

SEXUAL HARASSMENT OF WOMEN IN ACADEMIC SCIENCES, ENGINEERING, AND MEDICINE

Statement of

Paula A. Johnson, MD, MPH

President

Wellesley College

and

Co-Chair, Committee on the Impacts of Sexual Harassment in Academia

Committee on Women in Science, Engineering, and Medicine

Division on Policy and Global Affairs

The National Academies of Sciences, Engineering, and Medicine

before the

Committee on Science, Space, and Technology

U.S. House of Representatives

June 12, 2019

Good morning, Madam Chairwoman Johnson, Ranking Member Lucas, and members of the Committee. My name is Paula Johnson. I am President of Wellesley College and served as co-chair of the Committee on the Impacts of Sexual Harassment in Academia of the National Academies of Sciences, Engineering, and Medicine, which was formed in October 2016, and which released its final report on June 12, 2018 – one year ago today. The National Academy of Sciences was chartered by Congress in 1863 to advise the government on matters of science and technology and later expanded to include the National Academies of Engineering and Medicine.

The National Academies have always concerned themselves with addressing some of society's toughest challenges and with matters that affect the integrity of science and the health of the nation. So it was fitting for them to take up the question of how sexual harassment impacts academic fields of science, engineering, and medicine, and therefore impacts the scientists, physicians, engineers, and practitioners that work in these fields and society more broadly. This work, and the outreach efforts conducted since the report was released, has been generously supported by the National Science Foundation, as the lead sponsor, as well as by the National Aeronautics and Space Administration, National Institutes of Health, National Institute of Standards and Technology (NIST), National Oceanic and Atmospheric Administration, the Burroughs Wellcome Fund, the Henry Luce Foundation, the Howard Hughes Medical Institute, and the Alfred P. Sloan Foundation.

I have been asked to summarize the findings and recommendations from our 2018 National Academies report, *Sexual Harassment of Women: Climate, Culture, and Consequences in Academic Sciences, Engineering, and Medicine*¹, and in particular to discuss what we found regarding the impact of sexual harassment on the careers of women and on the scientific enterprise. Let me get straight to the point: after a thorough review of research, our committee concluded that the cumulative effect of sexual harassment is significant damage to research integrity and a costly loss of talent in science, engineering, and medicine, which has consequences for advancing the nation's economic and social well-being and its overall public health. We also noted that more rapid and sustained progress in closing the gender gap in science, engineering, and medicine is jeopardized by the persistence of sexual harassment.

One of the first findings our committee made was that sexual harassment entails more behaviors than what the general public typically considers to be sexual harassment. Our committee

¹ For the full report, please see <http://www.nap.edu/sexualharassment>.

found that there are three types of sexually harassing behavior. The public is generally aware of the first two types: sexual coercion (when favorable professional or educational treatment is conditioned on sexual activity) and unwanted sexual attention (verbal or physical unwelcome sexual advances, which can include assault). These are the types of behavior that have the appearance of being come-ons, if you will, and which are more clearly covered in standard sexual harassment policies at organizations. However, the vast majority of sexual harassment takes the form of a “put-down”. Based on more than thirty years of research in workplaces across multiple sectors and in education environments, our committee found that the most common form of sexual harassment is *gender harassment* – this is verbal and nonverbal behaviors that convey hostility, objectification, exclusion, or second-class status about members of one gender – and it is this type that is most likely to create the hostile environment that is recognized as illegal sexual harassment. As one might imagine, or know from personal experience, sexually harassing behavior can be either direct (targeted at an individual) or ambient (a general level of sexual harassment in an environment), and it is harmful in both circumstances. The research reveals that gender harassment that is severe or occurs frequently over a period of time can result in the same level of negative professional and psychological outcomes as single instance of sexual coercion. In response to this research, we recommend that institutional leaders pay increased attention to and enact policies that cover gender harassment. Because it is the most common form of sexual harassment, it usually accompanies other forms of harassment, and thus addressing it will have a large impact on preventing the other types of harassment.

The research available on academic environments reveals that over 50 percent of women faculty and staff experience sexual harassment², and for students in higher education, depending on their field, 20-50 percent of them will experience sexual harassment from faculty and staff while at their institution.³ In addition, the research shows that certain populations experience more harassment. Women of color experience more harassment, whether sexual, racial or ethnic, or more often a combination of the two. And Sexual- and gender-minority people experience more sexual harassment than heterosexual women do.

What is especially discouraging is that at the same time that so much energy and money is being invested in efforts to attract and retain women in science, engineering, and medical fields, it appears women are often bullied or harassed out of career pathways in these fields. Even when they remain, their ability to contribute and advance in their field can be limited as a consequence of sexual harassment—either from the harassment directed at them; the ambient harassment in the environment in their department, program, or discipline; or the retaliation and betrayal they experience after formally reporting the harassment.

The research shows that sexual harassment undermines women’s professional and educational attainment and their mental and physical health. When women experience sexual harassment in the workplace, the professional outcomes include increased job stress, declines in job satisfaction, reduced productivity and performance, withdrawal from their organization (meaning they distance themselves from the work either physically or mentally or they actually leaving their job), and declines in their organizational commitment (meaning they feel disillusioned or angry with the organization). For women in science, engineering, and medicine, these outcomes include stepping down from leadership

² Ilies, R., Hauserman, N., Schwochau, S., and Stibal, J. 2003. Reported incidence rates of work-related sexual harassment in the United States: Using meta-analysis to explain reported rate disparities. *Personnel Psychology*, 56(3): 607–631.

³ Swartout, K. 2018. University of Texas Climate Survey. Report on the University of Texas System Campus Climate Survey. P. A. Johnson, S. E. Widnakk, and F. F. Benya (eds.) In *Sexual harassment of women: Climate, culture, and consequences in academic sciences, engineering and medicine* pp. 275–292 . Washington, DC: The National Academies Press.

opportunities to avoid the perpetrator, opting out of research projects to avoid the perpetrator, and deciding not to attend professional society meetings to avoid the perpetrator. It is important to recognize that women take these actions in an effort to escape an abusive situation and to protect themselves. When students experience sexual harassment, they suffer similar negative outcomes, including decreased motivation to attend class, not attending classes or school, dropping classes, paying less attention in class, receiving lower grades, changing advisors, changing majors, transferring to another educational institution, and dropping out entirely.

When it comes to mental and physical health, the more often women are harassed, the more they report symptoms of depression, disordered eating, stress, anxiety, and physical complaints such as headaches, exhaustion, and sleep disruption. According to one study, 1 in 5 sexually harassed women meet clinical criteria for Major Depressive Disorder, and 1 in 10 meet criteria for Posttraumatic Stress Disorder.⁴ According to another study, exposure to just sexist comments – in other words, gender harassment – triggered greater cardiovascular reactivity, which over the long term can put women at increased risk for coronary heart disease and depressed immune functioning.⁵

Additionally, our committee found that individuals do not have to be directly targeted with sexual harassment to feel its effects. Research shows that people who merely see sexual harassment targeted at others, report negative outcomes that parallel those of direct victims – for instance, the same declines in wellbeing such as symptoms of depression, stress, and anxiety, and the same withdrawal from their job and declines in productivity.

When considering sexual harassment that occurs in research environments, our committee found that sexual harassment violates the standards and values of research integrity. This is actually a finding from a previous National Academies report titled *Fostering Integrity in Research*⁶, which clearly defined sexual harassment as a type of “other misconduct,” that violates the integrity of research. This is a category that also includes the misuse of funds and violating government research regulations on human and animal subjects – two topics which are taken very seriously by federal agencies and academic institutions. However, in the case of sexual harassment, too often the judicial interpretation of Title IX and Title VII has incentivized institutions to create policies and training on sexual harassment that focus on symbolic compliance with current law and avoiding liability, rather than taking this matter seriously and working to prevent it from occurring in the first place. As a result, our committee recommended that academic institutions and federal agencies should consider sexual harassment equally important as research misconduct in terms of its effect on the integrity of research, and that academic institutions, research and training sites, and federal agencies should move beyond interventions or policies that represent basic legal compliance.

Our committee found that there are at least five factors that create the conditions under which sexual harassment is likely to occur in academic science, engineering, and medicine:

First, there is often a **perceived tolerance for sexual harassment** in academia, which is the most potent predictor of sexual harassment occurring in an organization. The degree to which the environment within academic departments, schools, programs, and institutions reflects an unflinching commitment to the principle that any form of sexual harassment behavior (from expressing any form of gender harassment to making any type of unwanted sexual advance) is unacceptable is a critical factor in determining whether harassment is likely to occur. The evidence suggests that the workplace climate

⁴ Dansky, B.S., and Kilpatrick, D.G. 1997. Effects of Sexual Harassment. In W. O'Donohue (ed.), *Sexual Harassment: Theory, Research, and Treatment*. Boston: Allyn and Bacon.

⁵ Schneider, K. T., Tomaka, J., and Palacios, R. 2001. Women's cognitive, affective, and physiological reactions to a male coworker's sexist behavior. *Journal of Applied Social Psychology*, 31(10): 1995–2018.

⁶ National Academies of Sciences, Engineering, and Medicine. 2017. *Fostering integrity in research*. Washington, DC: The National Academies Press.

is seen as *intolerant* of sexual harassment when targets of sexual harassment are supported and protected; instances of harassment are investigated fairly and in a timely way—with due process for both targets and alleged harassers; those found to have committed harassment are punished appropriately; and the campus community is regularly informed about how the institution is handling/attending to claims and disciplining those who have violated policies. These are important ways to demonstrate and declare that sexual harassment is taken seriously and is unacceptable under any circumstances.

Second, environments where men outnumber women, leadership is male dominated, and/or jobs or occupations are considered atypical for women, have more frequent incidents of sexual harassment. On many campuses, these programs and departments persist as **male-dominated work settings**. More often than not, men are in positions of authority—as deans, department chairs, principal investigators, and dissertation advisors—and women are in subordinate positions as early-career faculty, graduate students, and postdocs.

Third, the environments in which the **power structure** of an organization is hierarchical, with strong dependencies on those at higher levels or in which people are geographically isolated (such as at a field site or off-campus research setting), are more likely to foster and sustain sexual harassment. Moreover, when power is highly concentrated in a single person, perhaps because of that person's success in attracting funding for research, students or employees are more likely to feel as if revealing the harassing behavior will have a negative impact on their lives and careers.

Fourth, an increased focus on **symbolic compliance** with Title IX and Title VII has resulted in policies and procedures that protect the liability of the institution but are not necessarily effective in preventing sexual harassment. Judicial interpretations of these statutes incentivize creating policies and procedures and having training on the policy. However these policies and procedures have not been shown to prevent sexual harassment, and they are based on the inaccurate assumption that a target will promptly report the harassment without worrying about retaliation. While policies against sexual harassment are widely in place and have been for many years, nonetheless, sexual harassment continues to exist and has not significantly decreased. While adherence to legal requirements is necessary, it is not sufficient to drive the change needed to address sexual harassment.

Fifth, uninformed **leadership** on campus that lacks the intentionality and focus to take the bold and aggressive measures needed to reduce and eliminate sexual harassment is another contributing factor. While most college and university presidents, deans, and department chairs aspire to reduce or eliminate harassment on their campuses, many lack the tools needed to achieve that goal. Fortunately, some institutions have begun creating and implementing strong, campus-wide policies and systems that start with explicit statements from leadership and move toward concrete intervention strategies aimed at preventing sexual harassment.

Our committee was, however, encouraged by the research that suggests that the most potent predictor of sexual harassment is an organizational climate— that is, the degree to which those in the organization perceive that sexual harassment is or is not tolerated. This means that institutions can take concrete steps to reduce sexual harassment by making systemwide changes that demonstrate how seriously they take this issue and that reflect that they are listening to those who courageously speak up to report their sexual harassment experiences and it is why we recommended that institutions move beyond legal compliance to address their culture and climate. We recommended that academic institutions do this by following four key recommendations:

1. **Create diverse, inclusive, and respectful environments.** Academic institutions should work to create a diverse, inclusive, and respectful environment where these values are aligned with and embedded into the systems, structures, policies, and procedures of the institution. Their leaders should prioritize taking actions that will result in greater gender and racial equity in

hiring and promotions, thus improving the representation of women at every level. They should also foster greater cooperation, respectful work behavior, and professionalism at the faculty, staff, and student/trainee levels, and should evaluate faculty and staff on these criteria in hiring and promotion. Institutions should combine anti-harassment and civility-promotion programs. They should ensure that training on preventing and addressing sexual harassment is tailored for specific populations, provides skills needed by all members of the academic community, teaches how to interrupt and intervene when harassment occurs, and focuses on changing behavior, not on changing beliefs. Critically, institutions must evaluate training programs for efficacy and to determine what aspects most effectively change climate, and reduce and prevent harassment.

2. **Improve transparency and accountability:** Academic institutions should develop and readily share clear, accessible, and consistent policies on sexual harassment and standards of behavior. They should include a range of clearly stated, appropriate, and escalating disciplinary consequences for perpetrators found to have violated policy and/or law, and such consequences should be punitive, not something often considered a benefit, such as a reduction in teaching load. Policies should also include an investigative and decision making process that is fair to all involved and that is undertaken and completed in a timely manner. Academic institutions should strive for greater transparency in how they are handling reports of sexual harassment while balancing a need for confidentiality. They should issue annual reports that provide information on (1) how many and what type of policy violations have been reported (both informally and formally), (2) how many reports are currently under investigation, and (3) how many have been adjudicated, along with general descriptions of any disciplinary actions taken. Lastly, academic institutions should be accountable for their organizational climate, and utilize climate surveys to further investigate and address systemic sexual harassment, particularly when surveys indicate specific schools or facilities have high rates of harassment or chronically fail to reduce rates of sexual harassment.
3. **Diffuse the hierarchical and dependent relationship between trainees and faculty:** Academic institutions should identify and enact mechanisms to diffuse concentrated power and dependencies in relationships between trainees and faculty/advisors, such as using mentoring networks and committee-based advising, and providing independent funding.
4. **Provide support for the target:** Academic institutions should convey that reporting sexual harassment is an honorable and courageous action and provide (1) access to support services (social services, health care, legal, career/professional) regardless of if a formal report is filed, (2) alternative and less formal ways to record information about an incident, and (3) approaches that prevent the target from experiencing or fearing retaliation, and that support the target reintegrating into the workplace or educational environment.

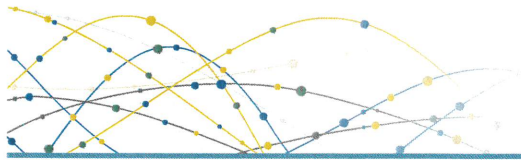
While our report was focused on academic institutions, our committee recognized that other actors have a role to play, including Congress, state legislatures, and federal agencies, and I have submitted a copy of the report highlights for policymakers along with my testimony. Our committee recommends that federal and state legislatures consider new and additional legislation with the following goals: requiring institutions receiving federal funds to publicly disclose results from campus climate surveys and/or the number of sexual harassment reports made to campuses; better protecting sexual harassment claimants from retaliation; prohibiting confidentiality in settlement agreements that currently enable harassers to move to another institution and conceal past adjudications; banning mandatory arbitration clauses for discrimination claims; allowing lawsuits to be filed against alleged harassers directly (instead of or in addition to their academic employers); and finally requesting that the

National Science Foundation and the National Institutes of Health devote research funds to doing a follow-up analysis on the topic of sexual harassment in science, engineering, and medicine in 3 to 5 years to determine 1) whether research has shown that the prevalence of sexual harassment has decreased; 2) whether progress has been made on implementing these recommendations; and 3) where to focus future efforts.

For federal agencies, the report recommends that they: increase support for research and evaluation of the effectiveness of policies, procedures, and training on sexual harassment; require institutions to report to federal agencies when individuals on grants have been found to have violated sexual harassment policies or have been put on administrative leave related to sexual harassment; hold accountable the perpetrator and the grantee institution by using a range of disciplinary actions that limit the negative effects on other grant personnel who were either the target of the harassing behavior or innocent bystanders; and reward and incentivize colleges and universities for implementing policies, programs, and strategies that research shows are most likely to and are succeeding in reducing and preventing sexual harassment.

Building from our report, the Combating Sexual Harassment in Science Act of 2019 addresses many of the recommendations that our committee made to federal agencies, Congress, and academic institutions. For instance, it directs NSF to establish a program to award grants on many of the topics that our committee identified were in need of research. By calling for an updated version of "On Being a Scientist: A Guide to Responsible Conduct in Research" that specifically addresses and includes sexual harassment, H.R. 36 reflects our recommendation to consider sexual harassment equally important as research misconduct in terms of its effect on the integrity of research. By establishing an interagency working group to develop policy guidelines for how Federal science agencies address sexual harassment involving grant personnel and requiring that the policy guidelines include a requirement that grantees report to the Federal science agencies when there is a finding or determination of sexual harassment or grant personnel are put on administrative leave related to a sexual harassment investigation, the bill reflects our recommendation that federal agencies require institutions to provide this information. By directing the interagency working group to consider guidelines that require grantees assess their climate using climate surveys, make the results of such surveys publicly available, and reward and incentivize grantees working to create a climate intolerant of sexual harassment, H.R. 36 reflects the recommendations we made to academic institutions to improve transparency and accountability and to measure their progress.

In conclusion, as a medical professional, I want to note that our report very clearly shows that sexual harassment in academia is a public health problem, and we need to treat it as such. This means we need to work toward reducing the risk of it occurring, toward preventing the spread of this behavior, and toward recognizing and remediating the harm it causes to the community, and especially to those who have been the direct victim of sexual harassment.



SEXUAL HARASSMENT OF WOMEN

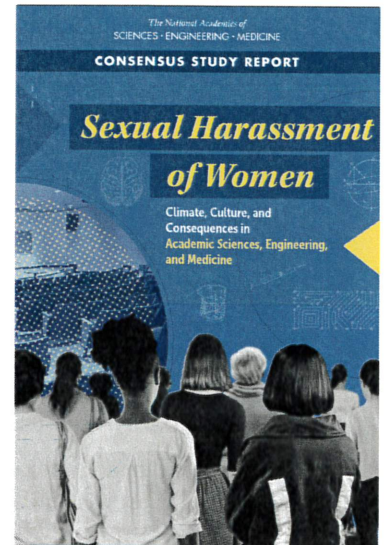
Climate, Culture, and Consequences in Academic Sciences, Engineering, and Medicine

The National Academies of Sciences, Engineering, and Medicine undertook the most comprehensive examination to date of sexual harassment in academic sciences, engineering, and medicine, and its effects on women’s well-being, their careers, and the scientific enterprise.

The study committee’s report finds that sexual harassment in academic sciences, engineering, and medicine is common. There is no evidence that current policies, procedures, and approaches have resulted in a significant reduction in sexual harassment. The cumulative result of sexual harassment is significant damage to research integrity and a costly loss of talent in academic sciences, engineering, and medicine.

A system-wide change to the culture and climate in higher education is needed to prevent and effectively respond to sexual harassment, concludes the report. It recommends that colleges, universities, and federal agencies adopt holistic, evidence-based policies and practices to address sexual harassment. For example, sexual harassment occurs at lower rates in systems in which prohibitions against unacceptable behaviors are clear and which hold members of the community accountable for meeting behavioral expectations established by leadership. Sexual harassment is also less likely to occur when organizational systems and structures support diversity, inclusion, and respect. Sexual harassment is also less likely to occur if targets of sexual harassment are supported.

The legal system alone is not an adequate mechanism for reducing or eliminating sexual harassment, the report stresses. Adherence to legal requirements is necessary but not sufficient to drive the change needed to address sexual harassment. As such, academic institutions and federal agencies should treat the legal obligations for addressing sexual harassment under Title IX and Title VII law as a floor, not a ceiling, and work to move beyond basic legal compliance to promote sustainable, holistic, evidence-based policies and practices.



RECOMMENDATIONS FOR CONGRESS AND FEDERAL AGENCIES

The report recommends that state legislatures and Congress consider new and additional legislation with the following goals:

- Better protecting sexual harassment claimants from retaliation.
- Prohibiting confidentiality in settlement agreements that currently enable harassers to move to another institution and conceal past adjudications.
- Banning mandatory arbitration clauses for discrimination claims.

- Allowing lawsuits to be filed against alleged harassers directly (instead of or in addition to their academic employers).
- Requiring institutions receiving federal funds to publicly disclose results from campus climate surveys and/or the number of sexual harassment reports made to campuses.
- Requesting that the National Science Foundation and the National Institutes of Health devote research funds to doing a follow-up analysis on the topic of sexual harassment in science, engineering, and medicine in 3 to 5 years to determine 1) whether research has shown that the prevalence of sexual harassment has decreased; 2) whether progress has been made on implementing these recommendations; and 3) where to focus future efforts.

The report recommends that federal agencies:

- Increase support for research and evaluation of the effectiveness of policies, procedures, and training on sexual harassment.
- Attend to sexual harassment with at least the same level of attention and resources devoted to research misconduct. They should increase collaboration among offices that oversee the integrity of research (i.e., those that cover ethics, research misconduct, diversity, and harassment issues); centralize resources, information, and expertise; provide more resources for handling complaints and working with targets; and implement sanctions on researchers found guilty of sexual harassment.
- Require institutions to report to federal agencies when individuals on grants have been found to have violated sexual harassment policies or have been put on administrative leave related to sexual harassment, as the National Science Foundation has proposed doing. Agencies should also hold accountable the perpetrator and the institution by using a range of disciplinary actions that limit the negative effects on other grant personnel who were either the target of the harassing behavior or innocent bystanders.
- Reward and incentivize colleges and universities for implementing policies, programs, and strategies that research shows are most likely to and are succeeding in reducing and preventing sexual harassment.

COMMITTEE ON IMPACTS OF SEXUAL HARASSMENT IN ACADEMIA

Paula Johnson, NAM (*Co-Chair*), Wellesley College; **Sheila Widnall**, NAE (*Co-Chair*), Massachusetts Institute of Technology; **Alice M. Agogino**, NAE, University of California, Berkeley; **Nicholas Arnold**, Santa Barbara Community College; **Gilda Barabino**, City College of New York; **Kathryn Clancy**, University of Illinois at Urbana-Champaign; **Lilia Cortina**, University of Michigan; **Amy Dodrill**, Trumpf Medical USA, Hill-Rom; **Lisa Garcia Bedolla**, University of California, Berkeley; **Liza Gold**, Georgetown University School of Medicine; **Melvin Greer**, Intel Corporation; **Linda Gundersen**, U.S. Geological Survey; **Elizabeth Hillman**, Mills College; **Timothy Johnson**, University of Michigan; **Anna Kirkland**, University of Michigan; **Ed Lazowska**, University of Washington; **Vicki Magley**, University of Connecticut; **Roberta Marinelli**, Oregon State University; **Constance Morella**, former Congresswoman; **John Pryor**, Illinois State University; **Billy Williams**, American Geophysical Union; **Frazier Benya**, *Study Director*; and **Tom Rudin**, *Director*, Committee on Women in Science, Engineering, and Medicine.

For More Information . . . This Consensus Study Report Highlights was prepared by the Committee on Women in Science, Engineering, and Medicine based on the Report *Sexual Harassment of Women: Climate, Culture, and Consequences in Academic Science, Engineering, and Medicine* (2018). The study was sponsored by the National Science Foundation, the National Aeronautics and Space Administration, the National Institutes of Health, the National Institute of Standards and Technology, the National Oceanic and Atmospheric Administration, the Burroughs Wellcome Fund, the Henry Luce Foundation, and the Howard Hughes Medical Institute. Any opinions, findings, conclusions, or recommendations expressed in this publication do not necessarily reflect the views of any organization or agency that provided support for the project. Copies of the Report are available from the National Academies Press, (800) 624-6242; <http://www.nap.edu> or at www.nationalacademies.org/sexualharassment.

Committee on Women in Science, Engineering, and Medicine Policy and Global Affairs

The National Academies of
SCIENCES • ENGINEERING • MEDICINE

The nation turns to the National Academies of Sciences, Engineering, and Medicine for independent, objective advice on issues that affect people's lives worldwide.

www.national-academies.org

Copyright 2018 by the National Academy of Sciences. All rights reserved.