

# ACADEMIC MEDICINE

Journal of the Association of American Medical Colleges

Uncomposed, edited manuscript published online ahead of print.

This published ahead-of-print manuscript is not the final version of this article, but it may be cited and shared publicly.

**Author:** Vargas Emily A. PhD; Cortina Lilia M. PhD; Settles Isis H. PhD; Brassel Sheila T. PhD; Perumalswami Chithra R. MD, MSc; Johnson Timothy R. B. MD, AM; Jagsi Reshma MD, DPhil

**Title:** Formal Reporting of Identity-Based Harassment at an Academic Medical Center: Incidence, Barriers, and Institutional Responses

**DOI:** 10.1097/ACM.00000000000004711

**Formal Reporting of Identity-Based Harassment at an Academic Medical Center:  
Incidence, Barriers, and Institutional Responses**

Emily A. Vargas, PhD, Lilia M. Cortina, PhD, Isis H. Settles, PhD, Sheila T. Brassel, PhD,  
Chithra R. Perumalswami, MD, MSc, Timothy R. B. Johnson, MD, AM, and Reshma Jagsi, MD,  
DPhil

**E.A. Vargas** was a T32 postdoctoral fellow, Cardiovascular Disease Epidemiology and Prevention, Department of Preventive Medicine, Northwestern University Feinberg School of Medicine, Chicago, Illinois, at the time of this study; ORCID: 0000-0001-8551-2432.

**L.M. Cortina** is university diversity and social transformation professor, Department of Psychology and Department of Women's and Gender Studies, University of Michigan, Ann Arbor, Michigan.

**I.H. Settles** is professor, Department of Psychology and Department of Afroamerican and African Studies, University of Michigan, Ann Arbor, Michigan; ORCID: 0000-0001-5015-7231.

**S.T. Brassel** is senior associate, Research, at Catalyst Inc., New York, New York. At the time of the study, the author was a graduate student, University of Michigan, Ann Arbor, Michigan.

**C.R. Perumalswami** is a research fellow, Center for Bioethics and Social Sciences in Medicine, University of Michigan, Ann Arbor, Michigan.

**T.R.B. Johnson** is Arthur F. Thurnau Professor Obstetrics and Gynecology and Women's and Gender Studies, Center for Bioethics and Social Sciences in Medicine and Global Reach, University of Michigan, Ann Arbor, Michigan.

**R. Jagsi** is Newman Family Professor and deputy chair, Department of Radiation Oncology, and director, Center for Bioethics and Social Sciences in Medicine, University of Michigan, Ann Arbor, Michigan.

Correspondence should be addressed to Reshma Jagsi, Department of Radiation Oncology, University of Michigan, UHB2C490, SPC 5010, 1500 East Medical Center Drive, Ann Arbor, MI 48109-5010; telephone: 734-936-7810; email: [rjagsi@med.umich.edu](mailto:rjagsi@med.umich.edu); Twitter: @reshmajagsi.

Supplemental digital content for this article is available at <http://links.lww.com/ACADMED/B263>.

*Acknowledgments:* The authors would like to thank the research participants for taking the time to complete the surveys.

*Funding/Support:* This study was funded by the Center for Bioethics and Social Sciences in Medicine, the ADVANCE program, and the Department of Obstetrics and Gynecology at the University of Michigan. Starting at the time of data analysis and manuscript preparation, E.A. Vargas was funded by the T32 Research Training Program in Cardiovascular Disease Epidemiology and Prevention at Northwestern University Feinberg School of Medicine, Department of Preventive Medicine.

*Other disclosures:* E.A. Vargas received a National Institutes of Health (NIH) grant for research outside this work. L.M. Cortina has received grants for research outside this work from the Social Sciences and Humanities Research Council of Canada, the Workplace Safety and Insurance Board of Ontario, and the University of Michigan, as well as personal fees for serving as an expert witness for the U.S. Equal Employment Opportunity Commission. She also served on the NASEM report<sup>1</sup> cited in the study without financial conflict. I.H. Settles has received

grants for unrelated research from the NIH and the National Science Foundation. C.R. Perumalswami has received grants outside this work from the NIH and the University of Michigan Office of Research. T.R.B. Johnson served on the NASEM report<sup>1</sup> cited in the study without financial conflict. R. Jagsi has stock options as compensation for her advisory board role in Equity Quotient, a company that evaluates culture in health care companies; she has received personal fees from the NIH as a special government employee (in her role as a member of the Advisory Committee on Research on Women's Health), the Greenwall Foundation, and the Doris Duke Charitable Foundation. She has received grants for unrelated work from the NIH, the Doris Duke Foundation, the Greenwall Foundation, Susan G. Komen, and Blue Cross Blue Shield of Michigan for the Michigan Radiation Oncology Quality Consortium. She has a contract to conduct an investigator-initiated study with Genentech. She has served as an expert witness for Sherinian and Hasso, Dressman Benzinger LaVelle, and Kleinbard LLC. She is an uncompensated member of the NASEM's Committee on Women in Science, Engineering, and Medicine. S. Brassel reported no competing financial interests.

*Ethical approval:* The University of Michigan Medical School Institutional Review Board (IRBMED) determined that this study is exempt from IRB oversight (HUM00138012; March 16, 2018).

## **Abstract**

### **Purpose**

To examine the incidence of, barriers to, and institutional responses to formal reporting of experiences of identity-based harassment at an academic medical center.

### **Method**

The authors invited 4,545 faculty and medical trainees at the University of Michigan Medical School to participate in a 2018 survey about civility and respect. This analysis focused on respondents who indicated experiencing at least 1 form of identity-based harassment (sexual harassment, gender policing harassment, heterosexist harassment, racialized sexual harassment) within the past year, perpetrated by staff, students, and faculty or by patients and patients' families. The authors assessed the incidence of formally reporting harassment to someone in authority, barriers to reporting, and institutional responses following reporting.

### **Results**

Among the 1,288 (28.3%) respondents with useable data, 83.9% (n = 1,080) indicated experiencing harassment. Of the harassed individuals, 10.7% (114/1,067), including 13.1% (79/603) of cisgender women and 7.5% (35/464) of cisgender men, indicated they formally reported their harassment experiences. Among these reporters, 84.6% (66/78) of cisgender women and 71.9% (23/32) of cisgender men indicated experiencing positive institutional remedies. Many reporters indicated experiencing institutional minimization (42.9% [33/77] of cisgender women; 53.1% [17/32] of cisgender men) or retaliation (21.8% [17/78] of cisgender women; 43.8% [14/32] of cisgender men). Cisgender men were significantly more likely to indicate experiencing specific negative institutional responses, such as being considered a troublemaker (OR 3.56, 95% CI: 1.33–9.55). Among respondents who did not formally report

harassment experiences, cisgender women were significantly more likely to cite concerns about institutional retaliation, such as being given an unfair performance evaluation or grade (OR 1.90, 95% CI: 1.33–2.70).

## **Conclusions**

Most respondents who experienced harassment did not formally report it to anyone in authority. Many reporters faced institutional minimization and retaliation. These findings suggest a need to reshape institutional harassment prevention and response systems in academic medicine.

A recent report of the National Academies of Sciences, Engineering, and Medicine (NASEM) highlighted the concerning pervasiveness and patterns of identity-based harassment in academic medicine.<sup>1</sup> This 2018 report encouraged the adoption of a comprehensive definition of *sexual harassment*, including three components: gender harassment, unwanted sexual attention, and sexual coercion. *Gender harassment* involves verbal and nonverbal behaviors that convey hostility to, exclusion of, or objectification of members of a given gender (e.g., being insulted or condescended to because of their gender). *Unwanted sexual attention* involves unwanted touches, sexual advances, or attempts to initiate a relationship despite discouragement. *Sexual coercion* includes attempts to coerce compliance with sexual demands by promising job-related benefits or making job-related threats. This tripartite model originated in the groundbreaking work of Fitzgerald et al, who defined *sexual harassment* as “unwanted sex-related behavior at work” appraised by targets as offensive, exceeding their resources, or threatening their well-being.<sup>2(p15)</sup>

Following the NASEM report’s guidance for using detailed validated instruments to measure harassment,<sup>1</sup> we surveyed the faculty, fellows, residents, and first- through third-year medical students at a major academic medical center in 2018. We found most faculty respondents (82.5% of women and 65.1% of men) indicated they had experienced at least 1 instance of sexual harassment perpetrated by “insiders” (staff, students, or faculty) within the past year.<sup>3</sup> Similarly, many faculty (64.4% of women and 44.1% of men) indicated they had experienced at least 1 incident of harassment perpetrated by patients and their families within that same year.

Consistent with previous research, we found increased experiences of sexual harassment were significantly associated with adverse mental health and job outcomes for both female and male faculty.<sup>3</sup>

Using data from that same survey, we also examined the incidence of 3 related, yet distinct, forms of identity-based harassment: gender policing harassment, heterosexist harassment, and racialized sexual harassment.<sup>4</sup> *Gender policing harassment* is negative treatment for individuals who are acting in ways that are inconsistent with traditional gender roles (e.g., treating a woman negatively because she is not “feminine” enough).<sup>5,6</sup> *Heterosexist harassment* is negative treatment (e.g., calling individuals derogatory names) for deviating from the heterosexual norm by being lesbian, gay, bisexual, or perceived as such.<sup>7</sup> *Racialized sexual harassment* is mistreatment occurring at the intersection of racial and gender identities that cannot uniquely be represented by sexual or racial harassment alone (e.g., making remarks stereotyping Black women as angry or Asian men as weak).<sup>8-10</sup> We found that experiences of these 3 forms of harassment also were common. Cisgender women were significantly more likely to face gender policing harassment compared with cisgender men. LGBTQ+ individuals were significantly more likely to experience heterosexist harassment compared with cisgender heterosexual individuals. Finally, underrepresented minorities, Asian Americans, and cisgender women had the highest rates of racialized sexual harassment.<sup>4</sup>

The NASEM report<sup>1</sup> also highlighted that individuals’ experiences of formally reporting harassment to someone in authority have scarcely been examined empirically in academic medicine. Studies in various work settings consistently find that employees rarely formally report harassment.<sup>11,12</sup> For example, Cortina and Berdahl found that only around 25% of employees who faced sexual harassment formally reported the incident.<sup>13</sup> The employee fears associated with reporting harassment appear justified, as research demonstrates employees who do report often face backlash and incur social and psychological penalties.<sup>13,14</sup> Although research examining harassment reporting in academic medicine is scant,<sup>15,16</sup> evidence from other



hierarchical and historically male-dominated workplaces<sup>17,18</sup> suggests 2 hypotheses: Reporting is uncommon, and when reporting occurs, backlash is common.

Therefore, in this study, we systematically examined formal reporting of identity-based harassment (sexual harassment, gender policing harassment, heterosexist harassment, and racialized sexual harassment) at a large academic medical center. We focused specifically on incidence of reporting, barriers to reporting (i.e., concerns about retaliation), and institutional responses to reporting (including remedies, minimization, and retaliation). We used data from the same large sample of faculty, fellows, residents, and medical students in whom we previously analyzed the incidence of identity-based harassment.<sup>3,4</sup> Further, we analyzed reporting experiences by gender, as research<sup>19</sup> suggests there may be differences based on this dimension.

## **Method**

This study was deemed exempt from IRB oversight by the University of Michigan Medical School Institutional Review Board (HUM00138012).

Our survey contained 174 items adapted from validated questionnaires using best psychometric practices.<sup>18,20</sup> In June 2018, we emailed all 4,545 current faculty and medical trainees (fellows, residents, and first- through third-year medical students) who had worked or trained at the University of Michigan Medical School (UMMS) for at least 1 year, inviting them to complete a 20-minute survey about their “experiences with civility and respect in our institution.” We did not invite fourth-year medical students as our study launch date followed their graduation date (May 2018). Only trainees were provided compensation (\$5 gift card) for considering participation that was not conditional on their response. (Additional details about the entire survey and study site are described elsewhere.<sup>3,4</sup>) We included respondents in the final dataset if

they passed 2 attention-check questions, and we excluded those who returned largely unanswered surveys (skipping  $\geq 90\%$  of items).

One prior analysis of data from this survey examined the incidence of sexual harassment and its impact on psychological well-being and job-related perceptions among faculty.<sup>3</sup> Another prior analysis examined the incidence of gender policing harassment, heterosexist harassment, and racialized sexual harassment by faculty and trainees' cisgender identity, LGBTQ+ identity, racial and ethnic identity, and department grouping.<sup>4</sup> Neither of these analyses examined faculty and trainee experiences with harassment reporting.

### **Analytic sample**

We assessed the extent to which respondents indicated they had experienced sexual harassment, gender policing harassment, heterosexist harassment, and/or racialized sexual harassment within the past year perpetrated (a) by “institutional insiders” (staff, students, and faculty) and (b) by patients and patients' families (patients/families). All harassment questions were administered on a 5-point scale from 0 = “never” to 4 = “many times.” (Detailed information on each harassment scale is available in prior publications.<sup>3,4</sup>) To identify individuals who indicated they had experienced harassment, we computed a total harassment score for each respondent by taking the sum of all harassment items. The analytic sample for this study includes 1,080 *harassed individuals*, defined as the respondents who indicated experiencing at least 1 form of any type of harassment (i.e., their total score was  $\geq 1$ ) by either group of perpetrators.

Harassed individuals were presented with a series of survey questions about their post-harassment experiences. We purposefully designed the survey to reflect the ways in which harassment is perpetrated and experienced, as supported by the literature: Harassment experiences are not rare, isolated events, but frequently occur together.<sup>1</sup> Therefore, participants

were not instructed to consider a single specific instance of harassment, but rather to consider their experiences more generally.

All harassed individuals were presented with the question, “Did you tell anyone about these UNWANTED behaviors?” (1 = “yes,” 2 = “no”). The term *UNWANTED behaviors* was purposefully included in all survey instructions and questions. Excluding the term *harassment* from survey elements is essential for survey administration to accurately capture the phenomenon of harassment, because harassed individuals are not likely to label their experiences as such.<sup>21</sup> If participants responded “yes,” or did not answer this item, they were then presented with a list of 5 different individuals/groups and instructed to indicate (1= “yes,” 2 = “no”) whom, if anyone, they told about the unwanted behaviors. One item included formally reporting harassment: “Someone in authority at the University of Michigan or Michigan Medicine who could have taken action to address the situation.” See Figure 1 for the survey flowchart.

### **Reporters**

Harassed individuals were classified as *reporters* if they indicated “yes” to the item about reporting to someone in authority at the institution. Reporters were presented with follow-up questions about institutional responses to their harassment reports. We adapted and expanded upon previously published and validated items of responses to reporting harassment.<sup>18,22</sup>

**Institutional remedies.** We measured actions taken to support the reporter and/or redress the situation using 6 items. Three items began with this question stem: “When you told someone in authority about the UNWANTED behavior, did any of the following happen?” Participants responded “yes” or “no” to each item; for example, “Someone in authority made me feel that I was listened to.” The remaining 3 items began with a slightly different stem: “To the best of your knowledge, did any of the following happen after you told someone in authority about the

UNWANTED behavior?” These items also included a “don’t know” response option given their nature; for example, “The person or people who bothered me were transferred.”

**Institutional minimization.** With 8 items, we measured institutional responses that minimized the report and/or blamed the reporter. Five yes/no items began with the following stem: “When you told someone in authority about the UNWANTED behavior, did any of the following happen?” One sample item was “Someone in authority encouraged me to drop the issue.” The remaining 3 items began with a slightly different stem: “To the best of your knowledge, did any of the following happen after you told someone in authority about the UNWANTED behavior?” One example item was “My concerns were found to be unsubstantiated.” A “don’t know” response option was available for these 3 items.

**Retaliation.** We measured instances of professional or personal reprisals against the reporter across 8 items. All items began with the stem, “To the best of your knowledge, did any of the following happen to you as a result of speaking to an authority figure at Michigan Medicine about the UNWANTED behavior?” Participants responded “yes” or “no” to each item; a “don’t know” option was not provided. One example item was “I was given an unfair performance evaluation or grade.”

**Nonreporters: Concerns of retaliation (barriers to reporting)**

Harassed individuals were classified as *nonreporters* if they indicated they did not tell anyone at all about the unwanted behavior or did not indicate “yes” in reply to the question about reporting to “someone in authority.” Nonreporters were presented with follow-up questions (developed by members of the research team) asking if and how concerns about potential retaliation influenced their decision not to report.

We measured nonreporters' concerns regarding retaliation (barriers to reporting) across 10 items, which began with a stem question: "Did the following concerns influence your decision not to report the UNWANTED behavior to an authority at Michigan Medicine?" Participants responded "yes" or "no" to each item; a "don't know" option was not provided. One sample item was "Possibility of triggering a mandatory report if you spoke up."

## **Gender**

All participants were asked to indicate which gender category best described their identity. Because Few respondents selected available gender categories other than "cisgender man" and "cisgender woman," we created and exclusively used a binary cisgender identity variable (1 = "cisgender woman" and 0 = "cisgender man") in the analyses.

## **Analytic approach**

We conducted chi-square analyses to examine possible differences by gender. We initially pursued a more complicated multivariable analysis plan including comparisons by race/ethnicity and sexual orientation; however, due to the limitations of subgroup analysis sample sizes, analytic assumptions were not met and we did not pursue these analyses. It is critical to accurately represent the experiences of marginalized groups, but given the situation of our study in a single institution with relatively small numbers of individuals in those groups, we were constrained by the need to protect the identities of those respondents. For all chi-square analyses, we used Fisher's exact test in instances in which more than 20% of the cells had expected frequencies of  $< 5$ .<sup>23</sup> For items with "don't know" options, these responses were pooled with "no" responses. The denominator for each item reflects the total number of responders who identified as cisgender individuals who answered the item as "yes," "no," or "don't know." Item

nonresponders were dropped from all analyses. All analyses were run in IBM SPSS version 26 (IBM, Armonk, New York). *P* values less than .05 were considered significant.

## Results

The research team invited 2,723 faculty and 1,822 medical trainees to participate in the survey. A total of 1,619 participants (35.6%) initiated surveys. Of these, 331 were removed due to extensive missing data and/or failed attention checks. A total of 1,288 respondents (28.3%)—705 faculty (25.9% of the targeted sample) and 583 trainees (32.0% of the targeted sample)—passed attention check questions and provided complete data (as specified in the Method section). We previously reported that there were minimal differences between our faculty sample and the target population overall for measured demographics including race, gender, department, and faculty track.<sup>3</sup> In the present analysis, we examined potential differences between our trainee sample and the target population. We found that cisgender women were modestly overrepresented among trainee respondents: 61% (131/216) of cisgender responding medical students and 54% (193/360) of cisgender responding residents and fellows identified as cisgender women, whereas 55% (288/519) of all cisgender medical students and 45% (578/1296) of all cisgender fellows and residents who were eligible for this survey at the institution identified as cisgender women ( $P = .10$  for medical students,  $P = .001$  for residents and fellows). Table 1 provides the demographic characteristics of this study's analytic sample: the 1,080 respondents (83.9% of all valid respondents) who indicated they had experienced identity-based harassment in the past year. The majority of these harassed individuals identified as cisgender women ( $n = 603$ , 55.8%), White ( $n = 767$ , 71.0%), and heterosexual ( $n = 1,004$ , 93.0%), and worked with patients ( $n = 942$ , 87.2%). Trainees comprised almost half of the analytic sample ( $n = 513$ , 47.5%), and faculty comprised slightly more than half ( $n = 567$ , 52.5%).

Among cisgender harassed individuals, 10.7% (114/1,067), including 13.1% (79/603) of cisgender women and 7.5% (35/464) of cisgender men, indicated they had reported their harassment to someone in authority. Among these reporters, 84.6% (66/78) of cisgender women and 71.9% (23/32) of cisgender men indicated at least 1 positive institutional remedy. The most frequently indicated remedy was “someone in authority made me feel that I was listened to” (78.7% [59/75] of cisgender women and 59.4% [19/32] of cisgender men). Cisgender women were significantly more likely than cisgender men to indicate feeling listened to (OR 2.52, 95% CI: 1.03–6.18;  $P = .04$ ) and being told it was not their fault (OR 3.21, 95% CI: 1.24–8.32;  $P = .01$ ) (Table 2).

Further, 45.9% (50/109) of reporters, including 42.9% (33/77) of cisgender women and 53.1% (17/32) of cisgender men, indicated at least 1 experience of institutional minimization. The most frequently indicated form of minimization was “No action was taken” (32.4% [24/74] of cisgender women and 34.4% [11/32] of cisgender men). Cisgender men were significantly more likely than cisgender women to indicate being encouraged to drop the issue (OR 3.46, 95% CI: 1.29–9.28;  $P = .01$ ), made to feel less important than the institution’s reputation (OR 3.83, 95% CI: 1.21–12.18;  $P = .03$ ), or told to stop thinking about it (OR 4.67, 95% CI: 1.39–15.65;  $P = .02$ ).

Moreover, 28.2% (31/110) of reporters, including 21.8% (17/78) of cisgender women, and 43.8% (14/32) of cisgender men, indicated at least 1 experience of institutional retaliation. The most frequently indicated form of retaliation was “I was considered a “troublemaker” (12.8% [10/78] cisgender women and 34.4% [11/32] of cisgender men). Cisgender men were significantly more likely than cisgender women to indicate being considered a “troublemaker” (OR 3.56, 95% CI: 1.33–9.55;  $P = .01$ ), denied opportunities (OR 3.42, 95% CI: 1.18–9.91;  $P =$

.04), given less favorable assignments (OR 4.70, 95% CI: 1.51–14.60;  $P = .01$ ), threatened (OR 5.77, 95% CI: 1.35–24.74;  $P = .02$ ), or denied promotions (OR 21.28, 95% CI: 2.50–181.50;  $P = .001$ ).

The majority of cisgender harassed individuals were nonreporters (89.3% [953/1067]). Among nonreporters, 47.8% (404/845), including 53.8% (259/481) of cisgender women and 39.8% (145/364) of cisgender men, indicated that concerns about potential retaliation deterred them from reporting. Cisgender women were significantly more likely than cisgender men to indicate concerns about being considered a “troublemaker” (OR 1.98, 95% CI: 1.45–2.69;  $P < .001$ ), slighted/ignored/ridiculed (OR 2.05, 95% CI: 1.47–2.84;  $P < .001$ ), given an unfair performance evaluation or grade (OR 1.90, 95% CI: 1.33–2.70;  $P < .001$ ), denied opportunities (OR 2.20, 95% CI: 1.52–3.17;  $P < .001$ ), or given less favorable assignments (OR 1.68, 95% CI: 1.11–2.56;  $P = .01$ ). Cisgender men were more likely than cisgender women to indicate concerns about being threatened (OR 2.53, 95% CI: 1.27–5.04;  $P < .01$ ) (Table 3).

## Discussion

This study is the first, to our knowledge, to empirically examine formal reporting of identity-based harassment in a large academic medical center, with a focus on incidence, barriers, and institutional responses. Importantly, we examined each of these experiences by gender identity among cisgender respondents. Overall, our results demonstrate patterns of infrequent reporting and, for those who report, frequent negative experiences after reporting, which is generally consistent with our hypotheses and the broader literature. These findings augment the understanding of the phenomenon of harassment in academic medicine and demonstrate that improvements are needed in what happens after harassment has occurred.



Within our analytic sample, the incidence of formally reporting harassment to someone in authority was very low. We found that only 1 of every 10 harassed individuals had reported their experience. These rates echo those published in the extant literature from organizational science broadly—formally reporting harassment is uncommon in organizations.<sup>24</sup> Specific to academic medicine, while sexual harassment has previously been identified as highly pervasive,<sup>1</sup> our findings and previous research suggest few harassment experiences may ever be reported.<sup>25-27</sup> Similarly, the Association of American Medical Colleges (AAMC) 2019 Medical School Graduation Questionnaire (GQ) Summary Report revealed that 23.2% of 6,582 graduating medical students reported instances of mistreatment to authority.<sup>15</sup> Although our study and the AAMC GQ report differ in terms of which mistreatment experiences were included, together they suggest that most experiences go unreported.

Additionally, our study examined reporters' perceptions of and experiences with institutional responses—including institutional remedies, institutional minimization, and retaliation. The majority of reporters indicated experiencing at least 1 positive institutional remedy. Simultaneously, substantial proportions of reporters noted institutional minimization (nearly 50%) and retaliation (approximately 30%) following reporting. These results highlight several important complexities around responses to reporting harassment.

Positive and negative institutional responses are not necessarily mutually exclusive. For instance, research finds that reporting and grievance procedures tend to favor the institution over the target (i.e., the harassed individual reporting).<sup>1,28</sup> This may explain why reporters in our study often indicated they were offered a listening ear, but their most frequently indicated institutional minimization item was that “no action was taken.” This pattern is consistent with qualitative studies demonstrating how employers can offer a sympathetic response while not taking

disciplinary action against the perpetrator.<sup>29</sup> It is possible that the variation in institutional responses may depend on characteristics of the authority figure contacted during the reporting procedure. Future research should investigate whether certain authority figures systematically have lower tolerance for harassment and offer more remedies.

Additionally, the conditions of academic medicine—including the historical cultural norms, hierarchical structure, and traditionally male-dominated workforce—may explain why harassed cisgender men were significantly more likely to indicate they experienced minimization and retaliation, compared with harassed cisgender women. Although research finds that cisgender men do experience harassment, many assume that cisgender men cannot be harassed.<sup>3</sup> Therefore, cisgender men who choose to formally report and identify themselves as bothered by harassment may be perceived as “not tough enough” and may subsequently face retaliation.<sup>30,31</sup>

Alternatively, it is possible that gender differences in experiences of negative institutional responses are reflective of differences in the types of harassers being reported. One study found that men faced more harassment from people higher in the organizational hierarchy, whereas women faced more harassment from peers.<sup>32</sup> If this pattern extends to academic medicine, men could be experiencing (and reporting) more harassment from people situated above them in the hierarchy. Their reports of wrongdoing committed by more powerful individuals may be met with more resistance. This hypothesis warrants further research.

Importantly, the overwhelming majority (nearly 90%) of the harassed individuals in our sample did not formally report their experiences. Among nonreporters, approximately half cited retaliation concerns. Fear of blame, disbelief, inaction, and career damage often deters reporting.<sup>1</sup> We found cisgender women were more likely than cisgender men to indicate they did not report their harassment due to such fears. Thus, institutional tracking of harassment that is

based on reporting is likely to be an underestimate, especially for the harassment of cisgender women (who are generally harassed more than cisgender men).<sup>3,4</sup>

In addition to retaliation, many nonreporters described concerns about institutional minimization and inaction. These concerns are serious problems because institutions typically rely on individual reporting as a primary route to institutional action on harassment (i.e., no report, no action). Reporting systems attempt to enable intervention in harassment on an individual basis; however, the most powerful predictors of harassment are organizational. That is, harassment thrives in organizations that are dominated by cisgender men, turn a blind eye to abusive behavior, neglect respect, and/or promote dysfunctional masculine norms.<sup>19,33</sup> Evidence suggests the most effective strategy for prevention of harassment is for institutional leaders to focus on cultivating cultures of respect and overhauling the conditions that support the existence of harassment.<sup>19</sup> Our findings add to accumulating evidence highlighting the need for institutional responses to harassment that rely less upon reporting systems, which place the burden of managing institutional wrongdoing on the shoulders of those who have been wronged.<sup>19,34</sup> To turn the tide on harassment, leaders should consider these factors and intervene at the level of the organization.

One starting place is to intervene in the gender make-up of the organization. Experts have noted, “We already know how to reduce sexual harassment at work, and the answer is actually pretty simple: Hire and promote more women.”<sup>35</sup> Thus, there should be more focus on recruiting and integrating women (and gender-nonbinary persons) into all specialties and at all levels of academic medicine, especially into the most powerful positions traditionally reserved for and filled by cisgender men.<sup>36,37</sup> A related step would be to integrate the built environment—that is, the photographs, portraits, and other displays that celebrate important figures. The walls of many

academic medical centers are covered in images of White cisgender men, which sends signals about who is valued and deserving of respect (and, tacitly, who is not). Bringing gender balance to an organization might not eradicate harassment, but it can be a strong first step.<sup>19,33</sup>

## **Limitations**

This study provides critical insights, but it also has limitations. First, the setting was a single institution, which may limit the generalizability of the findings to other institutions. For example, academic medical centers may differ in their reporting systems, specific policies to prevent harassment, and workplace characteristics and cultures that may perpetuate harassment.

Differences at the institution level may inform the formal reporting of harassment. However, the University of Michigan Medical School is similar to other large academic medical centers in many ways, and we have no reason to believe this setting to be atypical.

Second, while our sample size of harassed individuals was large enough to permit analyses by gender, the diversity of the sample along the dimensions of other identities was limited by the demographic diversity of the institution. Therefore, we did not have adequate sample sizes for analyses by LGBTQ+ and racial/ethnic identities, especially among reporters. We recommend that institutions continue to conduct research to help improve representation and understanding of barriers to and consequences of harassment reporting for LGBTQ+ individuals and people of color.

Third, a minority of the individuals sampled responded to the survey (overall response rate of 35.6%, with a usable data response rate of 28.3%). This may have led to some over- or underrepresentation of those who experienced harassment in the sample, even though invitations deliberately said nothing about “harassment” (following best practice in sexual harassment survey measurement<sup>1</sup>). As we noted previously,<sup>4</sup> this response rate is typical of online surveys

covering issues related to those addressed in this study. Reassuringly, as previously detailed,<sup>3</sup> we did not observe dramatic differences in demographic characteristics like race or gender among the faculty survey respondents as compared with the targeted population. Similar results were found in this study when comparing demographic data that included the trainees. Therefore, despite the low response rate, we believe our sample is mostly representative of the targeted population. Moreover, this analysis specifically focused only on respondents who indicated they had experienced identity-based harassment; there is little reason to believe that the harassment reporting experiences that are the focus of this analysis would differ systematically from those of harassed individuals who did not respond to the survey.

Fourth, we designed the survey to reflect the empirically supported realities of harassment experiences by wording the questions about reporting in a holistic way.<sup>1,19</sup> Despite the strengths of this approach, participants may have been considering multiple experiences and/or multiple perpetrators of harassment when responding to the survey. Further, details about specific harassment events were not reported. Because multiple experiences cannot be disaggregated, it remains unknown if factors such as the perpetrator source influenced the likelihood of reporting and any subsequent institutional responses. Future research should ask participants about a single, most impactful harassment experience to gain a more nuanced understanding of reporting. Finally, the measures for this study derive from self-report; therefore, outcomes like formal reporting are not objectively verifiable and may be subject to recall errors. However, the questions came from well-validated instruments, performed well on pretesting, and have face validity.<sup>3</sup> Respondents were assured of anonymity, so there would be little reason for participants to obfuscate deliberately. While self-reported data are not without limitations, they are considered to be a more accurate representation of the phenomenon over “objective” indicators,

such as the number of filed harassment complaints. This is in part because most harassed individuals never file formal grievances.<sup>19</sup> Further, the inclusion of other self-report measures permitted the collection of data that cannot be assessed objectively, including concerns about retaliation. Understanding why individuals do not report harassment is essential for informing and promoting institutional change. Similarly, our analytic sample comprised individuals who indicated they had experienced at least 1 form of harassment. While the harassment measures informing the analytic sample also derived from self-report, all measures were behaviorally based, valid and reliable across contexts, and considered to be the most accurate “gold standard” measurements of harassment as compared to other methods, as discussed in previous publications.<sup>3,4</sup>

## **Conclusions**

Identity-based harassment is common in academic medicine.<sup>1</sup> However, our study suggests individuals who experience harassment rarely report it to anyone in authority within the institution we studied, often owing to concerns about negative institutional responses (particularly among cisgender women). These fears appear well-founded, with many reporters (especially cisgender men) indicating they experienced institutional minimization and retaliation following their reports. These findings suggest a need to reshape institutional harassment prevention and response systems.

## References

1. National Academies of Sciences, Engineering, and Medicine. Sexual harassment of women: Climate, culture, and consequences in academic sciences, engineering, and medicine. Washington, DC: National Academies Press; 2018.  
<https://doi.org/10.17226/24994>. Accessed February 22, 2022.
2. Fitzgerald LF, Swan S, Magley VJ. But was it really sexual harassment? Legal, behavioral, and psychological definitions of the workplace victimization of women. In: O'Donohue W, ed. Sexual Harassment: Theory, Research, and Treatment. Boston: Allyn & Bacon; 1997:5-28.
3. Vargas EA, Brassel ST, Cortina LM, Settles IH, Johnson TRB, Jagsi R. #MedToo: A large-scale examination of the incidence and impact of sexual harassment of physicians and other faculty at an academic medical center. *J Womens Health*. 2020;29(1):13-20.
4. Vargas EA, Brassel ST, Perumalswami CR, et al. Incidence and group comparisons of harassment based on gender, LGBTQ+ identity, and race at an academic medical center. *J Womens Health*. 2021;30(6):789-798. doi.org/10.1089/jwh.2020.8553
5. Leskinen EA, Cortina LM. Dimensions of disrespect: Mapping and measuring gender harassment in organizations. *Psychol Women Quart*. 2014;38(1):107-123.
6. Sandfort TGM, Melendez RM, Diaz RM. Gender nonconformity, homophobia, and mental distress in Latino gay and bisexual men. *J Sex Res*. 2007;44(2):181-189.
7. Konik J, Cortina LM. Policing gender at work: Intersections of harassment based on sex and sexuality. *Soc Justice Res*. 2008;21(3):313-337.
8. Buchanan NT, Ormerod AJ. Racialized sexual harassment in the lives of African American women. *Women Ther*. 2002;25:107-124.

9. Buchanan NT, Settles IH, Wu IHC, Hayashino DS. Sexual harassment, racial harassment, and well-being among Asian American women: An intersectional approach. *Women Ther.* 2018;41:261-280.
10. Cho SK. Converging stereotypes in racialized sexual harassment: Where the model minority myth meets Suzie Wong. *J Gender Race & Just.* 1997;1:177-211.
11. Schneider KT, Swan S, Fitzgerald LF. Job-related and psychological effects of sexual harassment in the workplace: Empirical evidence from two organizations. *J Appl Psychol.* 1997;82(3):401-415.
12. Wasti SA, Cortina LM. Coping in context: Sociocultural determinants of responses to sexual harassment. *J Pers Soc Psychol.* 2002;83(2):394-405.
13. Cortina LM, Berdahl JL. Sexual harassment in organizations: A decade of research in review. In: Barling J, Cooper CL, eds. *The SAGE Handbook of Organizational Behavior: Volume 1—Micro Approaches*. London: SAGE Publications; 2008:469-497.
14. Cortina LM, Magley VJ. Raising voice, risking retaliation: Events following interpersonal mistreatment in the workplace. *J Occup Health Psychol.* 2003;8(4):247-265.
15. Association of American Medical Colleges. Medical School Graduation Questionnaire: 2019 All Schools Summary Report. <https://www.aamc.org/system/files/2019-08/2019-gq-all-schools-summary-report.pdf>. Published July 2019. Accessed February 2, 2022.
16. Binder R, Garcia P, Johnson B, Fuentes-Afflick E. Sexual harassment in medical schools: The challenge of covert retaliation as a barrier to reporting. *Acad Med.* 2018;93(12):1770-1773.



17. Buchanan NT, Settles IH, Hall AT, O'Connor RC. A review of organizational strategies for reducing sexual harassment: Insights from the U. S. Military. *J Soc Issues*. 2014;70(4):687-702.
18. Bergman ME, Langhout RD, Palmieri PA, Cortina LM, Fitzgerald LF. The (un)reasonableness of reporting: Antecedents and consequences of reporting sexual harassment. *J Appl Psychol*. 2002;87(2):230-242.
19. Cortina LM, Areguin MA. Putting people down and pushing them out: Sexual harassment in the workplace. *Annu Rev Organ Psychol Behav*. 2021;8:285–309. doi.org/10.1146/annurev-orgpsych-012420-055606.
20. Swartout KM, Flack Jr WF, Cook SL, Olson LN, Smith PH, White JW. Measuring campus sexual misconduct and its context: The Administrator-Researcher Campus Climate Consortium (ARC3) survey. *Psychol Trauma*. 2019;11(5):495-504.
21. Holland KJ, Cortina LM. When sexism and feminism collide: The sexual harassment of feminist working women. *Psychol Women Quart*. 2013;37(2):192-208.
22. Administrator Researcher Campus Climate Collaborative. ARC3 Campus Climate Survey. <https://campusclimate.gsu.edu/>. Accessed February 2, 2022.
23. Kim HY. Statistical notes for clinical researchers: Chi-squared test and Fisher's exact test. *Restor Dent Endod*. 2017;42(2):152-155.
24. McDonald P. Workplace sexual harassment 30 years on: A review of the literature. *Int J Manag Rev*. 2012;14(1):1-17.
25. Freedman-Weiss MR, Chiu AS, Heller DR, et al. Understanding the barriers to reporting sexual harassment in surgical training. *Ann Surg*. 2020;271(4):608-613.

26. Bates CK, Jagsi R, Gordon LK, et al. It is time for zero tolerance for sexual harassment in academic medicine. *Acad Med*. 2018;93(2):163-165.
27. Fnais N, Soobiah C, Chen MH, et al. Harassment and discrimination in medical training: A systematic review and meta-analysis. *Acad Med*. 2014;89(5):817-827.
28. Smidt AM, Freyd JJ. Government-mandated institutional betrayal. *J Trauma Dissociation*. 2018;19(5):491-499.
29. Lindquist C, McKay T. Sexual harassment experiences and consequences for women faculty in science, engineering, and medicine. Research Triangle Park, NC: RTI International Press; 2018. <https://www.rti.org/rti-press-publication/sexual-harassment-SEM/fulltext.pdf>. Accessed February 22, 2022.
30. Rabelo VC, Cortina LM. Two sides of the same coin: Gender harassment and heterosexist harassment in LGBTQ work lives. *Law Human Behav*. 2014;38(4):378-391.
31. Holland KJ, Rabelo VC, Gustafson AM, Seabrook RC, Cortina LM. Sexual harassment against men: Examining the roles of feminist activism, sexuality, and organizational context. *Psychol Men Masculin*. 2016;17(1):17-29.
32. Cortina LM, Lonsway KA, Magley VJ, et al. What's gender got to do with it? Incivility in the federal courts. *Law Soc Inq*. 2002;27(2):235-270.
33. Clancy KBH, Cortina LM, Kirkland AR. Opinion: Use science to stop sexual harassment in higher education. *Proc Natl Acad Sci USA*. 2020;117 (37):22614-22618.
34. Freyd JJ, Smidt AM. So you want to address sexual harassment and assault in your organization? Training is not enough; education is necessary. *J Trauma Dissociation*. 2019;20(5):489-494.

35. Dobbin F, Kalev Alexandra. Training programs and reporting systems won't end sexual harassment—promoting more women will. *Harvard Bus Rev.* 2017;70 (4):687-702.
36. Schultz V. The sanitized workplace. *Yale Law J.* 2003;112(8):2061-2193.
37. Schultz V. Reconceptualizing sexual harassment, again. *Yale Law J.* 2018;128:22-66.

ACCEPTED

## Figure Legend

### Figure 1

Flowchart for survey questions asked of reporters (respondents who reported experiences of harassment to someone in authority) and nonreporters (respondents who did not report those experiences) among the 1,080 respondents who indicated they had experienced identity-based harassment within the past year at the University of Michigan Medical School, 2018 survey. Questions asked of reporters appear in Table 2; those asked of nonreporters appear in Table 3. The full survey is available as Supplemental Digital Appendix 1 at <http://links.lww.com/ACADMED/B263>.

**Table 1**

**Demographics of 1,080 Respondents (Harassed Individuals) Who Indicated They Had Experienced Identity-Based Harassment in the Past Year, University of Michigan Medical School, 2018 Survey**

Demographic variable	No. (%)
<b>Gender</b>	
Cisgender women	603 (55.8)
Cisgender men	464 (43.0)
Not cisgender	5 (0.5)
Missing	8 (0.7)
<b>Race/ethnicity</b>	
White	767 (71.0)
Asian/Asian American/Pacific Islander	161 (14.9)
Multiracial/multiethnic	41 (3.8)
Hispanic/Latinx	35 (3.2)
Middle Eastern	25 (2.3)
Black/African American	22 (2.0)
None of these categories	10 (0.9) <sup>a</sup>
Missing	19 (1.8)
<b>Sexual orientation</b>	
Heterosexual	1,004 (93.0)
Bisexual	19 (1.8)
Gay	17 (1.6)
Lesbian	6 (0.6)
Queer/pansexual/asexual	6 (0.6)
None of these categories	1 (0.1)
Missing	27 (2.5)

<sup>a</sup>Includes any respondents who identified as Native American/American Indian.

**Table 2**

**Institutional Responses to Reporters (Respondents Who Reported Experiences of Identity-Based Harassment to Someone in Authority) by Gender, 2018 Survey<sup>a,b</sup>**

Institutional response	Cisgender women, no. (% of cisgender women reporters)	Cisgender men, no. (% of cisgender men reporters)	Odds ratio, 95% CI	<i>P</i> value <sup>c</sup>
<b>Institutional remedies (actions taken to support the reporter and/or redress the situation)<sup>d,e</sup></b>				
Someone in authority made me feel that I was listened to. <sup>f</sup>	59/75 (78.7)	19/32 (59.4)	2.52, 1.03–6.18	.04
Someone in authority reassured me that I am an important member of Michigan Medicine. <sup>f</sup>	48/74 (64.8)	15/32 (46.9)	2.09, 0.90–4.86	.08
The person or people who bothered me were talked to about the behavior. <sup>g</sup>	31/76 (40.8)	13/32 (40.6)	1.01, 0.43–2.33	.99
Someone in authority told me it was not my fault. <sup>f</sup>	36/76 (47.4)	7/32 (21.9)	3.21, 1.24–8.32	.01
Action was taken against the person or people who bothered me. <sup>g</sup>	10/75 (13.3)	6/32 (18.8)	0.67, 0.22–2.02	.56
The person or people who bothered me were transferred. <sup>g</sup>	4/76 (5.3)	0/32 (0)	— <sup>h</sup>	.32
<b>Institutional Minimization (minimization of the report and/or blame of the reporter)<sup>d,e</sup></b>				
No action was taken. <sup>g</sup>	24/74 (32.4)	11/32 (34.4)	0.91, 0.38–2.20	.84
My concerns were not taken seriously. <sup>g</sup>	14/77 (18.2)	7/32 (21.9)	0.79, 0.29–2.20	.66
Someone in authority encouraged me to drop the issue. <sup>f</sup>	10/76 (13.2)	11/32 (34.3)	3.46, 1.29–9.28 <sup>i</sup>	.01

Someone in authority told me I could have done more to prevent this experience. <sup>f</sup>	6/76 (7.9)	4/32 (12.5)	0.60, 0.16–2.29	.48
Someone in authority told me that talking about it might negatively affect the reputation of Michigan Medicine. <sup>f</sup>	6/76 (7.9)	7/32 (21.9)	0.31, 0.09–1.00	.06
Someone in authority made me feel that the experience was less important than the reputation of Michigan Medicine. <sup>f</sup>	6/75 (8.0)	8/32 (25.0)	3.83, 1.21–12.18 <sup>i</sup>	.03
Someone in authority told me to stop thinking about it. <sup>f</sup>	5/75 (6.7)	8/32 (25.0)	4.67, 1.39–15.65 <sup>i</sup>	.02
My concerns were found to be unsubstantiated. <sup>g</sup>	2/77 (2.6)	2/32 (6.3)	0.40, 0.05–2.97	.58
<b>Retaliation (professional or personal reprisals against the reporter)<sup>e,f</sup></b>				
I was given an unfair performance evaluation or grade.	10/77 (13.0)	8/32 (25.0)	0.45, 0.16–1.27	.12
I was considered a "troublemaker".	10/78 (12.8)	11/32 (34.4)	3.56, 1.33–9.55 <sup>i</sup>	.01
I was denied an opportunity that I deserved.	8/78 (10.3)	9/32 (28.1)	3.42, 1.18–9.91 <sup>i</sup>	.04
I was given less favorable job duties or assignments.	6/78 (7.7)	9/32 (28.1)	4.70, 1.51–14.60 <sup>i</sup>	.01
I was slighted, ignored, or ridiculed by others at Michigan Medicine.	6/77 (7.8)	6/32 (18.8)	0.37, 0.11–1.24	.18
I was threatened.	3/78 (3.8)	6/32 (18.8)	5.77, 1.35–24.74 <sup>i</sup>	.02
I was denied a promotion or advancement that I deserved.	1/77 (1.3)	7/32 (21.9)	21.28, 2.50–181.50 <sup>i</sup>	.001
I lost my position and/or funding.	0/78 (0)	2/31 (6.5)	— <sup>h</sup>	.08

Abbreviation: CI, confidence interval.

<sup>a</sup>Survey respondents were included in this analysis if they were among the 114 cisgender individuals (79 cisgender women, 35 cisgender men) who indicated “yes” to the question asking whether they had reported the unwanted behaviors to “someone in authority at the University of Michigan or Michigan Medicine who could have taken action to address the situation.”

<sup>b</sup>The full survey, with each item’s question stem and response options, is available as Supplemental Digital Appendix 1 at [LWW INSERT LINK].

<sup>c</sup>Determined using chi-square test. Fisher's exact test was used in cases in which more than 20% of the cells have expected frequencies of < 5.

<sup>d</sup>These items expanded upon and were adapted from Bergman and colleagues' organizational minimization scale.<sup>18</sup>

<sup>e</sup>These items expanded upon and were adapted from the Administrator Researcher Campus Climate Collaborative (ARC3) Campus Climate Survey<sup>19</sup>

<sup>f</sup>The denominator for each item reflects the total number of reporters for an individual gender who answered the item as "yes" or "no." Item non-responders were dropped.

<sup>g</sup>The "don't know" responses were pooled with the "no" responses. The denominator for each item reflects the total number of reporters for an individual gender who answered the item as "yes," "no," or "don't know." Item non-responders were dropped.

<sup>h</sup>The odds ratio was not calculated due to nonsignificant findings, and 0 cases observed in cells.

<sup>i</sup>Reflects the odds ratio for cisgender men.



**Table 3**

**Concerns of Retaliation Among Nonreporters (Respondents Who Experienced Identity-Based Harassment but Did Not Report Their Experiences to Someone in Authority), by Gender, 2018 Survey<sup>a,b,c</sup>**

Concern of retaliation item	Cisgender women, no. (% of cisgender women nonreporters)	Cisgender men, no. (% of cisgender men nonreporters)	Odds ratio, 95% CI	<i>P</i> value <sup>d</sup>
Possibility of being considered a “troublemaker”	175/477 (36.7)	82/362 (22.7)	1.98, 1.45–2.69	< .001
Possibility of being slighted, ignored, or ridiculed by others at Michigan Medicine	150/479 (31.3)	66/362 (18.2)	2.05, 1.47–2.84	< .001
Possibility of being given an unfair performance evaluation or grade	122/479 (25.5)	55/360 (15.3)	1.90, 1.33–2.70	< .001
Possibility of being denied an opportunity that you deserved	121/479 (25.3)	48/360 (13.3)	2.20, 1.52–3.17	< .001
Possibility of triggering a mandatory report if you spoke up	113/475 (23.8)	77/359 (21.4)	1.14, 0.82–1.59	.43
Possibility of the person or people who bothered you facing negative consequences (such as losing their position)	95/476 (20.0)	68/359 (18.9)	1.07, 0.75–1.51	.71
Possibility of being given less favorable job duties or assignments	77/479 (16.1)	37/362 (10.2)	1.68, 1.11–2.56	.01
Possibility of being denied a promotion or advancement that you deserved	71/479 (14.8)	44/362 (12.2)	1.26, 0.84–1.88	.27
Possibility of losing your position and/or funding	43/474 (9.1)	33/359 (9.2)	0.99, 0.61–1.59	.95
Possibility of being threatened	13/475 (2.7)	24/361 (6.6)	2.53, 1.27–5.04 <sup>e</sup>	< .01

Abbreviation: CI, confidence interval.

<sup>a</sup>Survey respondents were included in this analysis if they were among the 953 cisgender respondents (who included 524 cisgender women and 429 cisgender men) who did not tell anyone at all about the unwanted behavior or who did not indicate “yes” to the question asking whether they had reported the unwanted behaviors to “someone in authority at the University of Michigan or Michigan Medicine who could have taken action to address the situation.”

<sup>b</sup>The full survey, with each item's question stem and response options, is available as Supplemental Digital Appendix 1 at [LWW INSERT LINK].

<sup>c</sup>The denominator for each item reflects the total number of nonreporters for an individual gender who answered the item as "yes" or "no." Item nonresponders were dropped.

<sup>d</sup>Determined using chi-square test. Fisher's exact test was used in cases in which more than 20% of the cells have expected frequencies of < 5.

<sup>e</sup>Reflects the odds ratio for cisgender men.

ACCEPTED

**Figure 1**

