. Stockdale, Logan, and Weston (2009) found that sexual harassment significantly predicted posttraumatic symptoms, even after statistically controlling for experiences of child abuse, intimate partner violence, and other traumatic events. McDermut, Haaga, and Kirk (2000) also found that sexual harassment remained a significant predictor of general psychological distress after controlling for other trauma. However, McDermut and colleagues' findings (2000) are limited by their small sample (total $N = 69$; harassed $n = 53$). To our knowledge, Stockdale and colleagues (2009) offer the only robust evidence that sexual harassment predicts posttraumatic symptoms while accounting for other forms of trauma. Yet, because Stockdale and colleagues' sample is drawn from a larger study of health outcomes among victims of domestic violence (a particularly high trauma population), their findings cannot be generalized to other groups.

In addition to the negative psychological and physical correlates of sexual harassment, students harassed in academic contexts experience negative educational outcomes. Cortina et al. (1994) found that sexual harassment predicted poorer student perceptions of and experiences with faculty and advisors, lower ratings of fairness on campus (e.g., feeling unable to speak up in class), depleted confidence in academic competence, and lower ratings of perceived respect on campus. Fitzgerald and colleagues (1988a) also suggest that the threat of sexual harassment may be associated with decreases in students' abilities to complete their degree requirements; 21% of female graduate student participants had avoided enrolling in a course in order to circumvent a professor of concern. Similarly, 30% of McKinney and colleagues' (1988) harassed graduate student participants reported avoiding or dropping a class as a strategy to evade a harassing professor. McKinney et al. reported that 9% of graduate students who experienced harassment from a professor switched mentors to sidestep further harassment.

Furthermore, 45% of female medical students in a 2005 study felt that sexual harassment influenced their choice of a medical specialty (Stratton et al., 2005). And finally, most students do not formally report experiences of sexual harassment—Fitzgerald and colleagues (1988a) found that only 3% of harassed students attempted to make a formal report of the incident; many thought they would not be believed or feared they would be labeled troublemakers.

Betrayal Trauma and Posttraumatic Outcomes

All trauma does not produce equal harm; Freyd's (1994) betrayal trauma theory posits that when the perpetrator of abuse is someone upon whom the victim depends for basic needs (e.g., a caregiver or partner), posttraumatic outcomes are worse than when abuse occurs without that added element of betrayal. Traumas perpetrated by someone who is close to or needed by the victim predict worse physical health (Goldsmith, Freyd, & DePrince, 2012), increased memory impairment (Freyd, DePrince, & Zurbriggen, 2001), heightened risk of revictimization (Gobin & Freyd, 2009), alexithymia, (Goldsmith et al., 2012), dissociation (Goldsmith et al., 2012), and depression (Martin, Cromer, DePrince, & Freyd, 2013), compared to traumas perpetrated by someone less close, such as a stranger or acquaintance. In short, betrayal exacerbates posttraumatic outcomes.

Smith and Freyd (2013) extended betrayal trauma theory to the context of larger institutions and reported that students experience worse psychological outcomes after being sexually assaulted when their institution (e.g., their university, their sorority, their residence hall) is nonresponsive to, or even complicit in, their assault. In the same sense that abuse by a partner or family member is a betrayal, assault within an institution of higher education is a violation of trust in the context of dependence. Women in Smith and Freyd's (2013) study who reported that their institution failed to prevent or respond to their assault reported heightened anxiety, dissociation, and trauma-specific sexual symptoms. To our knowledge, no previous research has explored students' experiences of institutional betrayal in connection with incidents of sexual harassment. In line with betrayal trauma theory (Freyd, 1994), power and dependence matter; as such, student harassment and faculty/staff harassment should be measured separately.

The Current Study

The current study had two specific aims. First, we sought to replicate previous findings (McDermut et al., 2000; Stockdale, Logan, & Weston, 2009) that sexual harassment predicts posttraumatic outcomes—even after accounting for other traumatic experiences—and to extend these findings to the context of graduate education. We hypothesized that both faculty/staff-perpetrated and student-perpetrated sexual harassment would be significantly associated with

posttraumatic symptoms after statistically controlling for sexual assault during graduate school, stalking during graduate school, and dating violence during graduate school. Second, we examined whether faculty/staff sexual harassment is uniquely associated with institutional betrayal. We hypothesized that faculty/staff sexual harassment would significantly predict unique variance in institutional betrayal in relation to other trauma during graduate school. Finally, we sought to explore the association between sexual harassment and graduate students' perceptions of their campus as a safe place. We predicted that students' experiences of both faculty/staff-perpetrated and student-perpetrated harassment would correlate with decreased perceptions of campus safety.

We limited our analyses in this report to graduate students. Although research on the sexual victimization of undergraduate women is currently burgeoning (e.g., Carey, Durney, Shepardson, & Carey, 2015; Cook, Swartout, Goodnight, Hipp, & Bellis, 2015; Orchowski & Gidycz, 2015; Warren, Swan, & Allen, 2015; Wigderson & Katz, 2015), research on the victimization of graduate students, male and female, is absent from recent studies. While undergraduates experience sexual harassment from both professors and other students, graduate students are in a potentially risky position for three reasons. First, some stay at the same university for a number of years (in the case of doctoral students, up to 6 or 7 years). Second, they may work in close proximity with faculty (collaborating on projects, publishing papers together, etc.). Third, graduate students are often highly dependent on a small number of faculty members in a way that undergraduates rarely are. These three factors are likely to place graduate students at unique risk of sexual harassment from superiors.

We chose to examine three main outcomes in this study: posttraumatic symptoms, institutional betrayal, and perceived safety on and around campus. The first two outcomes—posttraumatic symptoms and institutional betrayal—were included to replicate and extend previous research (Smith & Freyd, 2013; Stockdale et al., 2009). The third outcome—perceptions of campus safety—was added to assess the relation between victimization and a tangible aspect of students' daily lives—how safe they feel on campus. As many students need to be physically present on campus (for class, meetings, research, etc.), feeling unsafe at school is a barrier to pursuing their education. Our prediction, that sexual harassment would be negatively associated with campus safety while controlling for other victimization, is in line with institutional betrayal theory (Smith & Freyd, 2013). Although sexual harassment likely occurs in a dyadic context between a student and a professor, or a student and another student, these dyadic interactions may create a pervasive sense of vulnerability extending beyond one specific classroom or carrel in the library. We hypothesized that individual events of harassment would predict a decreased sense of safety on campus as a whole, not just in the proximity of a specific harasser.

Method

Participants

All participants in this study were students at a large, Pacific–Northwestern public university. Data in this report are based on a subset of the measures and the graduate student participants involved in a larger study including both undergraduate and graduate participants (The UO Sexual Violence and Institutional Betrayal Survey; Freyd, 2015).

To recruit graduate student participants, we obtained 2,000 student e-mails that were randomly selected by the Registrar from the population of graduate students who, at the time of data collection, had been continuously enrolled during the entire 2014–2015 academic year, were currently registered for classes, and were at least 18 years old. Data collection occurred in June 2015, and we anticipated a 20% response rate based on previous research on this campus with similar methodology (Gómez, Rosenthal, Smith, & Freyd, 2015). Of the 2,000 graduate students recruited for participation, 539 participated and provided valid and complete responses. Of these, 324 were female, 201 were male, 13 were genderqueer or transgender, and 1 did not provide a gender identification. Given the limited number of gender nonconforming graduate students, we were not able to compute adequate between-group comparisons, so we included only male- and female-identified participants in our analyses. The response rate was at least 31% for female graduate students and at least 21% for male graduate students (only including participants who passed the attention check); given that participation was cut off once we reached our predetermined number of participants, these rates may be underestimations.

Of this final sample of graduate students, 41.5% ($n = 218$) were master's students, 40.2% ($n = 211$) were doctoral students, and 13.3% ($n = 70$) were law students. Of the 218 master's students, 32.5% were seeking master of science degrees, 22.9% were seeking master of arts degrees, and 16% were seeking master of education degrees; the remaining master's students were seeking a variety of other degrees including master of architecture, master of fine arts, master of music, and master of public administration. Of the 211 doctoral students, 96.6% were seeking doctor of philosophy degrees, 1% were seeking doctor of music arts degrees, and 1.8% were seeking doctor of education degrees. Given the vast number of types of degrees available, we did not collect additional information beyond degree type. For example, students who stated that they would receive a master of education degree may have been enrolled in counseling, family, and human services; curriculum and teacher education; educational leadership; communication disorders and sciences; or a number of other programs.

The sample was relatively similar to the overall graduate population at this university. Approximately 48% of graduate students on campus are master's students, approximately 36% are doctoral students, and approximately 15% are law

students. Participants ranged in age from 22 to 56 with a mean age of 28.31 ($SD = 5.37$). The majority of participants (84.8%) were heterosexual; 3.4% identified as gay or lesbian, 6.2% identified as bisexual, 1.9% identified as queer, and 1.9% identified as a sexual orientation not listed. Seventy-eight percent of participants identified as White, 10% identified as Asian or Asian American, 2% identified as Black or African American, 5.7% identified as Hispanic or Latino, 2% identified as Native American or Alaskan Native, less than 1% identified as Hawaiian or Pacific Islander, and 3.2% identified as a race or ethnicity not listed.

Procedure

Our University's Office of Research Compliance (Institutional Review Board) approved all procedures in this online study. We were directed to the Qualtrics survey software portal to complete the survey. After receiving an invitation to participate, students had 10 days to complete the survey. Participants received up to two e-mails from the research team: one initial recruitment e-mail and one reminder e-mail, if needed, 5 days after the initial e-mail. Students who chose to participate clicked a unique link provided in the recruitment e-mail and were directed to the Qualtrics portal to complete the survey. Five attention-check items (Oppenheimer, Meyvis, & Davidenko, 2009) were designed and placed throughout the survey to ensure participants devoted care and attention to their responses; these items were embedded within survey scales and included statements such as "I will select 'agree' if I am paying attention." After answering one attention-check item incorrectly, participants were reminded by the survey software to pay close attention while participating; participants who incorrectly answered more than one attention-check item were directed to stop completing the survey and informed that they would not be compensated. Participants were made aware of all procedures during the informed consent process. After completing all survey measures, participants who passed attention checks were compensated with \$15 USD Amazon.com gift certificates distributed via e-mail within 10 days of participation. Participants were provided with contact information for local mental health and sexual violence resources in addition to contact information for the research team and the Office of Research Compliance.

Measures

Participants completed a number of measures that assessed sexual harassment, sexual assault, dating violence, stalking, perceptions about the campus climate (including issues of safety, support, and betrayal), measures of psychological and physical health, and attitudinal measures (rape myth acceptance, male role norms, entitlement, and Dark Triad traits), as part of the larger study. The measures used for the analyses in the current report are described below. Researchers who

desire access to any of the measures used in this study can e-mail the first author. A number of the questionnaires used in this study were modified by the Administrator-Researcher Campus Climate Consortium (ARC3, 2015). ARC3 is a consortium whose members include a number of sexual assault research scientists who developed a set of survey measures to assess the problem of campus sexual assault in terms of prevalence, incidence, and correlates (Kingkade, 2015).

Sexual harassment victimization. We assessed experiences of sexual harassment that occurred since participants' enrollment at their university with a modified version of the short SEQ-Department of Defense-Military Version (SEQ-DoD-s; Stark, Chernyshenko, Lancaster, Drasgow, & Fitzgerald, 2002). The SEQ-DoD-s is an abbreviated version of the original SEQ-DoD (Fitzgerald, Magley, Drasgow, & Waldo, 1999). The SEQ-DoD-s consists of 16 behaviorally specific items depicting different sexual harassment scenarios (e.g., someone "Repeatedly told sexual stories or jokes that were offensive to you") and has good reliability (Cronbach's $\alpha = .94$ for both men and women; Stark et al., 2002). Three additional items were added to the SEQ-DoD-s to capture electronic harassment (e.g., someone "spread unwelcome sexual rumors about you by text, email, Facebook, or other electronic means"). Participants were asked to rate how frequently during graduate school they experienced the behavior depicted in each scenario, with response options of *never*, *once or twice*, *sometimes*, *often*, and *many times* (coded as 0, 1, 2, 3, and 4, respectively). Participants responded to two versions of this scale: one version assessed experiences with faculty and staff (prompted with: "Since you enrolled at [this institution], have you been in a situation in which a faculty member, instructor, or staff member . . .") and another version assessed experiences with students (prompted with: "Since you enrolled at [this institution], have you been in a situation in which a student . . ."). Prior to analyses, we removed the first item from the scale (someone "Treated you 'differently' because of your sex") in order to reflect a more conservative definition of sexual harassment (i.e., being treated "differently" may not be experienced as negative, and may even indicate privilege). Scale reliabilities in the current study for both versions were good (Cronbach's $\alpha = .79$ for faculty/staff-harassment and $.88$ for student-harassment). Responses to each version of the scale were summed to create two sexual harassment composite variables (faculty/staff-perpetrated and student-perpetrated). Possible scores on each of these variables ranged from 0 (*indicating no sexual harassment*) to 72 (*indicating that all types of sexual harassment occurred many times*).

For both student- and faculty/staff-perpetrated harassment, students who indicated they had experienced sexual harassment were asked a series of follow-up questions: when the event happened, what the situation involved (sexist or offensive language, gestures, or pictures; unwanted sexual attention; unwanted touching; subtle or explicit bribes or

threats), and the gender and status of the perpetrator (i.e., whether they were faculty, staff, graduate instructors, or undergraduate students). Participants who indicated sexual harassment were also asked how they responded to the situation (i.e., ignoring the person, avoiding the person, treating it like a joke, reporting them, etc.).

Sexual violence victimization. We assessed sexual violence victimization with a modified version of the Sexual Experiences Survey-Revised (SES-R; Koss et al., 2007). The SES-R assesses five types of sexual victimization (fondling, unwanted oral contact, unwanted vaginal penetration, unwanted anal penetration, and unwanted attempted oral contact or vaginal and/or anal penetration). The SES-R also asks about the coercion strategies experienced by victims; specifically, participants are asked whether their perpetrator used verbal coercion, assaulted them when they were intoxicated, threatened physical harm, or used physical force. Participants were asked to only report experiences that occurred since they began attending their current university. The version used in this study was modified in two ways. To account for more diverse gender identification, we changed the word "man" (in reference to people who have penises) to "someone" throughout the SES-R. For example, the statement "A man put his penis into my vagina, or someone inserted fingers or objects into my vagina without consent" was altered to the following: "Someone put their penis, fingers, or other objects into my vagina without my consent." Rather than separately assessing for attempted vaginal, anal, and oral contact, we asked one question to assess sexual assault: "Even though it didn't happen, someone TRIED to have oral, anal, or vaginal sex with me without my consent." The SES-R has been shown to be a valid measure of sexual assault with university samples (Franklin, 2010) with acceptable reliability (Smith & Freyd, 2013). Scale reliability was good with this sample (Cronbach's $\alpha = .84$). A sexual violence victimization variable was created for each participant by summing each unwanted sexual experience indicated for all types of coercion. As any single experience may have included multiple coercion strategies, this variable does not capture the number of assaults experienced by victims but instead identifies the number of ways individuals have been victimized. For example, a participant might report verbal coercion to obtain oral sex, threats of physical force to obtain anal penetration, and physical force to obtain anal penetration. This participant's score would be 3, regardless of whether these three types of coercion were separate events. Possible scores on this variable range from 0 (*no victimization indicated*) to 25 (*all types of coercion indicated for all types of victimization*).

Dating violence. Dating violence was assessed with items from both the Partner Victimization Scale (PVS; Hamby, 2013, 2014) and the Women's Experience with Battering Scale (WEB; Smith, Earp, & DeVellis, 1995). Internal consistency has been demonstrated to be very good for both the PVS (Hamby, 2014) and the WEB (Smith, Earp, & DeVellis,

1995). The combined measure captured both actual or threatened physical violence (e.g., “The person pushed, grabbed, or shook me”) and psychological violence and intimidation (e.g., “The person can scare me without laying a hand on me”). Participants were instructed to disregard experiences that they characterized as “horseplay or joking around”; each item was prefaced with the phrase “not including horseplay or joking around” to remind participants of this instruction and to be consistent with the original wording of the PVS. Participants were instructed to answer the questions “about any hook-up, boyfriend, girlfriend, husband, or wife you have had, including exes, regardless of the length of the relationship.” As such, we used the word “person” (i.e., “the person beat me up”) instead of “partner” (i.e., “my partner beat me up”) to account for this wider range of relationships. Response options were *never*, *once or twice*, *sometimes*, *often*, and *many times* (coded as 0, 1, 2, 3, and 4). Scale reliability with the current sample was acceptable (Cronbach’s $\alpha = .79$). Scores were summed to create a single measure of dating violence. Possible scores ranged from 0 (*indicating no dating violence*) to 24 (*indicating all items “many times”*).

Stalking. We assessed stalking with a scale previously used in the National Intimate Partner and Sexual Violence Survey (Black et al., 2011). The original Black et al. (2011) scale consists of eight behaviorally defined types of stalking (e.g., someone “left strange or threatening items for you to find” or “sneaked into your home or car and did things to scare you by letting you know they had been there”). The version used in the current study was modified in two ways. First, 2 items were added to account for Internet stalking (someone “made rude or mean comments to you online” or “spread rumors about you online, whether they were true or not”). Next, while the original scale (Black et al., 2011) asks about contact through websites like MySpace or Facebook, the version in this study instead asked about contact through social media apps. This change was made to modernize the scale’s language. Participants were asked to rate how frequently they experienced each type of stalking since enrollment at their current university. Response options were *none*, *1–2 times*, *3–5 times*, *6–8 times*, and *more than 8 times* (scored as 0, 1, 2, 3, and 4, respectively). Reliability and validity information from Black et al. (2011) are not available. Scale reliability for the current sample was acceptable (Cronbach’s $\alpha = .77$). Scores on these 10 items were summed to create a single measure of experiences with stalking. Possible scores ranged between 0 (*indicating no stalking*) and 40 (*indicating all 10 stalking items happening “more than 8 times”*).

Posttraumatic outcomes. Trauma symptoms were assessed using the Trauma Symptom Checklist (TSC-40; Elliott & Briere, 1992). The TSC-40 has been shown to have good reliability (with Cronbach’s α generally observed at about .90; Elliott & Briere, 1992; Neal & Nagle, 2013; Stermac, Cabral, Clarke, & Toner, 2014) and validity (Elliott & Briere, 1992; Higgins & McCabe, 1994). The TSC-40 evaluates

common forms of posttraumatic distress (e.g., nightmares, loneliness, sadness, headaches, etc.) in response to a traumatic event. Response options were *never*, *occasionally*, *fairly often*, and *very often*. Scale reliability for the current sample was excellent (Cronbach’s $\alpha = .91$). We summed the 40 items to create an index of trauma symptom severity. Possible scores on this index ranged from 0 (*reporting no trauma symptoms*) to 120 (*reporting all trauma symptoms at the greatest level of severity*).

Institutional betrayal. We measured institutional betrayal (experiences when the university exacerbated sexual violence victimization) with the Institutional Betrayal and Support Questionnaire (IBSQ), which was adapted from the Institutional Betrayal Questionnaire (IBQ; Smith & Freyd, 2013). A 10-item version of the IBQ was previously validated by Smith and Freyd (2013). The IBSQ used in this study is a 26-item scale. Eighteen of the IBSQ’s items assess institutional failures to prevent sexual violence (e.g., “creating an environment where this type of experience seemed more likely to occur”) and also active mishandling of cases when reported (e.g., “creating an environment where you no longer felt like a valid member of the institution”). Six questions were added to assess institutional betrayals specifically related to race and sexual orientation (e.g., “responding differently to your experience/s based on your race” and “creating an environment in which you felt discriminated against based on your sexual orientation”). The final 8 items assess positive institutional responses such as “allowing you to have a say in how your report was handled.” In the current study, we were primarily interested in poor institutional responses; as such, we did not include the 8 IBSQ items assessing institutional support. Participants who indicated any sexual violence (sexual harassment, sexual assault, dating violence, or stalking) while enrolled at their current university were presented with the IBSQ. Response options were *no*, *yes*, and *N/A*. Participants’ “yes” responses to the 18 items assessing institutional failures and mishandling were summed to create an institutional betrayal index. Internal consistency for these items was excellent (Cronbach’s $\alpha = .96$). Due to an initial issue with our survey software, not all participants completed the IBSQ. We identified and fixed the problem after several days of data collection. One hundred and thirty-seven of our graduate student participants ultimately completed the IBSQ. Of these, 46 were men and 91 were women. Participants who completed the IBSQ did not differ significantly from the participants who did not complete the IBSQ in terms of gender, age, or race.

It should be noted that measuring institutional betrayal is in many ways analogous to measuring sexual assault, abuse, or other harmful experiences. Although the underlying construct is the institutional behaviors (including policies and practices) that constitute betrayal, the word “betrayal” is never mentioned in the questionnaire (similar to how behavioral measures like the SES-R assess sexual assault without

Table 1. Correlations Among Variables for Female Participants (Below Diagonal) and Male Participants (Above Diagonal).

Measures	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. Trauma symptoms	—	-.20**	.39*	.35***	.26***	.21**	.26***	.19**	.07
2. Perceived safety	-.31***	—	-.24	-.13	-.15*	-.003	-.09	-.04	-.07
3. Institutional betrayal	.34**	-.32**	—	.30	.06	.18	-.06	.48**	-.10
4. Faculty/staff harassment	.26***	-.21***	.38***	—	.32***	.17*	.17*	.12	.10
5. Student harassment	.25***	-.31***	.30**	.28***	—	.65***	.44***	.27***	.18*
6. Sexual assault	.17**	-.21***	.21	.07	.49***	—	.68***	.25***	.14
7. Stalking	.14*	-.24***	.26*	.21***	.50***	.51***	—	.19**	.17*
8. Dating violence	.02	-.18**	.06	.01	.16**	.16**	.24***	—	.03
9. Enrollment year	-.03	-.09	.09	.18**	.21***	.24***	.28***	.17**	—

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

ever directly asking participants whether they have been sexually assaulted or raped). Just as intercourse without consent is labeled sexual assault, the negative events on the IBSQ are defined as betrayals by the measure developers (Smith & Freyd, 2013). Also similar to measures of sexual victimization experiences, the goal of the IBSQ is to assess external experiences. As with other self-report measures of experiences, this is necessarily an imperfect measure of external reality. The IBSQ is intended to be an inventory of experiences that constitute actual institutional betrayal, rather than a measure of perceptions, evaluations, or subjective appraisals of “institutional betrayal.”

Safety on campus. We asked students to rate their perceptions of safety on or around campus with a 5-item measure. Each item was phrased as follows: “On or around this campus, I feel safe from sexual harassment (sexual violence/dating violence/stalking).” An additional item asked participants to rate their agreement with the following more general statement: “I feel safe on campus at [this university].” Response options were on a 5-point Likert-type scale ranging from *strongly disagree* to *strongly agree*. These 5 items had excellent internal consistency ($\alpha = .94$). We averaged participants’ responses to create a campus safety variable, which ranged from 1 (*responding “strongly disagree” to all items*) to 5 (*responding “strongly agree” to all items*).

Enrollment. Students indicated when they first enrolled at the university with response options of 2014 (the beginning of the academic year during which this study was conducted; coded as 1), 2013, 2012, 2011, 2010, 2009, and 2008 or earlier (coded as 7). Participants’ enrollment ranged from 1 to 7, with high scores indicating more time elapsed since initial enrollment.

Results

Ranges of all variables, as well as means and standard deviations by gender, are available in Table 1. For all regressions, t -tests, and χ^2 tests, values were omitted from the analyses using listwise deletion (i.e., participants’ data were not included if they had any missing values for any of the predictor or outcome variables). For all correlations, values were omitted from the

analyses using pairwise deletion (i.e., participants’ data were not used when values were missing for either variable in a given correlation but were used when both values were available).

Incidence

Sexual harassment by faculty/staff. A χ^2 test of independence and subsequent calculation of relative risk indicated that female graduate students were 1.64 times more likely to have experienced at least 1 of the 18 SEQ items from faculty or staff (38.3%) compared to male participants, 23.4%; $\chi^2(1) = 12.52$, $p < .001$; Cramer’s $V = .15$. Thirteen percent of female participants had experienced one incident of faculty/staff harassment, 7.7% had experienced two incidents of faculty/staff harassment, and 17.5% had experienced three or more incidents of faculty/staff harassment. Eleven percent of male participants had experienced one incident of faculty/staff harassment, 3.5% had experienced two incidents of faculty/staff harassment, and 8.5% had experienced three or more incidents of faculty/staff harassment. Of participants reporting faculty/staff sexual harassment, 67.8% indicated that the harasser was a faculty member, 13.5% indicated that the harasser was a staff member, and 14% indicated that the harasser was a graduate-level instructor. Of the participants who had been sexually harassed by faculty/staff, 86% of women and 63.8% of men reported harassment from male harassers and 14.5% of women and 29.8% of male participants reported harassment from female harassers. Participants were able to select all gender options that applied, as some may have had both male and female harassers. Of the participants who had experienced sexual harassment, only 6.4% indicated that they had reported the incident. Follow-up items about incident-level details revealed that the majority of harassment experiences involved sexist or sexually offensive language, gestures, or pictures (59.1%), with 6.4% involving unwanted sexual attention, 4.7% involving unwanted touching, and 3.5% involving subtle or explicit bribes or threats.

Sexual harassment by students. A χ^2 test of independence and subsequent calculation of relative risk indicated that female participants were 1.49 times more likely to report they

Table 2. Range, Mean, and Standard Deviation for Variables of Interest.

Variable	Possible range	Actual range	M(SD)—Women	M (SD)—Men
# of Faculty/staff sexual harassment incidents	0-72	0-25	1.44 (3.15)	.59 (1.52)
# of Student sexual harassment incidents	0-72	0-53	3.60 (5.79)	1.74 (3.63)
# of Sexual assault coercion types indicated	0-18	0-23	.42 (1.88)	.20 (1.70)
# of Stalking items indicated	0-40	0-22	.68 (1.75)	.49 (2.19)
# of Dating violence items indicated	0-24	0-12	.23 (.94)	.14 (.65)
Enrollment year	1-7	1-7	2.69 (1.79)	2.86 (1.80)
Trauma symptoms	0-120	0-73	20.93 (11.73)	17.24 (11.10)
Perceived safety	1-5	1-5	3.36 (.88)	4.32 (.68)
Institutional betrayal	0-18	0-12	1.53 (2.75)	1.04 (2.19)

had experienced at least one type of sexually harassing behavior from another student (57.7%) in comparison to male participants, 38.8%; $\chi^2(1) = 17.75, p < .001$; Cramer's $V = .18$. Eleven percent of female participants had experienced one incident of student harassment, 9.9% had experienced two incidents of student harassment, and 36.7% had experienced three or more incidents of student harassment. Nine percent of male participants had experienced one incident of student harassment, 9% had experienced two incidents of student harassment, and 20.3% had experienced three or more incidents of student harassment. Of participants who had been sexually harassed by a student, 91% of women and 65.4% of men reported harassment from a male harasser and 16% of women and 50% of men reported a female harasser. Participants were again able to select all gender options that applied. Only 3% of participants who experienced sexual harassment had reported the incident. Similar to faculty/staff-perpetrated sexual harassment, the majority of student-perpetrated incidents (68.3%) involved sexist or sexually offensive language, gestures, or pictures. Twenty-one percent of incidents involved unwanted sexual attention, 12.1% involved unwanted touching, and 1.5% involved subtle or explicit bribes or threats. Participants reported that a fellow graduate student perpetrated 54.7% of incidents and an undergraduate student perpetrated 42.6% of incidents.

Cumulative victimization. To conduct exploratory analyses about the association between victimization experiences and the dependent variables, we created a cumulative victimization index. Participants were categorized as having experienced no victimization (coded as 0, with no reported sexual harassment, sexual assault, stalking, or dating violence during graduate school), one type of victimization (coded as 1, with one type of victimization during graduate school), two types of victimization (coded as 2, with two types of victimization during graduate school), or three or more types of victimization (coded as 3, with three, four, or all five types of victimization during graduate school). Thirty percent of female participants and 45.8% of male participants reported no victimization of any kind (i.e., no experiences of faculty/staff harassment, student harassment, sexual assault, dating violence, or stalking). Female participants reported an average of 1.42 of the five

types of victimization ($SD = 1.28$), while male participants reported an average of .85 types ($SD = 1.00$). Thirty-five percent ($n = 112$) of female participants and 51.7% ($n = 104$) of male participants reported neither student nor faculty/staff harassment. Thirty-five percent of female participants ($n = 113$) and 34.4% of male participants ($n = 69$) reported either student or faculty/staff harassment but not both. Thirty-one percent of female participants ($n = 99$) and 13.9% ($n = 28$) of male participants reported both student and faculty/staff harassment. One quarter of female participants ($n = 81$) had experienced one type of victimization only, compared to 32.8% ($n = 66$) of male participants; 26.2% of female participants ($n = 85$) had experienced two types of victimization, compared to 14.4% of male participants ($n = 29$); 18.5% of female participants ($n = 60$) had experienced three or more types of victimization, compared to 7% of male participants ($n = 14$).

Enrollment year. Enrollment year significantly correlated with all victimization variables for female participants (faculty/staff harassment, student harassment, sexual assault, stalking, and dating violence; see Table 2). Among male participants, enrollment year significantly correlated with student harassment and stalking but with no other types of victimization.

Heightened sexual harassment of law students. Participants were coded as law students, master's-level students, or doctoral students. Because more law students indicated experiencing sexual harassment than doctoral or master's students (and master's and doctoral students did not differ significantly from each other), we created a dichotomous index of student status such that law students were compared to doctoral- and master's-level students combined. Female law students experienced more sexual harassment compared to other female graduate students (master's and doctoral combined); χ^2 tests of independence revealed that significantly more female law students (57.1%) reported faculty/staff-perpetrated sexual harassment compared to other female graduate students, 36.1%; $\chi^2(1) = 5.79, p < .05$; Cramer's $V = .14$. Calculations of relative risk indicated that female law students were 1.58 times more likely to experience faculty/staff harassment than other female graduate students. Female law students were also 1.50 times more likely to experience student harassment

Table 3. Predicting Trauma Symptoms, Campus Safety, and Institutional Betrayal.

Trauma symptoms: Female participants ($R^2 = .12$)	B	SE	β	Male participants ($R^2 = .19$)	B	SE	β
# of Faculty/staff sexual harassment incidents	.79	.21	.21***		2.10	.52	.29***
# of Student sexual harassment incidents	.34	.14	.17*		.30	.28	.10
# of Sexual assault coercion types indicated	.62	.41	.10		-.42	.70	-.06
# of Stalking items indicated	.01	.46	.001		.98	.46	.20*
# of Dating violence items indicated	-.07	.68	-.01		1.84	1.17	.11
Enrollment year	-.84	.37	-.13*		-.09	.43	-.01
Campus Safety: Female Participants ($R^2 = .14$)	B	SE	β	Male Participants ($R^2 = .06$)	B	SE	β
# of Faculty/staff sexual harassment incidents	-.04	.02	-.14*		-.04	.03	-.08
# of Student sexual harassment incidents	-.03	.01	-.21**		-.04	.02	-.22*
# of Sexual assault coercion types indicated	-.02	.03	-.05		.10	.05	.26*
# of Stalking items indicated	-.03	.03	-.06		-.05	.03	-.15
# of Dating violence items indicated	-.12	.05	-.13*		-.01	.08	-.01
Enrollment year	.01	.03	.02		-.01	.03	-.02
Institutional betrayal: Female participants ($R^2 = .25$)	B	SE	β	Male participants ($R^2 = .30$)	B	SE	β
# of Faculty/staff sexual harassment incidents	.30	.07	.40***		.33	.24	.22
# of Student sexual harassment incidents	.07	.05	.18		.02	.11	.04
# of Sexual assault coercion types indicated	.04	.11	.04		.35	.66	.10
# of Stalking items indicated	.25	.21	.16		-.07	.14	-.07
# of Dating violence items indicated	.12	.19	.06		2.61	.85	.45**
Enrollment year	-.15	.15	-.11		-.01	.19	-.01

(82.8%; $n = 29$) than other female graduate students, 55.1%; $n = 151$; $\chi^2(1) = 9.83, p < .01$; Cramer's $V = .18$. Male law students did not differ from other graduate students (master's and doctoral combined) in terms of faculty/staff harassment (25.7% of male law students [$n = 9$] and 23.5% [$n = 37$] of other male graduate students experienced faculty/staff harassment). Male law students were 1.63 times more likely to report they experienced student harassment (57.1%; $n = 20$) than other male graduate students, 35%; $n = 55$; $\chi^2(1) = 5.89, p < .05$; Cramer's $V = .18$.

Not only did a greater proportion of female law students report they experienced sexual harassment from fellow students, but they also reported more types of student-perpetrated sexual harassment, $M = 7.97, SD = 9.84$, than other female graduate students, $M = 3.04, SD = 4.76$; $t(36.06) = 2.92, p < .01$; Cohen's $d = .97$. Female law students, $M = 1.03, SD = 1.42$, did not differ from other female graduate students, $M = 1.49, SD = 3.34$, in terms of the number of types of faculty/staff sexual harassment they had experienced, $t(92.69) = -1.48, p = .14$; Cohen's $d = -.31$. Male law students did not differ from other male graduate students in the number of types of sexual harassment they had experienced from either students, $t(189) = .98, p = .33$; Cohen's $d = .14$, or faculty/staff, $t(188) = 1.00, p = .32$; Cohen's $d = .15$.

Associations Among Variables

Correlations among all variables of interest were obtained and are available in Table 2. We ran three sets of linear regressions to test the predictive power of victimization experiences on

dependent variables of interest: perceived safety on campus, institutional betrayal, and posttraumatic symptoms. To assess whether we had adequate power to detect significant associations among variables in our three multiple regression analyses, we conducted post hoc tests of power for each of the three models for men and women separately. Each model had six independent variables. For the female participants, the sample sizes for the models of posttraumatic symptom and campus safety were 307 and 319 respectively, due to missing data. These two models, with R^2 s of .12 and .14 and $\alpha = .05$, yielded power estimates of .99. The women's model of institutional betrayal ($n = 89, R^2 = .25, \alpha = .05$) yielded a power estimate of .95. For the male participants, the model predicting posttraumatic symptoms ($n = 188$) with $R^2 = .19$ and $\alpha = .05$ yielded a power estimate of .99. The men's model of campus safety ($n = 194$) was slightly underpowered with $R^2 = .06$ and $\alpha = .05$, yielding a power estimate of .71. The men's model of institutional betrayal ($n = 42, R^2 = .30, \alpha = .05$) was also underpowered with a power estimate of .67 (Cohen, 1992).

Trauma symptoms. To explore the relation between sexual harassment and trauma symptoms as assessed by the TSC-40, we used linear multiple regression. We entered the sum of all items on the TSC-40 as the dependent variable and faculty/staff sexual harassment, student sexual harassment, sexual assault, stalking, and dating violence as variables of interest. Enrollment year was entered as a control. The model explained a significant portion of the variance in trauma symptoms for both female participants, $R^2 = .12, F(6, 301) = 6.73, p < .001$, and male participants, $R^2 = .19, F(6, 182) = 6.93, p < .001$.

For female participants, sexual harassment by both students, $\beta = .17, p < .05$, and faculty/staff, $\beta = .21, p < .001$, significantly predicted trauma symptoms; sexual assault, dating violence, and stalking during graduate school did not contribute significantly to the model (see Table 3). Time elapsed since enrollment was negatively associated with trauma symptoms for female participants, $\beta = -.84, p < .05$. For male students, sexual harassment by faculty/staff, $\beta = .29, p < .001$, and stalking, $\beta = .20, p < .05$, significantly predicted trauma symptoms, and the other variables did not contribute significantly to the model (also see Table 3).

Safety. To assess the relation between sexual harassment and perceptions of campus safety, we conducted an additional linear regression. The mean of all campus safety items was entered as the dependent variable, and faculty/staff sexual harassment, student sexual harassment, sexual assault, stalking, and dating violence were entered as variables of interest. Enrollment year was entered as a control. The overall model explained a significant proportion of the variance in perceived safety for female, $R^2 = .14, F(6, 313) = 8.49, p < .001$, but not male participants, $R^2 = .06, F(6, 188) = 1.90, p = .08$. For female participants, faculty/staff harassment, $\beta = -.14, p < .05$; student harassment, $\beta = -.21, p < .01$; and dating violence, $\beta = -.13, p < .05$, significantly contributed to the model (see Table 3). Female participants reported feeling significantly less safe on campus, $M = 3.36, SD = .88$, than male participants, $M = 4.32, SD = .68; t(497.26) = -13.85, p < .001$; Cohen's $d = -1.24$.

Institutional betrayal. To assess the relation of sexual harassment with other trauma and institutional betrayal, we conducted a linear multiple regression. We entered the sum of the items indicated by each participant on the IBSQ as the dependent variable and faculty/staff sexual harassment, student sexual harassment, sexual assault, stalking, and dating violence as variables of interest. The overall model explained a significant proportion of the variance in institutional betrayal for both female, $R^2 = .25, F(6, 83) = 4.64, p < .001$, and male participants, $R^2 = .30, F(6, 36) = 2.61, p < .05$. For female participants, sexual harassment perpetrated by faculty or staff was significantly associated with institutional betrayal, $\beta = .40, p < .001$ (see Table 3). No other variables contributed significantly to the model. For male participants, dating violence was significantly associated with institutional betrayal, $\beta = .45, p < .01$. No other variables contributed significantly to the model. A Chi Square test of independence and subsequent calculation of relative risk revealed that participants who experienced faculty/staff sexual harassment were 1.76 times more likely to report institutional betrayal, $\chi^2(1) = 5.30, p < .05$; Cramer's $V = .20$.

Cumulative victimization. We conducted exploratory analyses to examine the relation between cumulative victimization and the outcome variables in this study. Cumulative

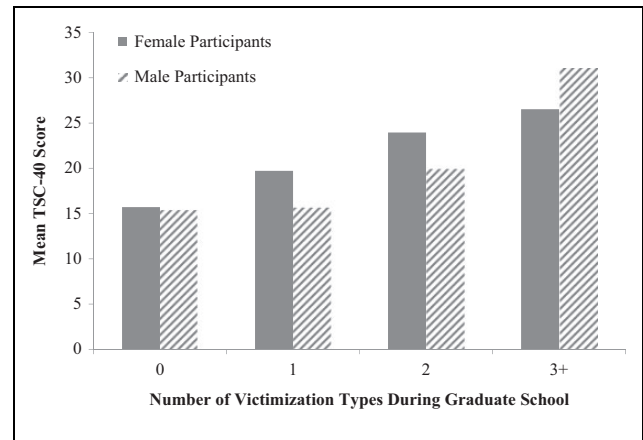


Figure 1. Cumulative victimization and trauma symptoms.

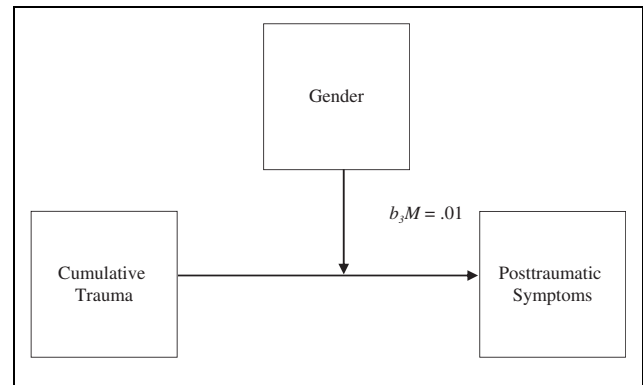


Figure 2. The moderation of cumulative trauma on posttraumatic symptoms by gender.

victimization was significantly correlated with all outcome variables for both women (trauma symptoms: $r = .32, p < .01$; safety: $r = -.36, p < .001$; institutional betrayal: $r = .32, p < .01$) and men (trauma symptoms: $r = .31, p < .001$; safety: $r = -.24, p < .01$; institutional betrayal: $r = .32, p < .05$). The association of cumulative victimization and trauma symptoms is depicted in Figure 1. To probe the possibility that gender moderates the relationship between cumulative victimization and trauma symptoms, we used Version 2.13 of the PROCESS macro, a software package created for SPSS (see Hayes, 2013). We evaluated a simple moderator model with one moderator. Using this method, the significance of relations was determined based on whether zero falls within a confidence interval (CI) based on the bootstrapped sample. We used 10,000 bootstrapped samples to determine a 95% confidence interval (see Figure 2 for model). Cumulative trauma was significantly associated with posttraumatic symptoms, $b_1 = 3.71, CI = [.98, 6.45]$, while gender was not significantly associated with posttraumatic symptoms, $b_2 = -1.78, CI = [-4.58, 1.01]$. Gender also did not

significantly moderate the association between cumulative trauma and posttraumatic symptoms, $b_3M = .01$, $CI = [-1.97, 1.99]$.

Discussion

The present study reveals that sexual harassment remains relatively common in higher education, and female graduate students currently face higher rates of sexual harassment from both students and faculty/staff than their male counterparts. Experiences of sexual harassment are associated with posttraumatic symptoms for both men and women. This finding updates previous research (from more than 20 years ago). In the current study, over one third of female graduate students had been sexually harassed by a professor or a staff member, in comparison to 53% of graduate women in Cortina and colleagues' study (1994) and 35% of graduate women in McKinney et al. (1988). We also extended previous findings to include peers; more than half of female graduate students have been sexually harassed by other students. Overall, 69.8% of female graduate students reported some kind of victimization (sexual harassment, sexual assault, stalking, or dating violence) during graduate school. Men's reported victimization was also high, with 54.2% of male graduate students reporting some kind of harassment since they enrolled.

Beyond replicating decades-old research on sexual harassment prevalence in graduate education, our study also provides support for the association of sexual harassment with posttraumatic symptoms, even when statistically controlling for other forms of trauma. These results extend Stockdale and colleagues' (2009) findings to the specific context of graduate school and to both male and female participants. We also found that female participants who indicated past experiences of sexual harassment (either faculty/staff- or student perpetrated) reported a diminished sense of safety on campus; no other victimization variables significantly predicted decreased perceptions of safety. Female participants in general indicated feeling significantly less safe on or around campus than their male counterparts. Our female participants' perception that the campus is not safe may be a consequence of the fact that graduate women do indeed face higher rates of all types of victimization than men (as revealed in our findings).

For female participants, faculty/staff sexual harassment was the sole significant predictor of institutional betrayal when accounting for all other traumatic experiences measured. This finding is consistent with Freyd's (1994) betrayal trauma theory, which holds that abuse is more harmful when perpetrated by people one is close to or depends upon for survival. Our findings cohere with Smith and Freyd's (2013) conception of institutional betrayal, wherein trauma survivors who are victimized within a trusted institution like a university report exacerbated posttraumatic symptoms. Individual people (professors, mentors, staff members, fellow students) perpetrated the harassment reported by our participants. Harassment is dyadic; however, the institution in

which harassment occurs can respond well (supporting students) or respond poorly (betraying students). The most commonly cited types of institutional betrayal indicated by participants who had experienced sexual harassment (student or faculty/staff) were "creating an environment where this type of experience seemed more likely to occur," "not doing enough to prevent this type of experience," and "making it difficult to report the experience." Institutional responses or nonresponses—such as inaction, incompetence, or inattention—did not go unnoticed by students. Consistent with institutional betrayal theory (Smith & Freyd, 2013), individual instances of sexual harassment that happen in a trusted institution constitute betrayals, not only by the individual perpetrator but also by the institution at large. Our findings suggest that while any instance of sexual harassment can highlight the university's failure to protect students, harassment by faculty/staff is most strongly associated with institutional betrayal for graduate students. The relation between faculty/staff harassment and institutional betrayal may be explained by graduate students' relative dependence on professors; future research should examine how dependence on sexual harassment perpetrators contributes to institutional betrayal.

Although all female graduate students in our sample faced higher risk of sexual harassment than their male counterparts—a troubling finding in and of itself—female law students were 1.58 times more likely to have experienced faculty/staff harassment and 1.5 times more likely to have experienced student harassment than other female graduate students. Male law students also reported more student harassment than their peers in other graduate programs. Although previous research (Torrey, 2007) suggests that law schools may frequently create and support particularly toxic environments for female students, little or nothing is known about why law students might face higher risk for sexual harassment. Further research is needed to provide a more adequate explanation for why law students may experience more sexual harassment.

Sexual harassment of graduate students remains perhaps surprisingly common after many years of supposed progress in academia. Nearly 30 years after McKinney et al. (1988) and Fitzgerald et al. (1988a) conducted their research, more than a third of female graduate students still face sexual harassment from faculty and staff. Student harassment is also common—57.7% of female and 38.8% of male participants reported experiences of sexual harassment by other students.

Limitations

These findings have several important limitations to consider. Although participants were drawn from a randomly selected subset of the overall population, some self-selection that limits generalizability may have occurred. Participants knew the topic and basic content of the study prior to participating, and some students may have "opted" in or out due to interest or lack thereof. However, recent analyses on campus climate data indicate that lower rates of responding do not indicate

that victims are overrepresented (Freyd, 2015). In an attempt to limit threats to generalizability from self-selection, we offered a \$15 gift certificate as incentive for participation.

Our findings are likely highly specific to a graduate student sample and should not be generalized to other populations (including undergraduates). As substantial previous research indicates (e.g., Koss, Gidycz, & Wisniewski, 1987; Smith & Freyd, 2013), rates of sexual assault are much higher among undergraduates than those observed in this graduate sample. Undergraduate and graduate students occupy a fundamentally different academic topography. In addition, not all potentially relevant measures were collected; for example, trauma experiences during childhood and adolescence were not assessed and are likely to be important predictors and controls when examining variables like trauma symptoms and perceived safety. All victimization variables in this study only cover the years spent in graduate school. Future research should control not only for concurrent traumas (as we did) but also for lifetime traumas. Furthermore, we did not collect information about students' relationships with the faculty/staff who had harassed them. As such, we do not know the actual degree of dependence and trust students experienced in these relationships. While the exploratory cumulative victimization findings offer some insight into how multiple types of trauma intersect for graduate students, they should be interpreted cautiously; different victimization experiences likely render different impacts, and a summed score of the number of types of victimization may not fully capture these effects. Unfortunately, due to a software error, only the last quarter of our participants completed the IBSQ. Although we were able to use the data of those participants who completed the IBSQ, our results may have been stronger with more statistical power if all our participants had completed this measure. Furthermore, we did not examine the relative association between different types of institutional betrayal and variables of interest; some forms of institutional betrayal may be particularly toxic, and future research should explore the relative impact of different forms of institutional betrayal. Finally, we cannot test causal relations in this sample. Data were collected only once; future research should follow graduate students' experiences of sexual harassment over time.

While the exacerbated risk of sexual harassment faced by law students is intriguing, we were unable to examine other subtypes of graduate students, due to insufficient numbers of participants in specific programs and a lack of information about what types of master's and doctoral programs participants were enrolled in. Some programs may face heightened risk that cannot be illuminated by the current research. There are also inherent limitations with all research on potentially sensitive or stigmatized topics; for example, participants may have been motivated to downplay or exaggerate their experiences. While survey research always comes with the risk of inattentive responses, we have tried to reduce poor responding in this sample by use of attention-check items throughout the survey.

Practice Implications

The current research has a number of implications for practice and policy. First, while societal progress in women's rights may lead some to conclude that women now face few barriers in academia, sexual harassment in graduate education may still be an obstacle for many. Leaders of academic communities (professors, department heads, deans, etc.) and therapists whose clients report that they have been sexually harassed can utilize these findings to shape their responses to destigmatize, validate, and prevent future incidents. Sexual harassment is still common in graduate education and is associated with trauma symptoms, feeling unsafe, and institutional betrayal. In short, sexual harassment is correlated with damage and should not be dismissed as low level, uncommon, or harmless.

Conclusions

We anticipate arguments that some or many of the experiences reported by students may have been minor events, unlikely to predict harm. However, our findings appear to refute such arguments—our data, in addition to previous research (Stockdale et al., 2009), indicate that sexual harassment is indeed associated with psychological distress. A recent meta-analysis by Sojo, Wood, and Genat (2016) suggests that infrequent and severe sexism is associated with similar impact as frequent and less severe sexism for women in the workplace. Lay understandings of what constitutes “serious” or “real” harassment downplay the relation between harassment and harm. We argue that sexual harassment remains a serious problem for female graduate students in particular, who reported experiencing 1.49 times as much student harassment and 1.64 times as much faculty/staff harassment as their male counterparts. In particular, our finding that faculty/staff and student harassment predicted decreased feelings of safety on and around campus for female participants, even when statistically controlling for other types of victimization, underscores the relation between harassment and harm. Furthermore, sexual harassment was associated with trauma symptoms for both male and female participants. Our research draws a portrait of an academic landscape where sexual harassment remains surprisingly prevalent for all students and where women face both heightened risk and consequences. Claims that conditions for women in academia have improved over the past three decades are undermined by our findings; even now, women face unequal barriers in education.

Acknowledgment

We thank our research team members Jennifer Gómez and Carly Smith. We thank the Administrator Researcher Campus Climate Consortium (ARC3) for compiling many of the measures utilized in this study. We are especially grateful to Louise Fitzgerald for her excellent Sexual Experiences Questionnaire and contributions to work on sexual harassment more broadly. We thank the Office of the President of the University of Oregon for providing funding for

this study. Data files can be made available to interested researchers; please email the first author for access to data.

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.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

References

- Administrator Researcher Campus Climate Consortium. (2015, September 1). *A letter to ARC3 users*. Retrieved from <http://campusclimate.gsu.edu/arc3-campus-climate-survey/>
- Avina, C., & O'Donohue, W. (2002). Sexual harassment and PTSD: Is sexual harassment diagnosable trauma? *Journal of Traumatic Stress, 15*, 69–75. doi:10.1023/A:1014387429057
- Berdahl, J. L., Magley, V. J., & Waldo, C. R. (1996). The sexual harassment of men?: Exploring the concept with theory and data. *Psychology of Women Quarterly, 20*, 527–547. doi:10.1111/j.1471-6402.1996.tb00320.x
- Black, M. C., Basile, K. C., Breiding, M. J., Smith, S. G., Walters, M. L., Merrick, M. T., . . . Stevens, M. R. (2011). *The national intimate partner and sexual violence survey (NISVS): 2010 summary report*. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention. Retrieved from http://www.cdc.gov/violenceprevention/pdf/nisvs_report2010-a.pdf
- Cairns, K. V., & Hatt, D. G. (1995). Discrimination and sexual harassment in a graduate student sample. *The Canadian Journal of Human Sexuality, 4*, 169–176.
- Carey, K. B., Durney, S. E., Shepardson, R. L., & Carey, M. P. (2015). Incapacitated and forcible rape of college women: Prevalence across the first year. *Journal of Adolescent Health, 56*, 678–680. doi:10.1016/j.jadohealth.2015.02.018
- Cohen, J. (1992). Statistical power analyses. *Current Directions in Psychological Science, 1*, 98–101. doi:10.1111/1467-8721.ep10768783
- Cook, S. L., Swartout, K. M., Goodnight, B. L., Hipp, T. N., & Bellis, A. L. (2015). Impact of violence research on participants over time: Helpful, harmful, or neither? *Psychology of Violence, 5*, 314–324. doi:10.1037/a0038442
- Cortina, L. M., Swan, S., Fitzgerald, L. F., & Waldo, C. (1994). Sexual harassment and assault: Chilling the climate for women in Academia. *Psychology of Women Quarterly, 22*, 419–441. doi:10.1111/j.1471-6402.1998.tb00166.x
- Elliott, D. M., & Briere, J. (1992). Sexual abuse trauma among professional women: Validating the Trauma Symptom Checklist-40 (TSC-40). *Child Abuse & Neglect: The International Journal, 16*, 391–398. doi:10.1016/0145-2134(92)90048-V
- Fitzgerald, L. F., Magley, V. J., Drasgow, F., & Waldo, C. R. (1999). Measuring sexual harassment in the military: The sexual experiences questionnaire (SEQ-DoD). *Military Psychology, 11*, 243–263. doi:10.1207/s15327876mp1103_3
- Fitzgerald, L. F., Shullman, S. L., Bailey, N., Richards, M., Swecker, J., Gold, Y., . . . Weitzman, L. (1988a). The incidence and dimensions of sexual harassment in academia and the workplace. *Journal of Vocational Behavior, 32*, 152–175. doi:10.1016/0001-8791(88)90012-7
- Fitzgerald, L. F., Weitzman, L. M., Gold, Y., & Ormerod, M. (1988b). Academic harassment—sex and denial in scholarly grab. *Psychology of Women Quarterly, 12*, 329–340. doi:10.1111/j.1471-6402.1988.tb00947.x
- Franklin, C. A. (2010). Physically forced, alcohol-induced, and verbally coerced sexual victimization: Assessing risk factors among university women. *Journal of Criminal Justice, 38*, 149–159. doi:10.1016/j.jcrimjus.2010.02.004
- Freyd, J. J. (1994). Betrayal trauma: Traumatic amnesia as an adaptive response to childhood abuse. *Ethics & Behavior, 4*, 307–329.
- Freyd, J. J. (2015, September 13). *The UO sexual violence and institutional betrayal surveys: 2014 and 2015*. Retrieved from <http://dynamic.uoregon.edu/jjf/campus/index.html>
- Freyd, J. J., DePrince, A. P., & Zurbriggen, E. L. (2001). Self-reported memory for abuse depends on victim-perpetrator relationship. *Journal of Trauma and Dissociation, 2*, 5–15. doi:10.1300/J229v02n03_02
- Gobin, R. L., & Freyd, J. J. (2009). Betrayal and revictimization: Preliminary findings. *Psychological Trauma: Theory, Research, Practice, and Policy, 1*, 242–257. doi:10.1037/a0017469
- Goldsmith, R. E., Freyd, J. J., & DePrince, A. P. (2012). Betrayal trauma: Associations with psychological and physical symptoms in young adults. *Journal of Interpersonal Violence, 27*, 547–67. doi:10.1177/0886260511421672
- Gómez, J. M., Rosenthal, M. N., Smith, C. P., & Freyd, J. J. (2015). Participant reactions to questions about gender-based sexual violence. *Electronic Journal of Public Affairs, 4*, 33–60. Retrieved from <http://ejopa.missouristate.edu/index.php/ejournal/article/view/75/88>
- Hamby, S. (2013). *The partner victimization scale*. Sewanee, TN: Life Paths Research Program. doi:10.13140/RG.2.1.1319.4405
- Hamby, S. (2014). Self-report measures that do not produce gender parity in intimate partner violence: A multi-study investigation. *Psychology of Violence, 6*, 323–335. doi:10.1037/a0038207
- Hayes, A. F. (2013). *Introduction in mediation, moderation, and conditional process analysis: A regression-based approach*. New York, NY: The Guilford Press.
- Higgins, D. J., & McCabe, M. P. (1994). The relationship of child sexual abuse and family violence to adult adjustment: Toward an integrated risk-sequelae model. *Journal of Sex Research, 31*, 255–266. doi:10.1080/00224499409551761
- Ho, I. K., Dinh, K. T., Bellefontaine, S. A., & Irving, A. L. (2012). Sexual harassment and posttraumatic stress symptoms among Asian and White women. *Journal of Aggression, Maltreatment & Trauma, 21*, 95–113. doi:10.1080/10926771.2012.633238
- Kingkade, T. (2015, September 1). A supergroup of academics is trying to stop people who profit from campus rape. *Huffington Post*. Retrieved from http://www.huffingtonpost.com/entry/professor-group-fighting-campus-rape_us_55e5120de4b0aec9f35459d9

- Koss, M. P., Abbey, A., Campbell, R., Cook, S., Norris, J., Testa, M., . . . White, J. (2007). Revising the SES: A collaborative process to improve assessment of sexual aggression and victimization. *Psychology of Women Quarterly, 31*, 357–370. doi:10.1111/j.1471-6402.2007.00385.x
- Koss, M. P., Gidycz, C. A., & Wisniewski, N. (1987). The scope of rape: Incidence and prevalence of sexual aggression and victimization in a national sample of higher education students. *Journal of Consulting and Clinical Psychology, 55*, 162–70.
- Martin, C. G., Cromer, L. D., DePrince, A. P., & Freyd, J. J. (2013). The role of cumulative trauma, betrayal, and appraisals in understanding trauma symptomatology. *Psychological Trauma: Theory, Research, Practice and Policy, 52*, 110–118. doi:10.1037/a0025686
- McDermut, J. F., Haaga, D. A., & Kirk, L. (2000). An evaluation of stress symptoms associated with academic sexual harassment. *Journal of Traumatic Stress, 13*, 397–411. doi:10.1023/A:1007725022534
- McKinney, K., Olson, C. V., & Satterfield, A. (1988). Graduate students' experiences with and responses to sexual harassment: A research note. *Journal of Interpersonal Violence, 3*, 319–325. doi:10.1177/088626088003003005
- Neal, T. M. S., & Nagle, J. E. (2013). Measuring abuse sequelae: Validating and extending the Trauma Symptom Checklist–40. *Journal of Aggression, Maltreatment & Trauma, 22*, 231–247. doi:10.1080/10926771.2013.764953
- Oppenheimer, D. M., Meyvis, T., & Davidenko, N. (2009). Instructional manipulation checks: Detecting satisficing to increase statistical power. *Journal of Experimental Social Psychology, 45*, 867–872. doi:10.1016/j.jesp.2009.03.009
- Orchowski, L. M., & Gidycz, C. A. (2015). Psychological consequences associated with positive and negative responses to disclosure of sexual assault among college women: A prospective study. *Violence Against Women, 21*, 803–823. doi:10.1177/1077801215584068
- Palmieri, P. A., & Fitzgerald, L. F. (2005). Confirmatory factor analysis of posttraumatic stress symptoms in sexually harassed women. *Journal of Traumatic Stress, 18*, 657–666. doi:10.1002/jts.20074
- Roosmalen, E. V., & McDaniel, S. A. (2008). Sexual harassment in academia: A hazard to women's health. *Women and Health, 28*, 33–54. doi:10.1300/J013v28n02
- Schneider, M., Baker, S., & Stermac, L. (2002). Sexual harassment experiences of psychologists and psychological associates during their graduate school training. *The Canadian Journal of Human Sexuality, 11*, 159–170.
- Shinsako, S. A., Richman, J. A., & Rospenda, K. M. (2001). Training-related harassment and drinking outcomes in medical residents versus graduate students. *Substance Use & Misuse, 36*, 2043–2063. doi:10.1081/JA-100108436
- Smith, C. P., & Freyd, J. J. (2013). Dangerous safe havens: Institutional betrayal exacerbates sexual trauma. *Journal of Traumatic Stress, 26*, 119–124. doi:10.1002/jts
- Smith, P. H., Earp, J. A., & DeVellis, R. (1995). Measuring battering: Development of the Women's Experience with Battering (WEB) Scale. *Women's Health: Research on Gender, Behavior, and Policy, 1*, 273–288.
- Sojo, V. E., Wood, R. E., & Genat, A. E. (2016). Harmful workplace experiences and women's occupational well-being: A meta-analysis. *Psychology of Women Quarterly, 40*, 10–40. doi:10.1177/0361684315599346
- Stark, S., Chernyshenko, O. S., Lancaster, A. R., Drasgow, F., & Fitzgerald, L. F. (2002). Toward standardized measurement of sexual harassment: Shortening the SEQ-DoD using item response theory. *Military Psychology, 14*, 49–72. doi:10.1207/S15327876MP1401_03
- Stermac, L., Cabral, C. M., Clarke, A. K., & Toner, B. (2014). Mediators of posttraumatic mental health in sexual assault survivors. *Journal of Aggression, Maltreatment & Trauma, 23*, 301–317. doi:10.1080/10926771.2014.881948
- Stockdale, M. S., Logan, T. K., & Weston, R. (2009). Sexual harassment and posttraumatic stress disorder: Damages beyond prior abuse. *Law and Human Behavior, 33*, 405–418. doi:10.1007/s10979-008-9162-8
- Stockdale, M. S., Visio, M., & Batra, L. (1999). The sexual harassment of men: Evidence for a broader theory of sexual harassment and sex discrimination. *Psychology, Public Policy, and Law, 5*, 630–664. doi:10.1037//1076-8971.5.3.630
- Stratton, T. D., McLaughlin, M. A., Witte, F. M., Fosson, S. E., & Nora, L. M. (2005). Does students' exposure to gender discrimination and sexual harassment in medical school affect specialty choice and residency program selection? *Academic Medicine: Journal of the Association of American Medical Colleges, 80*, 400–408. doi:10.1097/00001888-200504000-00020
- Street, A. E., Gradus, J. L., & Stafford, J. (2007). Gender differences in experiences of sexual harassment: Data from a male-dominated environment. *Journal of Consulting and Clinical Psychology, 75*, 464–474. doi:10.1037/0022-006X.75.3.464
- Torrey, M. (2007). Yet another gender study? A critique of the Harvard study and a proposal for change. *William and Mary Journal of Women and Law, 13*, 795–820.
- Warren, P., Swan, S., & Allen, C. T. (2015). Comprehension of sexual consent as a key factor in the perpetration of sexual aggression among college men. *Journal of Aggression, Maltreatment & Trauma, 24*, 897–913. doi:10.1080/10926771.2015.1070232
- Wigderson, S., & Katz, J. (2015). Feminine ideology and sexual assault: Are more traditional college women at greater risk? *Violence against Women, 21*, 616–631. doi:10.1177/1077801215573333

Corrigendum

Psychology of Women Quarterly
2016, Vol. 40(3) NPI
© The Author(s) 2016
Reprints and permission:
sagepub.com/journalsPermissions.nav
DOI: 10.1177/0361684316657822
pwq.sagepub.com



Rosenthal, M. N., Smidt, A. M., & Freyd, J. J. (2016). Still second class: Sexual harassment of graduate students. *Psychology of Women Quarterly*. Original doi:10.1177/0361684316644838

This article has been updated since the original online version to more accurately reflect the data regarding the institutional betrayal measure. Following the initial online publication, the authors realized that some participants had actually not seen or completed the institutional betrayal measure, the IBSQ, due to a software error. These participants had been mistakenly treated as 0s in the analyses. Analysis of the corrected data shows the findings remain the same and in some cases look stronger (though with smaller sample sizes). The participants who saw the IBSQ did not differ from those who did not see the IBSQ in terms of gender, age, or race.