The author(s) shown below used Federal funding provided by the U.S. Department of Justice to prepare the following resource:

**Document Title:** Population and Subgroup Differences in the Prevalence and Predictors of Campus Sexual Assault to Inform Preventive Interventions

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**Document Number:** 308453

**Date Received:** January 2024

**Award Number:** 2020-VA-CX-0004

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Final Research Report

Federal Award ID: 2020-VA-CX-0004

Project Title: Population and Subgroup Differences in the Prevalence and Predictors of Campus Sexual Assault to Inform Preventive Interventions

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Project/Budget Period: January 1, 2020 to December 30, 2023

Federal Funds Awarded: $254,196.00

This project was supported by Grant ID 2020-VA-CX-0004, awarded by the National Institute of Justice, Office of Justice Programs, U.S. Department of Justice. Points of view in this document are those of the author and do not necessarily represent the official position or policies of the US Department of Justice.
Summary of the Project

Major Goals and Objectives

Preventing sexual assault among college students in the United States has been an ongoing national priority. Federal initiatives (e.g., White House Task Force to Protect Students from Sexual Assault) and the overall high prevalence rates of sexual assault found among women on college campuses have prompted colleges and universities across the U.S. to develop policies and programs that aim to prevent campus sexual assault (White House Task Force to Protect Students from Sexual Assault, 2014, 2017). Yet, vast discrepancies exist in available prevalence data, largely due to inconsistencies in how data are collected and analyzed. Other understudied factors, such as demographic differences among student groups and variations in characteristics of college campuses (e.g., school type, size, region), also make it difficult to estimate the prevalence of sexual assaults among college-aged young adults (Banyard et al., 2007; Berkowitz, 2003; Dardis et al., 2016; Gidycz et al., 2011).

Attitudes and perceptions of campus social norms have been strongly associated with campus sexual assault victimization and perpetration (Cantor et al., 2017; Dardis et al., 2016; Gidycz et al., 2011; Krebs et al., 2016), but research on these topics has primarily been confined to small, non-representative, or single-campus samples that have not allowed researchers to explore how rates and patterns of sexual assault victimization and perpetration vary across contexts and among population subgroups, such as sexual, gender, and racial minority students. Additionally, research has yet to investigate how attitudes and norms vary across college campuses and whether characteristics of those campuses help to explain variations in norms and sexual assault experiences at the individual (student) level.
Our work on this study addressed these gaps by analyzing data from the Sexual Assault Prevention for Undergraduates (SAPU) online sexual assault prevention education program. The SAPU data includes a large, demographically diverse national sample of college students, allowing for a more in-depth investigation of the prevalence and predictors of sexual assault victimization and perpetration across different types of college campuses. Furthermore, the dataset includes contemporaneous measures of sexual assault victimization and perpetration during the highest period of risk (i.e., “red zone”) early on in students’ first year of college (Cranney, 2015; Krebs et al., 2007; Sweeney, 2011). To date, studies have largely relied on past-year or time-since-entering-college, retrospective reports to estimate sexual assault during this high-risk period, in which such data are more susceptible to recall bias. As such, findings from this study are critical to the development and testing of theory, as well as to the prevention of sexual assaults among young adults. Finally, the scope and scale of the dataset used in this study allow for greater understanding and generalizability of findings about the intersection of contexts and behaviors, as well as the vulnerabilities in students at higher risk for sexual assault. Findings add much-needed and timely information about the proximal risk factors for sexual assault and the mechanisms of risk transmission and possible risk mitigation. The aims of the study are as follows:

**Aim 1:** Examine variation in school-level prevalence of sexual assault victimization and perpetration by school type, size, and region from Academic Year (AY) 2016-2017 to 2019-2020.

**Aim 2:** Assess subgroup differences (by gender identity, sexual orientation, race) in school-level prevalence of sexual assault victimization and perpetration, accounting for school region, size, and type.
Aim 3: Investigate the relationship between attitudes and perceptions of campus norms and self-reports of sexual assault victimization and perpetration, accounting for precampus sexual assault and individual demographics and school characteristics (region, size, type).

Aim 4: Examine variation in the relationship between attitudes and perceptions of campus norms and self-reports of sexual assault victimization and perpetration by subgroups (gender identity, sexual orientation, race), accounting for precampus sexual assault and individual and school characteristics (region, size, type).

Aim 5: Examine variation in bystander intentions, efficacy, and behaviors and self-reports of sexual assault victimization and perpetration by subgroups (gender identity, race, sexual orientation), accounting for attitudes, perceptions of campus norms, and precampus sexual assault, as well as individual and school characteristics (region, size, type).

Research Design, Methods, Analytical and Data Analysis Techniques

Design & Methods

The study includes a partnership with Vector Solutions, which manages the Sexual Assault Prevention for Undergraduates (SAPU) online prevention program (formerly Haven Online Campus Sexual Assault Intervention), to conduct a secondary data analysis of the SAPU dataset. The SAPU online sexual assault prevention education program dataset consists of preintervention and postintervention data gathered from entering college students to whom the SAPU intervention was delivered across 50 states in the U.S. Data from Academic Years (AY) 2016-17; 2017-18, 2018-19, 2019-20, and 2020-21 were used in the study. Most participants are on campuses that require freshman, transfer, and new graduate students to complete the program prior to matriculation. Students complete pre-intervention (T1) and post-intervention (T2)
surveys. Pre- and post-tests are normally administered within the first three months of college enrollment (mean = 55.94 days; standard deviation = 34.75). Schools include public and private institutions, 4-year and 2-year colleges, and varying enrollment sizes.

**Study Measures**

*Demographics.* Demographic information included students’ age, school year, gender identity, sexual orientation, and race/ethnicity.

*Campus characteristics.* Campus-level measures included public or private institutions, campus size (small, medium, or large), and student full-time enrollment.

*Victimization and perpetration.* Four items were used to assess experiences with unwanted sexual contact victimization and perpetration, dating abuse, and harassment (Sexual Experiences Survey, Koss et al., 2007; Campus Sexual Assault Study, Krebs et al., 2007). Original response options to each of the items included “never,” “before college,” “since college,” “both before and during college,” “not sure,” or “prefer not to answer.” Our analyses recorded responses into three categories: 1) never, 2) before college only, or 3) any exposure during college. In the original response options, students who endorsed victimization “during college” or “both before and during college” on either the pre- or post-test were categorized as experiencing unwanted sexual contact during college to capture all reports of victimization since entering college. Students who provided non-definitive answers (i.e., “not sure,” “preferred not to answer”) were removed from the analysis.

Unwanted sexual contact victimization was assessed with the item: “Has someone ever had unwanted sexual contact with you (e.g., used physical force or threatened to physically harm you; manipulated you through lies, threats, or pressure; took sexual advantage of you when you were significantly impaired or incapacitated by drugs/alcohol, etc.)?” “Dating abuse
victimization was assessed with the item: “Has a current or former partner ever abused or threatened to abuse you? (e.g., verbally, physically, sexually, emotionally, financially).”

Harassment victimization was assessed with the item: “Have you experienced repeated and unwanted attention, harassment, or other form of contact from another person that has made you feel afraid?” Unwanted sexual contact perpetration was assessed with the item: “Have you ever had sexual contact with another person that they did not consent to or did not want (e.g., used physical force or threatened to physically harm them; manipulated them through lies, threats, or pressure; took sexual advantage of them when they were significantly impaired or incapacitated by drugs/alcohol, etc.)?”

**Attitudes toward consent and responsibility.** Ten items were used to assess attitudes toward consent and responsibility (Readiness to Change Scale, Banyard et al., 2010; Illinois Rape Myth Acceptance Scale (McMahon & Farmer, 2011). Example items include “Clear, verbal, and sober permission is the best way to make sure a person is okay with sexual activity” and “I would not engage in sexual activity with someone if the other person was incapacitated by alcohol or drugs” (1 = strongly disagree and 7 = strongly agree).

**Campus social norms.** Five items were used to assess students’ perceptions of campus social norms related to sexual assault (Berkowitz, 2010; Berkowitz, 2013). Examples include “Most students at my school would express concern if they saw a person exhibiting abusive behavior toward their partner” and “Most students at my school would never place blame on a person who told them someone else had sexually assaulted them” (1 = strongly disagree and 7 = strongly agree).

**Bystander efficacy, intention, and behavior.** Four items were used to assess bystander efficacy (students’ perceived ability to intervene), bystander intention (students’ stated intention
to intervene), and bystander action (reported actual bystander behavior) (Banyard et al., 2010; Berkowitz, 2003; 2010; Coker et al., 2016; Gidycz et al., 2011). Example items include “I can identify concerning behaviors related to abuse in relationships” and “I am confident in my ability to intervene effectively in a potential sexual assault situation” (1 = strongly disagree and 7 = strongly agree).

Data Analysis Techniques

The study team carried out extensive data cleaning, data quality checks, and merging of student and campus-level variables for each year of the SAPU data. These included descriptive statistics, recoding/scaling of variables, and analyses to test measurement validity and reliability, including confirmatory factor analysis. Our analysis activities for each study aim included extensive preliminary work, including independent samples-tests, chi-square, ANCOVA, multiple linear and logistic regression, and multiple group path analysis. These analyses were carried out across multiple academic years and included sensitivity analyses to assess the robustness of findings and conclusions from our primary analyses (see data analysis techniques described above for further detail on these activities).

Descriptive tests were conducted to provide means and standard deviations of scaled variables and to show where score distributions violate assumptions of normality. Indicators were grouped into scales conceptually and then examined using confirmatory factor analysis and other related procedures. Cross-tabulations and chi-square tests were used to examine schools and the various groups represented in the dataset based on school type, size, and region across each year of the data.

To examine differences in overall and subgroup prevalence of sexual assault victimization and perpetration, we used single-level and multi-level modeling approaches. In
single-level analyses, we used independent samples t-tests and chi-square tests, depending on the scoring and score distributions of the measures. Analysis of covariance (ANCOVA) and multiple linear and logistic regressions were used to examine associations among independent and dependent variables, accounting for relevant covariates and demographic variables. Additional analyses included single-level models that included tests of variable interactions (e.g., attitudes X subgroup, bystander intentions X subgroup) using product-term regression. These analyses assessed the extent to which associations between individual-level variables varied across schools and were also associated with school characteristics. In multilevel models examining unwanted sexual contact victimization, individual-level predictors and covariates (attitudes, norms, subgroup identity) were entered first. Campus-level characteristics (e.g., type, size, region) were then added to each model to explain the variance remaining for each outcome. Multiple group path analysis was used to examine pathways between student attitudes, perceptions, bystander behaviors, and victimization outcomes across student subgroups.

**Expected Applicability of the Research**

This study used a large, demographically diverse national sample and well-powered and rigorous analytic methods to overcome methodological limitations evident in prior research. The study distinguishes between campus types, some of which are understudied (e.g., large private institutions, 2-year colleges), and provides a detailed understanding of the prevalence and predictors of campus sexual assault victimization and perpetration across demographic groups. This research helps to improve understanding of the prevalence of unwanted sexual contact victimization and perpetration, as well as dating abuse and harassment, and the degree to which these outcomes are associated with student attitudes, perceptions of campus norms, and bystander behaviors. Knowledge gained from this research can be used to inform prevention and
intervention programs and point to contextual and cultural factors that are likely to influence student outcomes.

**Partners and Other Collaborating Organizations**

The primary partner on this study included Vector Solutions, which currently manages and administers the Sexual Assault Prevention for Undergraduates (SAPU) program to colleges and universities in the U.S. In 2020, Vector Solutions acquired the SAPU program from EVERFI, who had previously managed SAPU (formerly known as Haven Online Sexual Assault Prevention Education). The University of Michigan study team worked closely with EVERFI and Vector Solutions during the transition of SAPU and throughout the project period on data cleaning and analysis activities. Additionally, the University of Michigan investigators worked with Vector Solutions staff Rob Buelow and Dr. Mike Martynowicz to examine findings and identify implications for campus safety and public health. The team also leveraged existing collaborations with campus and community partners. The University of Michigan’s Sexual Assault Prevention and Awareness Center (SAPAC), Office of Institutional Equity (OIE), Institute for Research on Women and Gender (IRWG), undergraduate and graduate student representatives, and local community members and survivors participated in presentations, meetings, and community conversations to contribute to the interpretation and translation of findings to practice and policy.

**Outcomes**

**Results and Findings**

Data were analyzed across academic years. Results were consistent among student samples from each year, suggesting comparable rates of victimization during college as well as subgroup differences by race/ethnicity, gender identity, and sexual orientation. The following
results summarize findings from the most recent SAPU data (2020-2021) on the prevalence and sub-population differences in unwanted sexual contact, dating abuse, and harassment victimization. Analyses from Aims 3 through 5 are currently underway.

Within the first three months of college, a total of 3.2% ($n = 8,136$) of students reported unwanted sexual contact, 1.6% ($n = 4,003$) reported dating abuse, and 5.8% ($n = 14,456$) reported harassment victimization. A large proportion of students also reported victimization prior to entering college. Specifically, 17% before college ($n = 42,570$) reported unwanted sexual contact, 12.5% ($n = 31,287$) reported dating abuse, and 20.2% reported harassment ($n = 50,637$) before entering college.

Overall, statistically significant differences in unwanted sexual contact victimization were found between racial/ethnic, gender identity, and sexual orientation groups. With regard to race, American Indian/Alaska Native or Native Hawaiian/Pacific Islander (AIAN/NHPI) students reported the highest rate of unwanted sexual contact victimization during college (5.3%), followed by multiracial (4.9%), white (3.7%), Black (3.4%), Latino (2.9%), and Asian (2.2%) students. For differences by gender identity, transgender men (7.9%) reported the highest rate of unwanted sexual contact victimization among gender groups, followed by transgender women (7.4%), genderqueer or gender non-conforming individuals (7.4%), women (4.5%), and men (1.5%). Students who identified with more than one or with multiple sexual identities (e.g., lesbian and queer) reported the highest rate of unwanted sexual contact victimization (9%), followed by students identifying as bisexual (6.7%), queer, pansexual, or questioning (5.5%), gay (4%), lesbian (3.6%), heterosexual (2.8%), and asexual (2.7%).

Significant differences were found in unwanted sexual contact victimization by race/ethnicity within gender identity and sexual orientation subgroups. Overall, AIAN/NHPI
students within most gender identity groups reported the highest rates of unwanted sexual contact during college. For example, approximately 1 in 2 (55.6%) AIAN/NHPI transgender men and 41.7% of AIAN/NHPI genderqueer and gender non-conforming students reported unwanted sexual contact since entering college. When assessing differences among transgender women, students who identified as Black (35.7%) reported the highest rate of unwanted sexual contact victimization during college compared to other racial/ethnic groups. When examining differences among bisexual students, AIAN/NHPI students reported the highest rate of unwanted sexual contact during college (12.2%), followed by white (7.5%), Black (6.5%), multiracial (6.4%), Latino (5.5%), and Asian (4%) students.

For dating abuse victimization during college, transgender women (6.4%) reported the highest rates of victimization, followed by transgender men (5.0%), genderqueer and gender non-conforming students (5.0%), women (2.0%), and men (1.0%). For harassment victimization during college, genderqueer and gender-non-conforming students (13.7%) reported the high rate of victimization, followed by transgender women (11.2%), transgender men (8.9%), women (8.7%), and men (1.6%). Students who identified with more than sexual orientation identity reported the highest rate of dating abuse during college at 3.9%, followed by bisexual (3.3%), queer, pansexual, or questioning (2.4%), lesbian (2.3%), gay (2%), asexual (1.9%), and heterosexual (1.3%) students. For harassment victimization during college, students with multiple sexual orientation identities reported the highest rate of victimization at 14.9%, followed by bisexual (12.9%), queer, pansexual, or questioning (11.1%), lesbian (9.6%), gay (6.1%), heterosexual (4.8%), and asexual (4.6%) students.

There were fewer statistically significant differences by race/ethnicity for dating abuse and harassment victimization, particularly for some sexual and gender minority subgroups.
Statistically significant differences were found in dating abuse victimization for AIAN/NHPI students who identified as transgender men (42.9%), transgender women (41.7%), and genderqueer or gender non-conforming (26.1%) compared to white students from these gender minority groups. AIAN/NHPI students who identified as gay (22.2%) had higher rates of dating abuse victimization than other students identifying as gay from racial groups, including Asian (3.1%), Black (0.1%), Latino (2.1%), multiracial (1.4%), and white (1.6%). Finally, AIAN/NHPI students who also identified as asexual reported significantly higher rates of harassment (14.4%) than Asian (2.5%), Black (1.8%), Latino (2%), multiracial (1.9%), and white (1.6%) asexual students. When examining racial/ethnic differences among heterosexual students, multiracial students had the highest rates of harassment victimization during college (5.7%), which was significantly higher than white (5.1%), Latino (4.8%), Black (4.4%), and Asian (3.2%) heterosexual students.

**Limitations**

There are several limitations to the study that should be noted. First, although the purpose of this study was not to evaluate the effects of the SAPU intervention, the intervention may have affected prevalence rates. The intervention likely affected all groups equally and thus would unlikely change group differences in prevalence rates based on early research with these data (Zapp et al., 2018).

SAPU pre- and post-data surveys use single-item assessments to capture unwanted sexual contact, dating abuse, and harassment victimization, as well as unwanted sexual contact perpetration. As such, the prevalence of these forms of victimization and perpetration may be underestimated. The time frame in which SAPU pre and post-test surveys are collected is also limited. SAPU pre- and post-tests are typically collected within the first three months of
enrollment and, therefore, do not capture victimization and perpetration throughout a college student’s tenure. Despite this limitation, studies do indicate that the first three months of college, commonly referred to as the “red zone,” may be a very high-risk period for sexual assault on college campuses (Cranney, 2015; Krebs et al., 2016). Further study is needed to assess victimization experiences among understudied subgroup populations throughout students’ time in college.

Additionally, the SAPU sample of participants is non-probability-based, and consequently, the generalizability of findings may be affected. Although a strength of the SAPU dataset is its substantial and demographically diverse sample from hundreds of colleges across the U.S., some combining of racial/ethnic and gender minority groups was necessary due to small sample sizes. As such, caution is warranted when drawing conclusions for some subgroups (e.g., AIAN/NHPI transgender women reporting unwanted sexual contact victimization during college).

Finally, the SAPU surveys did not assess gender identity using best practices, including a two-step survey method that assesses sex assigned at birth (Coulter et al., 2020). Additionally, the gender identity measure used in the SAPU survey did not provide options for students to identify as cisgender. Thus, students who identified their gender identity as “man” or “woman” do not necessarily reflect only cisgender identities.

Artifacts

Activities and Accomplishments

Notably, the study team received an additional academic year (2020-2021) of data from Vector Solutions, which was not initially anticipated. The inclusion of this additional year allowed us to analyze and publish findings using the most updated available data and more expansive measures of racial/ethnic identities, sexual orientation, and gender identities. The first
manuscript from this study on the prevalence of dating abuse and harassment victimization (Aims 1 and 2) was published in a special issue in *LGBT Health* on Violence and Related Health Outcomes in Sexual & Gender Minority Communities, which was sponsored by the National Institutes of Health Sexual and Gender Minority Research Office, the National Institute on Aging, National Institute on Alcohol Abuse and Alcoholism, the National Institute of Mental Health, and the Office of Behavioral and Social Sciences Research. We currently have one additional manuscript under review (Aims 1 and 2) and three manuscripts currently in preparation (Aims 3 through 5), including a scoping review study on the racial, gender, and sexual orientation differences in the prevalence of campus sexual assault victimization and perpetration (see listing of publications below).

In addition to peer-reviewed manuscripts, we have presented findings at six national and international conferences and have held informal presentations and community conversations on findings with researchers, practitioners, and survivors (see dissemination activities below). Training and professional development opportunities have also been provided to five graduate students who are part of the research team under the supervision of the principal investigator (PI) and Co-I’s. Students’ opportunities include participating in scoping review activities and data analyses, team meetings to interpret findings and determine implications for practice and policy, and contributing to dissemination activities. Dissemination activities for student trainees have included co-authorship on peer-reviewed manuscripts and conference presentations and the opportunity to lead these activities.

**List of Publications**

Two peer-reviewed manuscripts have been developed (one published and one under review) reporting on study findings under Aims 1 and 2. Two additional manuscripts are
currently in preparation, reporting on findings from Aims 1, 3, 4, and 5. Additionally, the study team is conducting a scoping review on gender, race, and sexual orientation differences in the prevalence of victimization and perpetration of sexual assault among college students. This manuscript is currently in preparation.


**List of Presentations:**


Datasets Generated

A total of five datasets were created for each academic year, including 2016-17, 2017-18, 2018-19, 2019-20, and 2020-21. Data files containing pretest data, posttest data, and campus-level variables for each academic year were merged using participants' unique identification numbers contained in each data file. The final dataset for each academic year contains student pre and post-test survey variables and campus-level variables.

Dissemination Activities

We have disseminated study findings at several national and international conferences to practitioners and researchers in the fields of criminal justice, social work, nursing, public health, law, and other professional disciplines. These presentations have reached national and global audiences and will advance knowledge and data on the experiences of understudied student populations. We also conducted a researcher-practitioner webinar sponsored by the National Institute of Justice and the Violence Against Women Research Consortium at Rutgers University (see listing of presentations below). In addition to conference presentations and webinars, findings have been presented informally to researchers, practitioners, and survivors within the University of Michigan campus community. These discussions and community conversations have included the university Sexual Assault Prevention and Awareness Center (SAPAC), which provides prevention programming to incoming students. These activities have led to discussions on how study data and findings can guide campus prevention programming and policy, as well as
potential future partnerships with SAPAC and Vector Solutions to continue improving sexual assault prevention programming, particularly for racial, sexual, and gender minority students most impacted by victimization.

Finally, findings are being disseminated through several peer-reviewed publications (see previous listing under Artifacts). Additional dissemination activities are underway, particularly for Aims 3 through 5 findings. We intend to develop one practitioner brief and one policy brief on these results to disseminate broadly to the public. We are working with the University of Michigan Offices of Communications and Public Engagement to develop the practice and policy briefs and disseminate these materials widely (e.g., press releases, disseminating to policymakers, national campus sexual assault prevention efforts).
References


