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Gender Roles, Sexual Cognitions, and History of Victimization: A Preliminary Model of Reporting Behavior Among College Students

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Abstract

Sexual cognitions that flow from gender roles and previous history of victimization are strong predictors of sexual assault victimization. Because these cognitions reside within the individual themselves, we hypothesized that these same cognitions will also be predictors of subsequent reporting behavior to formal campus supports. An online self-report survey for assessing student awareness and perception of sexual safety was administered in a random stratified sample of college students (N = 98; 78% female). Participants were shown a hypothetical vignette involving a quid pro quo sexual harassment incident involving a student and were asked to rate their likelihood of making a formal report if this happened to them. Controlling for Type 1 error rates, a backward-chunk-wise elimination procedure was used to build a regression model involving nine predictors grouped into five categories: (1) conformity to traditional gender roles; (2) rape myth acceptance beliefs; (3) token resistance; (4) sexual assertiveness; and (5) prior history of victimization. Three of the five categories remained in the model after a sequential process of eliminating non-significant predictors. Specifically, lower agreement with token resistance beliefs, stronger sexual assertiveness, and not being a victim in the past increased the likelihood of respondents stating they would initiate a formal report. When predicting reporting behavior among the general college student sample, sexual cognitions related to token resistance beliefs and sexual assertiveness appear to be more robust predictors compared to conformity to traditional gender roles alone. Programming activities could consider targeting these attitudes as opposed to broad aspects of traditional gender roles. Future studies should test this model in a confirmatory manner to determine its reliability in subsequent samples, in addition to the potential role of toxic masculinity attitudes.

Keywords: *sexual violence, gender roles, sexual assertiveness, sexual cognition, help-seeking, campus programming*

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Introduction

It is estimated that approximately 15% of women report experiencing rape after age 15, and as many as 20% will experience rape over the course of their lifetime (Holland, 2020; Jozkowski et al., 2017; Orchowski et al., 2009). It is also reported that 20%–25% of college women will have experienced at least one form of sexual violence by the end of their sophomore year (Hickman & Muehlenhard, 1999; Holland, 2020). In light of these statistics, it is no surprise that sexual safety on campus is a primary concern for students and parents, as well as campus leaders (Holland, 2020; Jozkowski et al., 2014; Orchowski et al., 2009).

Although sexual violence is often portrayed as being an attack by a stranger, campus leaders are more likely to be dealing with incidents of assault between students who already know each other (Tjaden & Thoennes, 2000). As such, there continues to be a need for a deeper understanding of the systems and beliefs that may be contributing to and maintaining sexual violence on college campuses in order to formulate more effective strategies for violence prevention and sexual education.

Literature Review

Campus incidents of sexual violence could begin with a miscommunication about desired sexual activity and consent (Herman et al., 2018; Jozkowski et al., 2014; Orchowski et al., 2009). Gender differences in communication and consent styles have revealed many similarities in how men and women communicate consent, as well as some notable differences in how each gender interprets the consent communication they receive from their sexual partner (Hickman & Muehlenhard, 1999; Jozkowski et al., 2014, 2017). These differences appear related to several elements, including conformity to traditional gender roles (Herman et al., 2018; Jozkowski et al., 2014), which may contribute the endorsements of token resistance and rape myth acceptance beliefs (Fansher & Zedaker, 2022; Holland, 2020; Jozkowski et al., 2017; Orchowski et al., 2009; Osman, 2013) among college students.

Conformity to Traditional Gender Roles

Conformity to traditional gender roles has been cited as one of the factors that contribute to the occurrence of sexual assault (Sanche, et al., 2012a; Senkans et al., 2020; Willie et al., 2018). In North America, gender-specific stereotypes shape the cultural context in which internalized sexual scripts are formed (Eaton et al., 2015; Rossetto & Tollison, 2017). For example, the widely accepted gender roles broadly depict women engaging in female submissive behaviors and men engaging in male dominant behaviors within the context of intimate relationships. Moreover, both genders are assigned additional characteristics that are considered mutually exclusive, with men being assertive, aggressive, self-promoting, and agentic and women being passive, meek, self-deprecating, and docile. To the extent that gender-specific stereotypes are internalized, these roles and expectations flow into interpersonal sexual encounters between men and women. Subsumed within these gender roles are traditional sexual scripts that describe how men and women are expected to behave or not behave when both parties are interested in engaging in sexual intercourse (Eaton et al., 2015; Jozkowski & Peterson, 2013; Rossetto & Tollison, 2017), which sets the stage for token resistance or script refusal attitudes.

Token Resistance

The traditional script dictates that women are expected to be the gatekeepers of sex (i.e., always be selective and say "no" to sex) and men to be the initiators of sex (i.e., always responsible for initiating sex) (Benoit & Ronis, 2021; Eaton et al., 2015; Jozkowski & Peterson, 2013). Inflexible and extreme adherence to these gender roles causes problems in terms of consent because the man may feel compelled to persist in his sexual conquests in order to prove his "manhood." On the other hand, the woman may be reluctant to initiate sex or say "yes" to sex for fear of being labeled promiscuous (Benoit & Ronis, 2021).

Token resistance, or the belief that women say "no" to sexual advances when they actually mean "yes" (Osman, 2013), has been alternatively labeled "scripted refusal" to emphasize the implicit, verbal nature of such behaviors (Dalton, 2022; Emmers-Sommer, 2016; Muehlenhard, 2011) because the content of these scripts activates when interpersonal costs seem elevated (e.g., when someone wants to make themselves more desirable to a prospective partner). Consistent with the traditional sexual script, if the woman engages in token resistance or is *perceived* as engaging in token resistance, the man may continue with sexual activity anyway even though the women may be actively refusing his advances (Shafer et al., 2018).

Rape Myth Acceptance

The aforementioned traditional sexual script could also perpetuate rape-supportive attitudes among both genders in certain spaces (e.g., parties hosted by gender-segregated fraternities). McMahon and Farmer (2011) discussed four types of rape myth acceptance beliefs: (1) She asked for it; (2) He didn't mean to; (3) It wasn't really rape; and (4) She lied. The first belief, "She asked for it," pertains to how women are always somewhat responsible for being sexually assaulted ("If a girl goes to a room alone with a guy at a party, it is her own fault if she is raped"). The second belief, "He didn't mean to," involves lifting the burden of responsibility from the perpetrator ("Rape happens when a guy's sex drive goes out of control"). The third belief, "It wasn't really rape," involves downplaying the severity of the assault ("A rape probably doesn't happen if a girl doesn't have any bruises or marks"). And the fourth belief, "She lied," involves a prevailing suspicion over the integrity of women ("Rape accusations are often used as a way of getting back at guys.") Not surprisingly, shame and embarrassment (Sabina & Ho, 2014; Stoner & Kramer, 2019) and minimization of assault behaviors (Holland & Cortina, 2017) are commonly cited reasons for abstaining from utilizing resources on campus. The victim's emotions may stem from internalized implicit beliefs (e.g., feeling embarrassed because they feel responsible for allowing the assault to happen) and the minimization behavior may be a direct consequence of holding beliefs that downplay the severity of the assault.

While there has been demonstrated shifting in attitudes of acceptance of sexual harassment or assault since the rise of the #MeToo movement in 2017, studies have not yet found there to be a significant change in rape myth acceptance or reporting behaviors among college students (Fansher & Zedaker, 2022; Jaffe et al., 2021), demonstrating that these highly socialized beliefs about gender roles and sexual scripts continue to wield great power in the minds of emerging adults (Mulder & Bosma, 2022; Silver & Hovick, 2018; Pugh & Becker, 2018).

Sexual Assertiveness

Rigid adherence to traditional gender roles also contributes to distinct levels of sexual autonomy between the two genders (Sanchez et al., 2012a). Because the traditional sexual script dictates that men should take charge or be assertive and women should be passive or less assertive, this has the potential to impair the extent to which people feel like they can exercise choice in their sexual encounters. Sexual autonomy, in particular, is a strong predictor of sexual performance and safe-sex behavior. Because the script dictates that autonomy is relegated to men, women suffer the most, as evidence showed that women tend to report greater difficulty

with sexual arousal (Milhausen et al., 2010) and lower sexual satisfaction compared to men (Sanchez et al., 2012b). Men who are predisposed to acting out the gender-normed script, as opposed to letting spontaneity guide the sexual encounter, also experience lower sexual satisfaction (Sanchez et al., 2005) because the focus shifts to performance as opposed to pleasure.

In regard to utilization of formal supports following an assault, lower levels of assertive sexual communication predict a lower likelihood of reporting sexual victimization to police or a friend (Orchowski et al., 2009). Prior experience has some influence on sexual assertiveness, with evidence suggesting that women who had emotionally healthy relationships with their fathers showed higher levels of sexual assertiveness and agency (i.e., refusal behaviors with male peers; Katz & van der Kloet, 2010).

Prior History of Victimization

Conversely, the strongest predictor of sexual assault found in the current literature is a prior history of sexual assault or abuse—either as a child (Humphrey & White, 2000; Littleton et al., 2019; Maker et al., 2001) or as an adult (Gidycz et al., 1993). In particular, experiences of sexual abuse or assault before age 18 appear to have a broad impact on rates of victimization, as well as reporting behaviors. Humphrey and White, in a 2000 study, found that sexual victimization among college-aged women was 4.6 times higher in those who had experienced sexual abuse before age 14. Maker et al., (2001) found a similar pattern; in their study, sexual abuse before age 16 was the highest risk factor of sexual assault as an adult.

This is not to say, however, that a prior victimization is the direct cause of increased sexual violence later in life, but rather that a history of abuse or violence may create or reinforce the cognitive schemas that increase the likelihood of future victimization and create hesitancy in reporting (Calvete et al., 2007; Collinsworth & Fitzgerald, 2009; Goodman et al., 2019; Griffin et al., 2022; Littleton et al., 2019; Wright et al., 2009). For example, in studies of women who have experienced intimate partner violence (IPV), women with a prior history of sexual abuse reported that they were more likely to perform stereotypical sex-role behaviors when engaging with men, including acting more submissive or engaging in "survival sex" (Eaton et al., 2015; Edwards & Dardis, 2022; Knowles, 1992; Silver et al., 2023). These women were also more likely to be previously acquainted with their attacker, putting them at a higher risk for date rape or abuse by an established partner (Tjaden & Thoennes, 2000).

Stereotypical behaviors may carry over to reporting the assault after the fact, as well (Holland, 2020; Ullman, 1996). Women with a history of prior victimization are more likely to express hesitancy to report an assault due to the potential for embarrassment or disbelief in their account of the events (Griffin et al., 2022; Holland, 2020; Jozkowski & Peterson, 2013). This hesitancy to report makes it even more difficult for universities to keep an accurate account of sexual assaults happening on campus.

Present Study

Despite an increased awareness of sexual violence on campuses—as well as a widening availability of support services for victims—only about 20% of victims report their assault to campus authorities (Holland, 2020; Sabina & Ho, 2014). This low reporting rate contributes to a multitude of concerns that complicate the mission of violence prevention services, which include inhibiting the apprehension and prosecution of offenders; decreasing the opportunities for victims to be aware of and receive support services; and artificially deflating campus sexual safety statistics, which can be misleading for students and families, as well as administrative and governmental agencies (Fischer et al., 2003; Holland & Cortina, 2017).

A greater understanding of the reasons a student chooses not to report an incident of sexual violence could allow violence prevention teams to formulate more effective programming to combat low reporting rates and

increase participation in support services. Because of the pervasive impact of our traditional gender roles and their downstream effects on behaviors related to sexual encounters, it seemed likely that these intrapsychic factors would also be predictive of help-seeking behavior down the line (i.e., after an unwanted sexual experience occurs). Although sexual assertiveness and prior history of victimization have been reported to be predictors of utilizing formal supports (Orchowski et al., 2009; Holland, 2020), no study has examined whether the underlying intrapsychic factors (i.e., conformity to traditional gender roles, token resistance, or rape myth acceptance beliefs) would function as predictors of utilizing formal supports. Because shame, guilt, embarrassment, and downplaying of rape are among the foremost barriers that get in the way of reporting, we suspect that internalized token resistance and rape myth acceptance beliefs (both of which flow from traditional gender roles) would also be predictors of reporting behavior alongside sexual assertiveness and prior history of victimization.

Because of the exploratory nature of our study's hypotheses, we used a backward-chunk-wise elimination procedure (Kleinbaum et al., 2008), to build a regression model to predict the likelihood of reporting or disclosing sexual misconduct based on the following factors: (1) conformity to traditional gender roles; (2) acceptance of rape myths and token resistance theories; (3) personal history of sexual violence; and (4) sexual assertiveness.

Method

Participants

A battery assessing student awareness and perception of sexual safety and Title IX-related adjudication procedures was disseminated through email to students at a mid-sized, regional public university in the United States. A total of 3,608 student emails, stratified according to gender (60% female, 40% males), were randomly selected to receive a recruitment letter related to this study. This recruitment email provided information regarding the rationale for the survey, risks, and benefits for participating, rights they are entitled to, steps involved in completing the survey, eligibility requirements (main campus full-time student who has spent at least 1 year enrolled in the university and is 18 years or older), and the potential for monetary compensation for participating in the study (chance to win $50 gift card). This study was approved by the Institutional Review Board prior to the administration of this survey.

Out of 3,608 students, 232 participants started to complete the assessment battery. Two participants were removed because they did not spend at least 1 year enrolled in the university. One participant was removed because they were not at least 18 years of age. This left us with a total of 229 participants who met the inclusion criteria for completing the survey. The majority of participants were aged 19–20 (43.2%), followed by the 21–22 age category (39.3%). Most of the participants self-identified as White/Caucasian (n = 183; 79.9%), followed by Black/African American (n = 12; 5.2%) students. The majority of participants self-identified as being female (n = 180; 78.6%), with 29 (12.7%) self-identified as being male, followed by 20 (8.7%) participants who did not respond to the question pertaining to gender identity. In addition, most of the participants identified with a heterosexual sexual orientation (n = 148; 64.6%), followed by a bisexual/pansexual sexual orientation (n = 45; 19.7%).

Procedure

Participants received an email invitation to complete a battery of online questionnaires to assess student perceptions of campus sexual violence and Title IX policies and procedures. They were presented a hypothetical vignette depicting a quid pro quo sexual harassment incident where a student leader is attempting to leverage their position in a student organization to obtain sexual favors in exchange for a

leadership position (Appendix A). After reading the vignette, participants indicated their likelihood of filing a formal complaint to someone affiliated with the university if this happened to them on a 7-point Likert scale (1 = Strongly disagree; 7 = Strongly agree). Participants also answered a series of binary questions (yes or no) to indicate whether they would report to an assorted list of informal (e.g., parents), university-affiliated entities (e.g., campus violence prevention program), or non-university affiliated entities (e.g., national sexual assault hotline; Figure 1).

Figure 1. *Percent Response for Reporting Preferences*
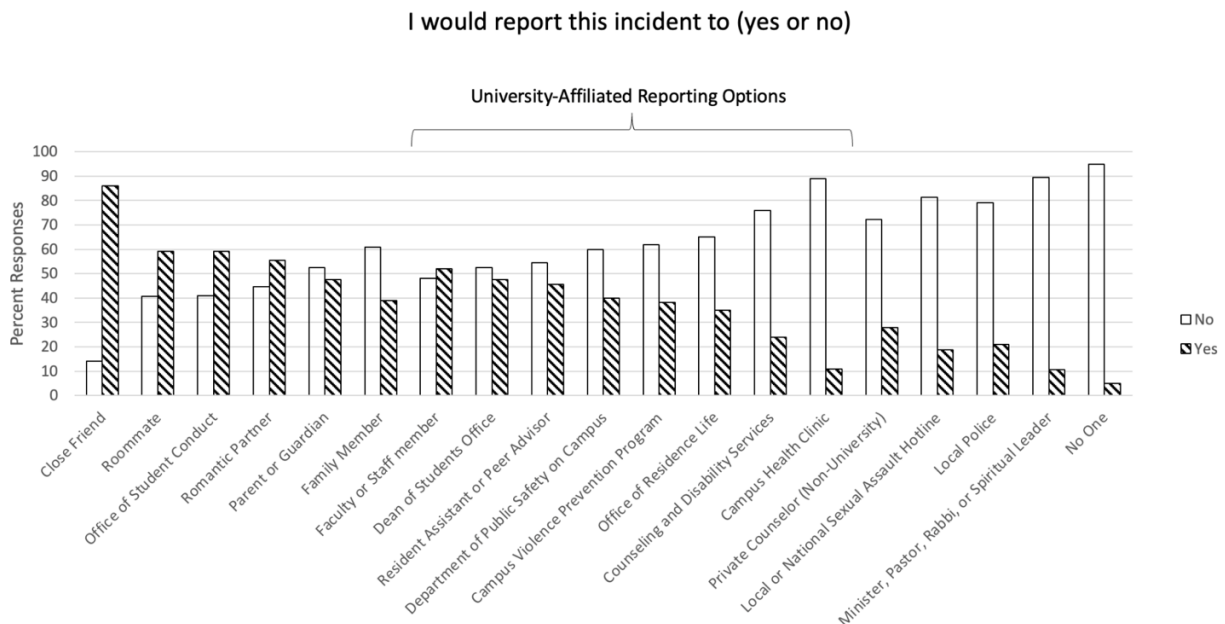
Note. Participants answered a series of binary questions (yes or no) to indicate whether they would report to an assorted list of informal, university-affiliated entities or non-university affiliated entities. Participants could indicate several reporting choices (e.g., report to close friend and office of residence life) in this section of the survey.

Measures

Each of the measures used in this study was judged for reliability using the standards outlined by DeVellis (2017), α < .60, unacceptable; between .60 and .65, undesirable; between .65 and .70, minimally acceptable; between .70 and .80, respectable; between .80 and .90, very good; and for α > .90, excellent.

Traditional Masculinity/Femininity Scale

The Traditional Masculinity/Femininity Scale (Kachel et al., 2016) was designed to measure gender role self-concepts, which encompass gender-role adoption (e.g., I consider myself as mostly feminine), gender-role preference (e.g., Ideally, I would like to be mostly feminine), and gender-role identity (e.g., Traditionally, my attitudes and beliefs would be considered as somewhat feminine; Kachel et al., 2016). Created to overcome limitations in previous masculinity/femininity measures (such as concerns about item aging and lack of content validity), this six-item measure is designed to capture individual attitudes in the context of the culture in which the participant lives. The measure demonstrates good internal consistency (reported α's ≤ .87), moderate test-retest reliability (1-year span = 0.75), excellent factorial validity (unidimensional latent factor in exploratory and confirmatory factor analyses), and strong criterion-related validity between known groups (e.g., differences between straight women, bisexual women, and lesbians). The measure allows respondents to rate themselves on a 7-point Likert scale in regard to masculinity (responses ranged from "1–Not at all masculine" to "7–Totally

masculine") and femininity (responses ranged from "1–Not at all feminine" to "7–Totally feminine"). For this study, the femininity scale and masculinity scales both evidenced very good reliabilities (α < .90 for both scales).

Illinois Rape Myth Acceptance Scale: Short-Form Version

The Illinois Rape Myth Acceptance Scale is a widely used scale for measuring general rape myth constructs with strong reliability and construct validity (Payne et al., 1999). A short-form version of the scale, used in this study, was updated to reduce participant burden and to better reflect modern subtleties involved with rape myths (McMahon & Famer, 2011). For example, the phrase "hooking up" was used to talk about getting physically intimate with another person—based on focus-group feedback.

Additional items were also added to capture subtle aspects of rape myths ("If both people are drunk, it can't be rape"). The first subscale, "She asked for it," reflects the belief that the victim's behavior elicited the assault. The second subscale, "It wasn't really rape," consists of items that minimize the severity of the assault. The third subscale, "He didn't mean to," reduces the blame (if any) put on the perpetrator. And the fourth subscale, "She lied," consists of items that state that women usually lie about their assault. Participants responded to the items on a 5-point Likert-type scale, ranging from 1–Strongly Disagree to 5–Strongly Agree. In the current study, the reliability indices ranged from undesirable ("It wasn't really rape;" α = .63), respectable ("He didn't mean to"; α = .75, and very good ("She lied" and "She asked for it; .80 < αs < .90).

Token Resistance to Sex Scale

Osman (2013) designed the Token Resistance to Sex Scale to measure the respondent's predispositional belief that women say "no" to sexual advances when they actually mean "yes." Consisting of eight items, participants respond to a variety of statements that denote how women engage in token resistance in various scenarios. Response choices were based on a Likert-type scale, ranging from 1–Strongly distressed to 7–Strongly agree. The measure has good reliability and construct validity across genders. For example, men score higher compared to women; women who score higher on the measure have a greater likelihood of engaging in passive sexual behaviors and are less likely to use verbal messages to communicate consent to sexual intercourse. Men who have higher scores attend more to nonverbal cues of sexual availability, while men with lower scores attend more to nonverbal cues of sexual refusal (Osman & Davis 1997). In this study, the measure provided excellent internal consistency (α = .91)

Hurlbert Index of Sexual Assertiveness

This instrument measures the extent to which the respondent is assertive in communicating their sexual desires (Hurlbert, 1991). Consisting of 25 items, respondents rate the frequency in which each statement applied to them (e.g., "I feel uncomfortable talking during sex") on a 4-point Likert-type scale, ranging from 0–All of the time to 4–Never. This measure has produced high internal consistency (Hurlbert, 1991) and test–retest reliability (Pierce & Hurlbert, 1999), in addition to producing expected relationships with external indicators, such as a positive correlation with frequency of sexual activity, greater subjective sexual desire, and greater sexual satisfaction (Hurlbert, 1991). In this study, the measure produced excellent internal consistency (α = .93).

Adapted Sexual Experiences Survey (SES): Victimization Version

The Sexual Experiences Survey is a widely used measure of unwanted sexual experiences (Koss et al., 2007), which includes sex play (e.g., fondling, kissing, and petting), sex acts (e.g., oral or anal sex), and sexual intercourse (i.e., penetration with a penis). The coercion methods varied according to four ways: (1) being overwhelmed by the other person's continual arguments and pressure; (2) other person used their position of authority; (3) other person threatened or used some degree of physical force; or (4) other person gave the

respondent drugs or alcohol. To limit participant burden, only 10 unique scenarios were assessed, altogether, in this particular survey (Appendix B). The instrument was adapted to reduce length and participant burden. For each item, participants indicated if it happened to them (1) during the past 12 months that the respondent was a student in the university; (2) during the entire time that the student was a student in the university; and/or (3) prior to being a student at the university. For the purposes of the analysis, participants were coded "yes" for lifetime history of victimization if they endorsed any of the above scenarios. All others were coded "no." Thus, a binary variable for lifetime history of victimization was used in this analysis.

Data Analysis

The research team used a backward-chunk-wise elimination procedure (Kleinbaum et al., 2008) to build a model that predicted one's likelihood of filing a formal complaint regarding sexual harassment to someone affiliated with the university so formal adjudication procedures could proceed. The purpose of this procedure was to build a regression model that could predict this dependent variable with any (or all) of the following predictor variables: (1) four acceptance of rape myth subscales; (2) endorsement of token resistance attitudes; (3) identification with traditional masculinity/femininity gender role concepts; (4) lifetime history of being a victim of sexual harassment (yes/no); and (5) sexual assertiveness.

The backward-chunk-wise elimination procedure comprised two phases: (1) the backward-chunk-wise elimination procedure followed by (2) the backward single variable elimination procedure. The first phase entails "chunking" (or grouping) variables to reduce the number of possible models assessed to reduce the inflation of Type-1 error rates due to multiple statistical tests. On the other hand, a backward-chunk-wise elimination procedure, as opposed to a forward-selection procedure, guards against underfitting the data because it uses the error term from the maximum model to conduct statistical tests.[1] In this phase of the analysis, we treated the four acceptance of rape myth subscales as one single chunk. We also treated the traditional masculinity and femininity subscales as one single chunk. The other predictor variables were single variables but were treated as separate "chunks" in the first phase of the analysis. Altogether, the maximum model had five "chunks."

The maximum model, with all five chunks, was treated as the base model. For each chunk, we examined the minimum (or smallest) test statistic, Fp, associated with a chunk. If the minimum test statistic was not significant (Fp < FCRIT), where α = .10, we deleted the chunk with the smallest test statistic and reduced the total number of predictors in the model by one chunk. Subsequently, we fitted the reduced model with remaining chunks and repeated this chunking elimination process. If the minimum test statistic in a reduced model was significant (Fp > FCRIT), where α = .10, we stopped the chunking elimination process and proceeded to the backward single variable elimination procedure.

In the first step of the backward single variable elimination procedure, the regression model with remaining chunks from the first part of the analysis was fitted as the base model. The predictors in the model, however, were treated as single variables as opposed to chunks. The second step included fitting all k-1 variables models, defined by deleting one variable from the base model. For each model, the minimum test statistic, Fp, was examined for each single variable. If statistically significant (Fp > FCRIT), where α = .10, the procedure stopped, and the reduced model was chosen as the final model. If not statistically significant (Fp < FCRIT), where α = .10, the predictor is deleted with the minimum test statistic and k is reduced by one. In this case, there was a return to the second step and the process was repeated until a final model was determined.

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[1] A forward selection procedure that uses the error estimate from an incomplete model, which may lead to ending the variable selection procedure prematurely and missing important predictors (Kleinbaum et al., 2008).

Results

Missing Data Treatment

Of the 229 participants who met the inclusion criteria for completing the survey, 98 (42.8%) participants had 10% or less missing data at the subscale. Little's Missing Complete at Random (MCAR) test was statistically significant ($\chi2$ = 466.54, df = 187, p < .05), suggesting that the underlying missing data was not missing at random (NMAR). Visual inspection of the pattern of missing data suggested that a little more than half of participants (n = 119; 52.00%) dropped out of the survey when items started to pose questions regarding the nature of sexual harassment (such as, "What is sexual harassment?" and "What is sexual misconduct?"). These questions were located approximately a third into the assessment battery (i.e., after providing demographics and answering items pertaining to perceptions of campus leadership). Not surprisingly, more than half of the participants (n = 130; 56.80%) never reached the end of the questionnaire battery.

This pattern of missing data suggests that participants may have been motivated to start a survey relevant to their experience but may have been dissuaded from completing the survey because it may be causing them to relive their traumatic experience (Rosenberg et al., 2018). In general, campus climate surveys have been marked by participation as low as 20%–30% (Krebs et al., 2016; Giroux et al., 2020), which appears to be the case for this study, as well. To maximize the power of this study, we imputed data using multiple imputation (Enders, 2010), which is currently considered one of the most robust methods of handling missing data deemed NMAR. To conduct this imputation, we used the R package mice to impute continuous and binary data by chained equations (van Buuren & Groothuis-Oudsshoorn, 2011). Data was imputed only in cases where (1) participants had 10% or less missing data and (2) variables had 10% or less missing data. Once data was imputed, one random dataset was selected for analysis, and the backward-chunk-wise elimination procedure was conducted in SPSS. Because not all data was imputed, participants with missing data were excluded from the examined models (below) in a listwise fashion.

Data Screening and Regression Diagnostics

We checked for multivariate outliers (leverage > 0.81) among our participants. We also examined studentized residuals (jackknife residuals < -2 or > +2) to examine the distance between a predicted outcome value for each individual's score and the regression line. In addition, we examined Cook's distance (Cook's >1) to identify individuals that may have too much of an influence on the regression coefficients estimates. No participants were flagged on all three aforementioned indices. We did not observe gross violations of assumptions pertaining to linearity, homogeneity of variance, and normality when reviewing residual and normal probability plots generated from the maximum and final models. Similarly, variance inflation factor (VIF) values and condition indices did not suggest the presence of significant collinearity among predictors in the maximum and final models. Descriptive statistics for predictors entered in the backward-chunk-wise elimination procedure are shown in Table 1.

Table 1. *Univariate Descriptive Statistics for Predictors Examined in the Backward-Chunk-Wise Elimination Procedure*

Scale	Mean (*SE*)[a]	*SD*	Skewness (*SE*)[b]	Kurtosis (*SE*)[c]	Range
Illinois Rape Myth Acceptance (IRMA)					
"She asked for it."	7.83 (0.27)	2.72	**2.05 (0.24)**	**5.29 (0.48)**	6–21
"He didn't mean to."	11.23 (0.42)	4.20	0.37 (0.24)	-0.88 (0.48)	6–21
"It wasn't rape."	5.70 (0.15)	1.44	0.36 (0.24)	**18.00 (0.48)**	5–25
"She lied."	8.70 (0.37)	3.71	0.99 (0.24)	0.40 (0.48)	5–20
Traditional Masculinity Scale (TMF)	2.89 (0.14)	1.39	0.33 (0.24)	-0.71 (0.48)	1–6
Traditional Femininity Scale (TMF)	5.02 (0.14)	1.35	-0.76 (0.24)	0.39 (0.48)	1–7
Token Resistance to Sex Scale (TRSS)	10.68 (0.50)	4.96	**2.78 (0.24)**	**8.60 (0.48)**	8–36
Lifetime History of Sexual Harassment	1	N/A	N/A	N/A	0–1
Hurlbert Index of Sexual Assertiveness (HISA)	3.48 (0.08)	0.70	-0.78 (0.28)	0.87 (0.56)	1–5

Note. Lifetime History of Sexual Harassment was coded as a binary variable (yes/no); TMF = Traditional Masculinity/Femininity Scale; N/A = Not Applicable.

[a]Mode instead of Mean is reported for Lifetime History of Sexual Harassment because of the binary nature of this item.

[b]Distribution is generally considered reasonably symmetrical if skewness is between -0.5 and 0.5; moderately skewed if between -1 and -0.5 or between 0.5 and 1; and highly skewed if skewness is less than -1 or greater than 1. Highly skewed values are bolded in the table.

[c] Distribution is generally considered leptokurtik if kurtosis > 1.0 and platykurtic if kurtosis < -1.0. Values that exceed these thresholds are bolded in the table.

Backward-Chunk-Wise Elimination Procedure

The backward-chunk wise elimination procedure began with the chunk-wise elimination procedure. Altogether the maximum model had five "chunks" of predictors (see Table 2), which include: (1) four acceptance of rape myth subscales; (2) endorsement of token resistance attitudes; (3) two traditional masculinity/femininity gender role subscales; (4) lifetime history of being a victim of sexual harassment (yes/no); and (5) sexual assertiveness. The minimum test statistic, associated with the Traditional Masculinity/Femininity Subscale, was not significant [$Fp(2,62) = 1.17$, $p = .29$)]. Subsequently, we deleted both subscales from the model and reduced the total number of predictors in the model to four chunks.

Table 2. *Maximum Model for Backward-Chunk-Wise Elimination Procedure*

Model	SS	df	MS	F	p	R2 Change
Chunk 1: IRMA Subscales	10.14	4	2.54	1.14	.35	.06
Chunk 2: TMF Scales	5.21	2	2.61	1.17	.32	.03
Chunk 3: TRSS	19.53	1	19.53	8.78	.004	.12
Chunk 4: Lifetime history of sexual harassment	5.78	1	5.78	2.60	.11	.03
Chunk 5: HISA	12.00	1	4.83	2.17	.02	
Regression	43.42	9	4.83	2.17	.04	
Residual	137.90	62	2.22			
Total	181.32	71				

Note. Lifetime History of Sexual Harassment was coded as a binary variable (yes/no). IRMA = Illinois Rape Myth Acceptance; TMF = Traditional Masculinity/Femininity Scale; TRSS = Token Resistance to Sex Scale; HISA = Hurlbert Index of Sexual Assertiveness.

After removing the Traditional Masculinity/Femininity Subscales, we assessed the remaining four chunks in a revised model. In this model, the minimum test statistic, associated with the four subscales of the Rape Myth Acceptance Scales, was not significant [(Fp (4, 66) = 1.51, p = .21). Subsequently, we deleted the four Rape Myth Acceptance Scales from the model and reduced the total number of predictors in the model to three chunks. Because the remaining chunks were essentially single predictors, we stopped the chunking elimination process and proceeded to the backward single variable elimination procedure.

In the backward-single-variable-elimination procedure, the regression model with the three remaining single variable predictors (Token Resistance Scale, Lifetime History of Sexual Violence, and Sexual Assertiveness Scale) from the chunking analysis was fitted as the base model. In this model, all three predictors were statistically significant (Fp > FCRIT), where α = .10 (Table 3).

**Table 3.** *Final Model for Backward-Chunk-Wise Elimination Procedure*

Model	SS	df	MS	F	p	R2 Change
TRSS	10.34	1	10.34	4.55	.04	.06
Lifetime History of Sexual Harassment	8.95	1	8.95	3.94	.05	.05
HISA	9.26	1	9.26	2.17	.02	
Regression	27.31	3	9.10	4.01	.01	
Residual	158.97	70	2.27			
Total	186.28	73				

Note. Lifetime History of Sexual Harassment was coded as a binary variable (yes/no). TRSS = Token Resistance to Sex Scale; HISA = Hurlbert Index of Sexual Assertiveness.

Specifically, for every point increase in the endorsement of token resistance attitudes, the likelihood of making a formal report goes down by .09 points on a 7-point Likert Scale (1 = Strongly disagree; 7 = Strongly agree). Moreover, individuals who have a history of being a victim of sexual violence are less likely to make a formal report, with an average difference of .89 points between the two groups (history versus no history of victimization). On the other hand, for every point increase in sexual assertiveness attitudes, the likelihood of

making a formal report goes up by .52 points on the same outcome variable (see Figure 2).

Figure 2. *Statistical Diagram of the Final Model for the Backward-Chunk-Wise Elimination Procedure*
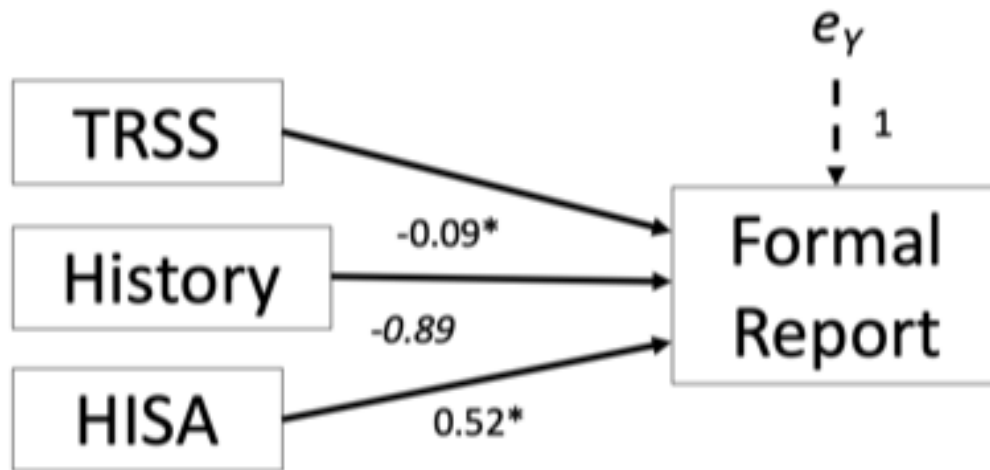
Note. The dependent variable was a Likert-type scale responses to the statement "I would file a formal complaint to someone affiliated with the university so formal adjudication procedures could proceed" (1 = Strongly disagree; 7 = Strongly agree). History refers to lifetime history of being a victim of sexual harassment coded as a binary variable. TRSS = Token Resistance to Sex Scale; HISA = Hurlbert Index of Sexual Assertiveness.
* *p* < .05

Discussion

The purpose of this study was to build a best-fitting regression model for predicting utilization of formal campus supports based on prior history of victimization and other intraindividual variables (e.g., token resistance, sexual assertiveness) related to conformity to traditional gender roles. Because gender role-related constructs (e.g., token resistance, rape myth acceptance) appear to be strong predictors of sexual violence (Sanchez et al., 2012a), we suspected that the same sexual cognitions would also be at play when the victim decides if they should make a formal report.

Because of the exploratory nature of this study, we did not have a specific hypothesis in regard to which predictor would be the strongest predictors. Instead, a backward-chunk-wise elimination procedure was used to identify the best subset of predictors. This regression procedure enabled us to test all nine predictors in the initial model but also group variables according to prior scientific knowledge.

Traditional Gender Role Conformity

Unexpectedly, the first set of predictors of reporting behavior deemed to be the least significant was conformity to traditional masculinity and femininity gender roles and self-concepts. This result was unexpected because of the central role we assigned to conformity to traditional gender roles and sexual cognitions in the intrapsychic landscape. However, a meta-analysis involving 39 studies and 11 different instruments did report that general gender-role traits alone were not strong predictors of sexual violence (Murnen et al., 2002). Instead, the more immediate problematic aspects of masculinity are one that combines hostile attitudes toward women, endorsement of men's dominance, and acceptance of men's sexual aggression

towards women (Murnen, et al. 2002). More recently, in a large sample of college students attending a private university in the Northeastern United States, stronger endorsement of beliefs related to power over women ("In general, I control the women in my life"), acceptance of violence (e.g., "Sometimes violent action is necessary"), and playboy attitudes (e.g., "If I could, I would frequently change sexual partners") predicted a diminished sense of behavioral control in asking for consent and weaker intent to verbally ask for consent (Hermann, et al., 2018). Similarly, conformity to traditional gender roles may not be a strong predictor of using campus supports post-sexual violence.

Future research may need to look at more specific gender-role facets that have stronger effects on reporting, such as agreement with toxic masculinity traits that have been found to contribute to the perpetration of sexual violence (Murnen et al., 2002).

Rape Myth Acceptance Beliefs

The next set of predictors deemed to be insignificant were the four subscales related to rape myth acceptance beliefs, this included beliefs that (1) women are always somewhat responsible for being sexually assaulted; (2) the perpetrator has zero or diminished responsibility for the assault; (3) rape constitutes a very narrow range of behaviors; and (4) women cannot be trusted to give reliable testimonies. Despite the non-significance results in this study, it is possible that these cognitions have limited predictive power in the general college student population when predicting reporting behavior but may have stronger effects in subcultures present in rape-supportive spaces, such as parties hosted by fraternities in gender-segregated Greek communities (Canan et al., 2018). Additionally, previous studies conducted in international populations cite cultural considerations as factors that predict acceptance of rape myths (Stephens et al., 2016; Tavrow et al., 2013), with a general trend for higher acceptance of rape myths in communities that traditionally assign more power and autonomy to men than women. Thus, the results of this study combined with findings reported in extant literature suggest a tailored, culturally informed approach to programming aimed at increasing reporting in specific college student populations.

Token Resistance

On the other hand, agreement with token resistance of beliefs did predict lower likelihood of making a formal report. To our knowledge, although previous studies reported token resistance attitudes as predictive of sexual assault, this is the first study to test whether token resistance attitudes would be predictive of making a formal report. The pattern of results thus far suggests that token resistance attitudes (e.g., women usually say "no" to sex when they really mean "yes") may have a two-fold consequence—both in blurring interpretation of consent in sexual encounters *and* eliciting blame, guilt, and/or responsibility victim for "allowing" the unwanted sexual experience to happen, which subsequently reduces the likelihood of accessing formal campus supports. Because these self-incrimination emotions are frequently cited as reasons for not reporting (Stoner & Cramer, 2019), future studies could evaluate the potential mediating role of token resistance attitudes in explaining the connection between these negative emotions and reporting behavior.

Sexual Assertiveness and Personal History of Sexual Violence

Our finding that those with a lifetime history of sexual violence are less likely to report an incident of campus violence is consistent with the existing literature (Holland, 2020; Orchowski et al., 2009; Ullman, 1996). This is an especially germane finding for campus support providers, who are often dealing with women under the age of 21, making it increasingly likely that abuse that happened before coming to campus also occurred prior to age 18. Campus programs must be prepared to address a population that may have pre-existing sexual schemas or scripts that inhibit the very reporting behaviors colleges are seeking to increase.

Developing formative experiences (e.g., strong father–daughter relationship) that affirm self-worth, defy traditional gender stereotypes, and integrate healthy emotion regulation skills are predictive of greater sexual assertiveness (Katz & van der Kloet, 2010). Conversely, daughters who report an absent father figure and or having a father that was emotionally distant were more likely to engage in unwanted intercourse with male partners. Similarly, sons who report a strong relationship with their fathers are less likely to perpetrate dating violence themselves (Alleyne-Green et al., 2015).

Taking a long-term, developmental perspective on developing formative experiences, Crooks et al. (2006) made the case for engaging fathers in violence prevention efforts by appealing to their roles as father figures (e.g., impact of fathers, uncles, and coaches; Coulter, 2003) in order to challenge, deepen, and expand traditional concepts of masculinity. Future studies could prospectively examine whether the establishment of strong, healthy father–daughter and father–son relationships could reduce incidences of sexual violence, reduce tolerance for sexual violence, and subsequently increase rates of reporting.

Limitations

The findings of this study are constrained by design limitations. In this study, participants were shown a vignette depicting sexual harassment and were asked to report their likelihood of filing a formal report. In a systematic review, Stoner and Cramer (2019) discussed how prevalence rates of reporting tend to be discrepant between hypothetical reporting and actual reporting, with the former typically being higher than the latter. However, vignettes do offer the ability to provide contextual meaning to situational features as opposed to having to rely on respondent interpretation of certain types of sexual violence scenarios (Schawrtz, 2000). Future research should examine the replicability of our results when applied to actual reporting (i.e., reporting in the past). To that end, best practices, such as using behavioral descriptions and administering sexual harassment victimization and coerced sexual contact questions prior to sexual assault victimization questions, could help produce more accurate results (Krebs et al., 2016).

Because the focus of the study was on individual-level factors (e.g., sexual cognitions, prior history), this study did not examine community-level variables that likely affect the help-seeking trajectory. An ecological model of understanding the pulse of the community will help contextualize the systemic and community-level factors that also influence the decision to report, such as student access to victim services (Sabina & Ho, 2014); policies that make clear in regard to help-seeking options (Sabina & Ho, 2014); and a transtheoretical model of change applied to the community (e.g., awareness of sexual violence as a problem and commitment to do something about it; Barco & Reel, 2011). Additionally, contextual factors, such as perceived power difference between the perpetrator and victim, may also impact reporting behavior. Because these variables were not controlled for in this study, future studies should distinguish between personal alignment with gender-stereotypic norms and the aforementioned factors to determine any interaction effects when predicting indices related to reporting.

Because this study was conducted in a convenience sample recruited from a Midwestern, regional public university, it limits the generalizability of the findings to the broader population of interest (i.e., college students in the United States). From an evaluation perspective, this study was conducted in collaboration with the Dean of Students and the local Campus Violence Prevention Program. Thus, the study was designed not only to contribute to generalizable knowledge, but also to benefit the local community.

Random recruitment strategy, stratified according to gender, was consequentially used to maximize the probability that the results would be generalized to the local college student population enrolled in this institution. From a transformative perspective, the local university administrators were able to generalize the results to the local student body, but these results nonetheless represent a limitation in terms of the generalization of results to the larger college student population in the United States. Future research could

also recruit participants from identified social identities (e.g., racial, religious, gender minorities) to evaluate the reliability of this preliminary model of reporting and the potential mediating role of these cognitive mechanisms in explaining possible between-group differences.[1]

Lastly, the low response rate (n = 98; 42.9% of participants had 10% or less missing data) significantly limits the conclusions we can draw from this study. Even campus climate surveys that offer financial incentives to *all* survey participants (mostly in large collegiate institutions) suffer from similar low response rates (Krebs et al., 2016; Giroux et al., 2020). Thanks to a modest amount of funding from a faculty-mentored student research grant, participants in this study had the opportunity to enter a random drawing for a gift card, although not everyone was a recipient of this financial incentive. Although innovative solutions have been proposed to address non-response issues in climate surveys (e.g., tailored reminders, adjusting live recruitment efforts using metadata; Krebs et al., 2016), this study did not have the opportunity to employ them.

To partially address concerns about results generalizability, this study used multiple imputation procedures (Enders, 2010)—a powerful method of handling missing data compared to traditional methods of handling missing data (e.g., averaging available items, regression imputation). Furthermore, a natural step in the backward elimination procedure is to test the model with a new sample to determine model reliability (Kleinbaum et al., 2008). Thus, future studies should evaluate the model obtained in this study with a new sample, with the possibility of using innovative targeted recruitment efforts to address non-response patterns.

Conclusion

This study examined individual-level predictors of making a formal campus report for sexual violence. Because previous experience to victimization and sexual cognitions related to traditional gender roles are predictors of sexual violence, we hypothesized that these same cognitions would influence the decision to make a formal report post-sexual violence. Based on a convenience sample of college students stratified, participants were shown a hypothetical vignette depicting sexual harassment and asked to report their likelihood of making a formal report to the university if this were to happen to them.

Nine variables grouped into five categories (conformity to traditional gender roles, token resistance attitudes, rape myth acceptance, sexual assertiveness, and prior history of victimization) were entered into a regression model and systematically tested via a backward-chunk-wise elimination procedure to control for type-1 error. Only three categories (token resistance attitudes, sexual assertiveness, and prior history of victimization) were significant predictors of reporting behavior. Future studies should evaluate this model in a confirmatory manner to determine its reliability in subsequent samples, in addition to examining the potential role of agreement with toxic masculinity traits and perceived communal norms in predicting reporting behavior.

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[1] In response to a reviewer's comment, we conducted a post-hoc backward-chunk-wise elimination procedure to predict the same outcome based on reported social identities. Specifically, we entered race (White versus non-White), religion (Christian, Atheist/Agnostic, or Others), sex (male versus female), and sexual orientation (heterosexual versus non-heterosexual) into a full model. Due to unbalanced and small cell sizes (e.g., 12 non-White participants, 10 male participants), we hesitate to draw strong conclusions based on this model. Utilizing backward-chunk-wise elimination procedures, gender appeared to be the only robust predictor of reporting to a university-affiliated entity. On average, females provided significantly lower willingness to report to a university-affiliated entity compared to male participants, R^2 = 0.056, $F(1,96)$ = 5.65, b = -1.061. p = .019.

References

Alleyne-Green, B., Grinnell-Davis, C., Clark, T. T., & Cryer-Coupet, Q. R. (2015). The role of fathers in reducing dating violence victimization and sexual risk behaviors among a national sample of Black adolescents. *Children and Youth Services Review*, *55*, 48–55. https://doi.org/10.1016/j.childyouth.2015.04.005

Barco, J. R., & Reel, J. J. (2011). Community readiness to prevent intimate partner violence: A university needs assessment-to-health education practice. *Utah's Health: An Annual Review*, *16*, 61–69. https://collections.lib.utah.edu/details?id=1052339&facet_setname_s=ehsl_uhr

Benoit, A. A., & Ronis, S. T. (2022). A qualitative examination of withdrawing sexual consent, sexual compliance, and young women's role as sexual gatekeepers. *International Journal of Sexual Health, 34*(4), 577–592. https://doi.org/10.1080/19317611.2022.2089312

Calvete, E., Estévez, A. and Corral, S. (2007). Intimate partner violence and depressive symptoms in women: Cognitive schemas as moderators and mediators. *Behaviour Research and Therapy*, *45*(4), 791–804. https://doi.org/10.1016/j.brat.2006.07.006

Canan, S. N., Jozkowski, K. N., & Crawford, B. L. (2018). Sexual assault supportive attitudes: Rape myth acceptance and token resistance in Greek and non-Greek college students from two university samples in the United States. *Journal of Interpersonal Violence*, *33*(22), 3502–3530. https://doi.org/10.1177/0886260516636064

Coulter, R. P. (2003). Boys doing good: Young men and gender equity. *Educational Review*, *55*(2), 135–145. https://doi.org/10.1080/0013191032000072182

Crooks, C. V., Goodall, G. R., Baker, L. L., & Hughes, R. (2006). Preventing violence against women: Engaging the fathers of today and tomorrow. *Cognitive and Behavioral Practice*, *13*(1), 82-93. https://doi.org/10.1016/j.cbpra.2005.04.001

Dalton, E. D. (2022). Framing sexual refusal experiences among emerging adult women: Politeness theory in unscripted territory. *Communication Studies, 73*(1), 17–35. https://doi.org/10.1080/10510974.2021.2011356

DeVellis, R. F. (2017). *Scale development: Theory and applications* (4th ed.). SAGE Publications.

Eaton, A., Rose, S., Interligi, C., Fernandez, K., & McHugh, M. (2015). Gender and ethnicity in dating, hanging out, and hooking up: Sexual scripts among Hispanic and White young adults. *The Journal of Sex Research*, *53*(7), 788–804. https://doi.org/10.1080/00224499.2015.1065954

Edwards, K. M., & Dardis, C. M. (2022). Sexual activity between victims and perpetrators following a sexual assault: A systematic literature review and critical feminist analysis. *Women's Studies International Forum, 94,* 1–5. https://doi.org/10.1016/j.wsif.2022.102631

Emmers-Sommer, T. M. (2016). Do men and women differ in their perceptions of women's and men's saying "no" when they mean "yes" to sex? An examination between and within gender. *Sexuality & Culture*, *20*(2), 373–385. https://doi.org/10.1007/s12119-015-9330-1

Enders, C. K. (2010). *Applied missing data analysis*. Guilford Press.

Fansher, A. K., & Zedaker, S. B. (2022). The relationship between rape myth acceptance and sexual behaviors. *Journal of Interpersonal Violence, 37*(1–2), NP903–NP924. https://doi.org/10.1177/0886260520916831

Fisher, B. S., Daigle, L. E., Cullen, F. T., & Turner, M. G. (2003). Reporting sexual victimization to the police and others: Results from a national-level study of college women. *Criminal Justice and*

Behavior, 30, 6–38. https://doi.org/10.1177/0093854802239161

Gidycz, C. A., Coble, C. N., Latham, L., & Layman, M. J. (1993). Sexual assault experience in adulthood and prior victimization experiences: A prospective analysis. *Psychology of Women Quarterly*, *17*(2), 151–168. https://doi.org/10.1111/j.1471-6402.1993.tb00441.x

Giroux, S. A., Gesselman, A. N., Garcia, J. R., Luetke, M., & Rosenberg, M. (2020). The magnitude and potential impact of missing data in a sexual violence campus climate survey. *Journal of American College Health*, *68* (5), 468–476. https://doi.org/10.1080/07448481.2019.1577865

Goodman, L. C., Hamilton, L., Koerten, H. R., Mattei, G. M., Froemming, M. W., & Dubow, E. F. (2019). Childhood victimization, cognitive schemas, and unwanted consensual sex among college students. *International Journal of Sexual Health*, *31*(2), 142–153. https://doi.org/10.1080/19317611.2019.1595258

Griffin, V. W., Wentz, E., & Meinert, E. (2022). Explaining the why in #WhyIDidntReport: An examination of common barriers to formal disclosure of sexual assault in college students. *Journal of Interpersonal Violence, 37*(15–16), NP14716–NP14745. https://doi.org/10.1177/08862605211016343

Hermann, C., Liang, C. T. H., & DeSipio, B. E. (2018). Exploring sexual consent and hostile masculine norms using the theory of planned behavior. *Psychology of Men and Masculinity*, *19*(4), 491–499. https://doi.org/10.1037/men0000127

Hickman, S. E., & Muehlenhard, C. L. (1999). "By the semi-mystical appearance of a condom": How young women and men communicate sexual consent in heterosexual situations. *Journal of Sex Research*, *36*(3), 258–272. http://www.jstor.org/stable/3813437

Holland, K. J. (2020). Correlates of college women's intentions to use formal campus supports for sexual assault. *Psychology of Violence*, *10*(2), 245–254. https://doi.org/10.1037/vio0000240

Holland, K. J., & Cortina, L. M. (2017). "It happens to girls all the time": Examining sexual assault survivors' reasons for not using campus supports. *American Journal of Community Psychology*, *59*(1–2), 50–64. https://doi.org/10.1002/ajcp.12126

Humphrey, J. A., & White, J. W. (2000). Women's vulnerability to sexual assault from adolescence to young adulthood. *Journal of Adolescent Health*, *27*(6), 419–424. https://doi.org/10.1016/S1054-139X(00)00168-3

Hurlbert, D. F. (1991). The role of assertiveness in female sexuality: A comparative study between sexually assertive and sexually nonassertive women. *Journal of Sex and Marital Therapy*, *17*(3), 183–190. https://doi.org/10.1080/00926239108404342

Jaffe, A. E., Cero, I., & DiLillo, D. (2021). The #MeToo movement and perceptions of sexual assault: College students' recognition of sexual assault experiences over time. *Psychology of Violence, 11*(2), 209–218. https://doi.org/10.1037/vio0000363

Jozkowski, K., Marcantonio, T., & Hunt, M. (2017). College students' sexual consent communication and perceptions of sexual double standards: A qualitative investigation. *Perspectives on Sexual and Reproductive Health*, *49*(4), 237–244. https://doi.org/10.1363/psrh.12041

Jozkowski, K. N., & Peterson, Z. D. (2013). College students and sexual consent: Unique insights. *Journal of Sex Research*, *50*(6), 517–523. https://doi.org/10.1080/00224499.2012.700739

Jozkowski, K. N., Peterson, Z. D., Sanders, S. A., Dennis, B., & Reece, M. (2014). Gender differences in heterosexual college students' conceptualizations and indicators of sexual consent: Implications for contemporary sexual assault prevention education. *The Journal of Sex Research, 51*(8), 904–916. https://doi.org/10.1080/00224499.2013.792326

Kachel, S., Steens, M. C., & Niedlich, C. (2016). Traditional masculinity and femininity: Validation of a new scale assessing gender roles. *Frontiers in Psychology, 7*, 956. https://doi.org/10.3389/fpsyg.2016.00956

Katz, J., & van der Kloet, E. (2010). The first man in her life: Father emotional responsiveness during adolescence and college women's sexual refusal behaviors. *The American Journal of Family Therapy*, *38*(4), 344–356. https://doi.org/10.1080/01926187.2010.493474

Kleinbaum, D. G., Kupper, L. L., Nizam, A., & Muller, K. E. (2008). *Applied regression analysis and other multivariable methods* (4th ed.). Duxbury Press.

Knowles, K. B. (1992). *Sexual revictimization: A comparison of single-incident versus recidivistic rape victims on symptom severity, definitions, attributions, coping strategies and precautionary behaviors* (Publication number 9237192) [Doctoral publication, Auburn University]. ProQuest Dissertations Publishing.

Koss, M. P., Abbey, A., Campbell, R., Cook, S., Norris, J., Testa, M., Ullman, S., West, C., & White, J. (2007). Revising the SES: A collaborative process to improve assessment of sexual aggression and victimization. *Psychology of Women Quarterly, 31(4),* 357–370. https://doi.org/10.1111/j.1471-6402.2007.00385.x

Krebs, C., Lindquist, C., Berzofsky, M., Shook-Sa, B., & Peterson, K. (2016). *Campus climate survey validation study final technical report.* Bureau of Justice Statistics. https://bjs.ojp.gov/content/pub/pdf/ccsvsftr.pdf

Krebs, C. P., Lindquist, C. H., Warner, T. D., Fischer, B. S., & Martin, S. L. (2007). *The campus sexual assault (CSA) study: Final report* (NIJ Grant No. 2004-WG-BX-0010). National Institute of Justice. https://www.innovations.harvard.edu/sites/default/files/Presentation-Krebs_0.pdf

Littleton, H., Layh, M., Rudolph, K., & Haney, L. (2019). Evaluation of the sexual experiences survey—revised as a screening measure for sexual assault victimization among college students. *Psychology of Violence, 9*(5), 555–563. https://doi.org/10.1037/vio0000191

Maker, A. H., Kemmelmeier, M., & Peterson, C. (2001). Child sexual abuse, peer sexual abuse, and sexual assault in adulthood: A multi-risk model of revictimization. *Journal of Traumatic Stress*, 14(2), 351–368. https://doi.org/10.1023/a:1011173103684

McMahon, S., & Farmer, G. L. (2011). An updated measure for assessing subtle rape myths. *Social Work Research*, *35*(2), 71–81. https://doi.org/10.1093/swr/35.2.71

Milhausen, R. R., Graham, C. A., Sanders, S. A., Yarber, W. L., & Maitland, S. B. (2010). Validation of the sexual excitation/sexual inhibition inventory for women and men. *Archives of Sexual Behavior*, *39*, 1091–1104. https://doi.org/10.1007/s10508-009-9554-y

Milhausen, R. R., Sakaluk, J. K., Fisher, T. D., Davis, C. M., & Yarber, W. L. (Eds.). (2019). *Handbook of sexuality-related measures* (4th ed.). Taylor & Francis.

Muehlenhard, C. L. (2011). Examining stereotypes about token resistance to sex. *Psychology of Women Quarterly*, *35*(4), 676–683. https://doi.org/10.1177/0361684311426689

Mulder, E., & Bosma, A. K. (2022). Filling in the (gendered) gaps: How observers frame claims of sexual assault. *International Review of Victimology, 28*(2), 215–234. https://doi.org/10.1177/02697580211061893

Murnen, S. K., Wright, C., & Kaluzny, G. (2002). If "boys will be boys," then girls will be victims? A meta-analytic review of the research that relates masculine ideology to sexual aggression. *Sex Roles*, *46*, 359–375. https://doi.org/10.1023/A:1020488928736

Orchowski, L. M., Meyer, D. H., & Gidycz, C. A. (2009). College women's likelihood to report unwanted sexual experiences to campus agencies: Trends and correlates. *Journal of Aggression, Maltreatment and Trauma*, *18(*8), 839–858. https://doi.org/10.1080/10926770903291779

Osman, S. L., & Davis, C. M. (1997). Predicting men's perceptions of date rape using the heuristic-systematic model. *Journal of Sex Education and Therapy, 22*(3), 25–32. https://doi.org/10.1080/016145 76.1997.11074190

Osman, S. L. (2013). Token resistance to sex scale. In T.D. Fisher, C. M. Davis, & W. L. Yarber (Eds.), *Handbook of sexuality-related measures* (3rd ed., pp. 653–654). Routledge.

Payne, D. L., Lonsway, K. A., & Fitzgerald, L. F. (1999). Rape myth acceptance: Exploration of its structure and its measurement using the *Illinois Rape Myth Acceptance Scale*. *Journal of Research in Personality*, *33*(1), 27–68. https://doi.org/10.1006/jrpe.1998.2238

Pierce, A. P., & Hurlbert, M. K. (1999). Test–retest reliability of the Hurlbert index of sexual assertiveness. *Perceptual and Motor Skills, 88(1),* 31–34. https://doi.org/10.2466/pms.1999.88.1.31

Pugh, B., & Becker, P. (2018). Exploring definitions and prevalence of verbal sexual coercion and its relationship to consent to unwanted sex: Implications for affirmative consent standards on college campuses. *Behavioral Sciences*, *8*(8), 69. https://doi.org/10.3390/bs8080069

Rosenberg, M., Townes, A., Taylor, S., Luetke, M., & Herbenick, D. (2018). Quantifying the magnitude and potential influence of missing data in campus sexual assault surveys: A systematic review of surveys, 2010–2016. *Journal of American College Health*, *67*(1), 42–50. https://doi.org/10.1080/07448481.2018.1462817

Rossetto, K. R., & Tollison, A. C. (2017). Feminist agency, sexual scripts, and sexual violence: Developing a model for postgendered family communication. *Family Relations*, *66*(1), 61–74. https://doi.org/10.1111/fare.12232

Sabina, C., & Ho, L. Y. (2014). Campus and college victim responses to sexual assault and dating violence: Disclosure, service utilization, and service provision. *Trauma, Violence, and Abuse*, *15*(3), 201–226. https://doi.org/10.1177/1524838014521322

Sanchez, D. T., Crocker, J., & Boike, K. R. (2005). Doing gender in the bedroom: Investing in gender norms and the sexual experience. *Personality and Social Psychology Bulletin*, *31*(10), 1445–1455. https://doi.org/10.1177/0146167205277333

Sanchez, D. T., Fetterolf, J. C., & Rudman, L. A. (2012a). Eroticizing inequality in the United States: The consequences and determinants of traditional gender role adherence in intimate relationships. *Journal of Sex Research*, *49*(2–3), 168–183. https://doi.org/10.1080/00224499.2011.653699

Sanchez, D. T., Phelan, J. E., Moss-Racusin, C. A., & Good, J. J. (2012b). The gender role motivation model of women's sexually submissive behavior and satisfaction in heterosexual couples. *Personality and Social Psychology Bulletin*, *38*(4), 528–539. https://doi.org/10.1177/0146167211430088

Senkans, S., McEwan, T. E., & Ogloff, J. R. (2020). Conceptualising intimate partner violence perpetrators' cognition as aggressive relational schemas. *Aggression and Violent Behavior*, *55*, Article 101456. https://doi.org/10.1016/j.avb.2020.101456

Shafer, A., Ortiz, R. R., Thompson, B., & Huemmer, J. (2018). The role of hypermasculinity, token resistance, rape myth, and assertive sexual consent communication among college men. *Journal of Adolescent Health, 62*(3), S44–S50. https://doi.org/10.1016/j.jadohealth.2017.10.015

Silver, K. E., Norton, M., King, K., Gonzalez, A., Holmes, S. C., & Johnson, D. M. (2023). Survival sex among a diverse sample of women with histories of intimate partner violence: Results from a domestic violence

shelter. *Psychological Trauma: Theory, Research, Practice, and Policy.* Advance online publication. https://doi.org/10.1037/tra0001431

Silver, N., & Hovick, S. R. (2018). A schema of denial: The influence of rape myth acceptance on beliefs, attitudes, and processing of affirmative consent campaign messages. *Journal of Health Communication*, *23*(6), 505–513. https://doi.org/10.1080/10810730.2018.1473532

Stephens, T., Kamimura, A., Yamawaki, N., Bhattacharya, H., Mo, W., Birkholz, R., Makomenaw, A., & Olson, L. M. (2016). Rape myth acceptance among college students in the United States, Japan, and India. *SAGE Open*, *6*(4), https://doi.org/10.1177/2158244016675015

Stoner, J. E., & Cramer, R. J. (2019). Sexual violence victimization among college females: A systematic review of rates, barriers, and facilitators of health service utilization on campus. *Trauma, Violence, and Abuse*, *20*(4), 520–533. https://doi.org/10.1177/1524838017721245

Tavrow, P., Withers, M., Obbuyi, A., Omollo, V., & Wu, E. (2013). Rape myth attitudes in rural Kenya: Toward the development of a culturally relevant attitude scale and "Blame Index." *Journal of Interpersonal Violence*, *28*(10), 2156–2178. https://doi.org/10.1177/0886260512471086

Tjaden, P. G., & Thoennes, N. (2000). *Full report of the prevalence, incidence, and consequences of violence against women*. National Institute of Justice and Centers for Disease Prevention and Control.

Ullman, S. E. (1996). Social reactions, coping strategies, and self-blame attributions in adjustment to sexual assault. *Psychology of Women Quarterly*, *20*(4), 505–526. https://doi.org/10.1111/j.1471-6402.1996.tb00319.x

van Buuren, S., & Groothuis-Oudshoorn, K. (2011). Mice: Multivariate imputations by chained equations in R. *Journal of Statistical Software, 45*(3), 1–67. https://www.jstatsoft.org/index.php/jss/article/view/v045i03/550

Wright, C. V., Collinsworth, L., & Fitzgerald, L.(2009). Why did this happen to me? Cognitive schema disruption and posttraumatic stress disorder in victims of sexual trauma. *Journal of Interpersonal Violence, 25*(10), 1801–1814. https://doi.org/10.1177/0886260509354500

Willie, T. C., Khondkaryan, E., Callands, T., & Kershaw, T. (2018). "Think like a man": How sexual cultural scripting and masculinity influence changes in men's use of intimate partner violence. *American Journal of Community Psychology, 61*(1–2), 240–250. https://doi.org/10.1002/ajcp.12224

Appendix A

Hypothetical Sexual Harassment Scenario

You are hanging out on a Saturday night at a Greek Week party with your friends. A leader in one of the organizations you belong to makes suggestive comments about your body and gropes you whenever they walk by. You tell them to stop, and that you are not interested. They continue to make comments until you leave with your friends. A couple of weeks later, you are asked to join a committee with them to work on a community project. They pull you aside after the meeting and tell you that if you have sex with them, they will make sure you are elected to the leadership position you want next semester—and if you refuse, they will tell everyone that you skipped out on the community project and should be kicked out of the organization. They are a well-respected leader, you are afraid that everyone will believe them if they say you didn't do your part, and you will be removed from the organization. They say to think about their offer and let them know by this weekend.

Appendix B

Adapted History of Sexual Violence Survey

Instructions

The following section is designed to help you better understand the sexual experiences of Southeast students. Due to the nature of the questions, you may experience potential emotional distress, including:

- Remembering negative personal experiences

- Remembering negative feelings associated with people in your life

- Reflecting on previous traumatic life experiences

Note: You may also feel offended or disturbed by the presented scenarios or questions.

Use the following information to help you complete the survey:

- Please read the following questions carefully, then respond to the questions to the best of your ability.

- Simply respond YES or NO.

Please keep the following definitions in mind as you complete this section of the survey:

- **Sex play:** Activities including fondling, kissing, and petting; excluding oral, anal, or penetrative sex with a penis or other object

- **Sex acts:** Activities including oral and anal sex, or penetrative sex with an object other than a penis

- **Sexual intercourse:** Penetration with a penis

Sexual Violence Survey Questions

Sex Play

1. Given the following examples, have you ever given in to sex play (NOT sex acts or sexual intercourse) when you did not want to because of any of the following examples?

    a. You were overwhelmed by the other person's continual arguments and pressure. If so, when did this happen?

        i. During the past 12 months at Southeast

        ii. During your entire time at Southeast

        iii. Prior to your time at Southeast

    b. The other person used their position of authority (boss, teacher, supervisor) to make you. If so, when did this happen?

        i. During the past 12 months at Southeast

        ii. During your entire time at Southeast

        iii. Prior to your time at Southeast

    c. The other person threatened you or used some degree of physical force (twisting your arm, holding you down) to make you. If so, when did this happen?

i. During the past 12 months at Southeast

ii. During your entire time at Southeast

iii. Prior to your time at Southeast

Sex Acts

2. Given the following examples, have you ever had sex acts (anal or oral intercourse or penetration by objects other than the penis) when you didn't want to because of any of the following examples?

    a. The other person threatened you or used some degree of physical force (twisting your arm, holding you down) to make you. If so, when did this happen?

        i. During the past 12 months at Southeast

        ii. During your entire time at Southeast

        iii. Prior to your time at Southeast

Sexual Intercourse

3. Given the following examples, have you ever given in to sexual intercourse when you did not want to because of any of the following examples?

    a. You were overwhelmed by the other person's continual arguments and pressure. If so, when did this happen?

        i. During the past 12 months at Southeast

        ii. During your entire time at Southeast

        iii. Prior to your time at Southeast

    b. The other person used their position of authority (boss, teacher, supervisor) to make you. If so, when did this happen?

        i. During the past 12 months at Southeast

        ii. During your entire time at Southeast

        iii. Prior to your time at Southeast

    c. The other person threatened you or used some degree of physical force (twisting your arm, holding you down) to make you. If so, when did this happen?

        i. During the past 12 months at Southeast

        ii. During your entire time at Southeast

        iii. Prior to your time at Southeast

    d. The other person gave you drugs or alcohol. If so, when did this happen?

        i. During the past 12 months at Southeast

        ii. During your entire time at Southeast

        iii.   Prior to your time at Southeast

4. Have you had another person attempt sexual intercourse (get on top of you, attempt to insert his penis) when you didn't want to by threatening you or using some degree of physical force (twisting your arm, holding you down), **but intercourse did NOT occur?** If so, when did this happen?

    a.   During the past 12 months at Southeast

    b.   During your entire time at Southeast

    c.   Prior to your time at Southeast

5. Have you had another person attempt sexual intercourse (get on top of you, attempt to insert his penis) when you didn't want to by giving you drugs or alcohol, **but intercourse did NOT occur?** If so, when did this happen?

    a.   During the past 12 months at Southeast

    b.   During your entire time at Southeast

    c.   Prior to your time at Southeast

Again, please keep the following definitions in mind as you complete this section of the survey:

- **Sex play:** Activities including fondling, kissing, and petting, but excluding oral, anal or penetrative sex with a penis or other object

- **Sex acts:** Activities including oral and anal sex, or penetrative sex with an object other than a penis

- **Sexual intercourse:** Penetration with a penis.

Sex Play

6. Have you ever engaged in sex play (**NOT sex acts or sexual intercourse**) when your partner did not want to because:

    a.   You overwhelmed them with continual arguments and pressure. If so, when did this happen?

        i.   During the past 12 months at Southeast

        ii.   During your entire time at Southeast

        iii.   Prior to your time at Southeast

    b.   You used your position of authority (boss, teacher, supervisor) to make them. If so, when did this happen?

        i.   During the past 12 months at Southeast

        ii.   During your entire time at Southeast

        iii.   Prior to your time at Southeast

    c.   You threatened or used some degree of physical force (twisting their arm, holding them down) to make them. If so, when did this happen?

        i.   During the past 12 months at Southeast

  ii. During your entire time at Southeast

  iii. Prior to your time at Southeast

Sex Acts

7. Have you engaged in sex acts (anal or oral intercourse or penetration by objects other than the penis) when your partner didn't want to because you threatened them or used some degree of physical force (twisting their arm, holding them down) to make them? If so, when did this happen?

 a. During the past 12 months at Southeast

 b. During your entire time at Southeast

 c. Prior to your time at Southeast

Sexual Intercourse

8. Have you ever engaged in sexual intercourse when your partner did not want to because:

 a. You are overwhelmed by them with continual arguments and pressure. If so, when did this happen?

  i. During the past 12 months at Southeast

  ii. During your entire time at Southeast

  iii. Prior to your time at Southeast

 b. You used your position of authority (boss, teacher, supervisor) to make them. If so, when did this happen?

  i. During the past 12 months at Southeast

  ii. During your entire time at Southeast

  iii. Prior to your time at Southeast

 c. You threatened them or used some degree of physical force (twisting their arm, holding them down) to make them. If so, when did this happen?

  i. During the past 12 months at Southeast

  ii. During your entire time at Southeast

  iii. Prior to your time at Southeast

 d. You gave them drugs or alcohol. If so, when did this happen?

  i. During the past 12 months at Southeast

  ii. During your entire time at Southeast

  iii. Prior to your time at Southeast

9. Have you attempted sexual intercourse (get on top of them, attempt to insert your penis) when your partner didn't want to by threatening them or using some degree of physical force (twisting their arm, holding them down), **but intercourse did NOT occur?** If so, when did this happen?

    a.   During the past 12 months at Southeast

    b.   During your entire time at Southeast

    c.   Prior to your time at Southeast

10. Have you attempted sexual intercourse (get on top of them, attempt to insert your penis) when your partner didn't want to by giving them drugs or alcohol, **but intercourse did NOT occur?** If so, when did this happen?

    a.   During the past 12 months at Southeast

    b.   During your entire time at Southeast

    c.   Prior to your time at Southeast