

# 2020 SURVEY TOPIC BRIEF

BY THE STRUCTURAL ENGINEERING ENGAGEMENT AND EQUITY COMMITTEE  
OF THE NATIONAL COUNCIL OF STRUCTURAL ENGINEERS ASSOCIATIONS

## DISCRIMINATION & HARASSMENT

The 2020 SE3 Discrimination and Harassment Brief explores the experiences of members of the structural engineering profession both qualitatively and quantitatively based on responses to a nation-wide survey.

This report examines the demographic statistics related to Harassment and Discrimination, as well as subjective experiences practicing engineers have encountered during their careers.

Although this topic was also considered in the 2018 SE3 survey, the Committee expanded questions in the 2020 cycle to include questions about incident reporting, consequences, and follow-up actions. The Brief concludes with an examination of the effect that these incidents have on respondents' satisfaction and their likelihood to stay in the profession.

### BRIEF HIGHLIGHTS

1. Women and minority racial groups are significantly more likely than White men to experience discrimination and/or harassment - up to 19 times more likely.
2. Women and people of color experience more varied and more pervasive discrimination and harassment compared to White men.
3. Only 23% of those who have experienced discrimination and/or harassment report it, and when they do, only 44% reported any resulting action.
4. Discrimination and/or harassment was the third most cited reason for leaving the profession (of those who actually left). However, of those currently working in the profession, most respondents indicated it would contribute very little to a potential decision to leave.
5. Respondents who have experienced discrimination and/or harassment reported lower satisfaction over all metrics measured in the survey and are 20% more likely to consider leaving.

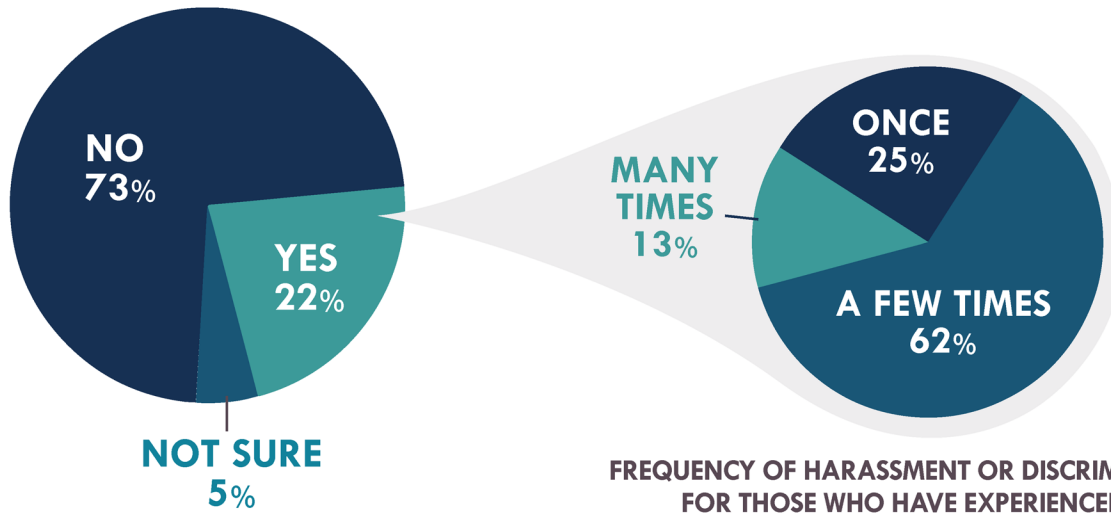
<sup>1</sup> The survey asked separate questions about respondents' experiences with discrimination and with harassment. However, the answers to both questions were highly correlated, and as such the responses were collapsed into a single variable. All subsequent statistics relate to the experience of discrimination and/or harassment.

<sup>2</sup> The Committee defines workplace discrimination as unwelcome treatment based on race, gender, nationality, religion, among other traits per the U.S. Equal Employment Opportunity Commission. Similarly, workplace harassment is defined as unwelcome conduct based on these same characteristics.

# DEMOGRAPHICS

The 2020 survey asked respondents if they had been the recipient of discrimination and/or harassment, including the frequency at which these events had occurred. Based on these questions, 22% of respondents have experienced some form of discrimination or harassment. Of those who replied "Yes", 13 experienced it many times, 62% experienced it a few times, and 25% experienced it once.

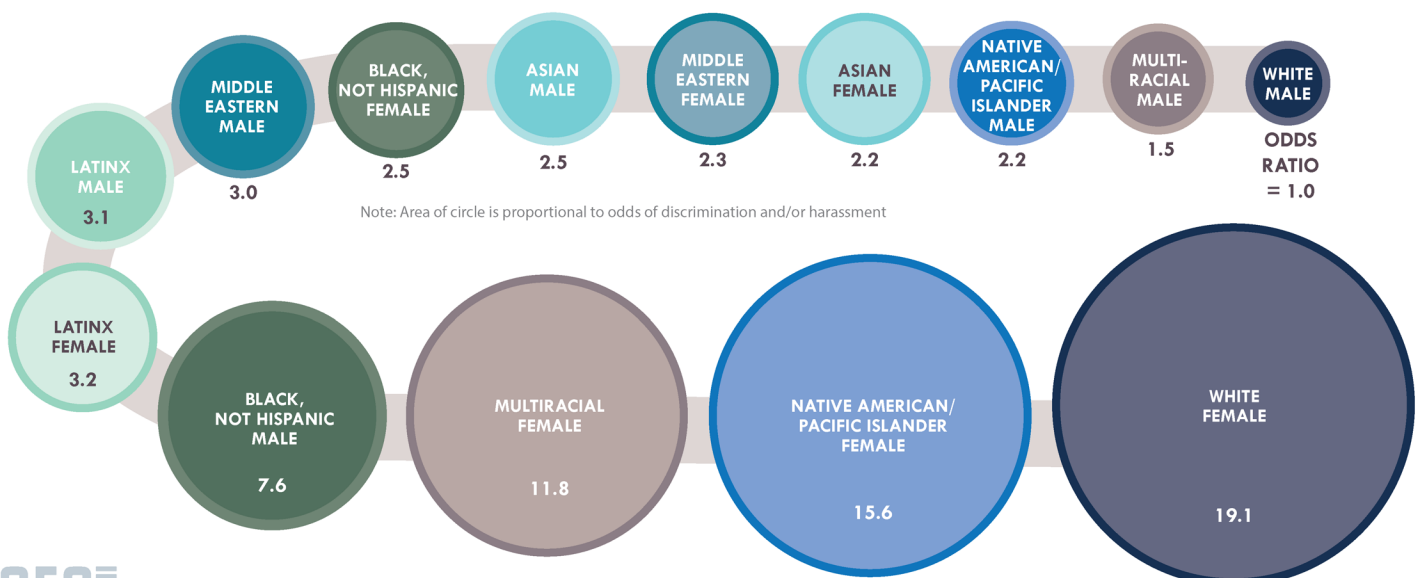
## DISCRIMINATION & HARASSMENT - ALL RESPONDENTS



A multivariate analysis of the data above (controlling for age, position, firm size, and salary) shows that the odds that a respondent experienced discrimination or harassment is specific to their combined racial and gender identity. For example, the odds that a female Latina respondent experienced discrimination or harassment are significantly different than the odds for a male Latino respondent, but also different than the odds for a female Black respondent.

All racial and gender demographic groups experienced discrimination and/or harassment at a greater rate than White male respondents. For example, the odds of Native American and Pacific Islander men experiencing harassment was higher than White men by a factor of 2.2. For White women, the factor was 19.1. In the figure below, the area of each circle represents the likelihood that a particular racial and gender demographic group has experienced discrimination and/or harassment relative to White male respondents.

## ODDS OF DISCRIMINATION AND HARASSMENT BY RACE AND GENDER DEMOGRAPHICS



# FREE RESPONSES

In addition to the quantitative questions asked above, the survey also gave respondents the opportunity to describe their experiences in more detail. Of the 1,105 respondents who indicated that they experienced discrimination or harassment, 390 provided a more detailed response. Because these responses are self-selecting, the results below are not presented with percentages or other quantitative statistics.

However, these responses still offer an informative picture of the relative experiences of different demographics in our profession. The figures below show the most common responses for each demographic.

## MOST COMMON CATEGORIES OF EVENT BY DEMOGRAPHIC

### WHITE WOMEN

1. Belittling or disrespectful comments
2. Inappropriate comments
3. Unwanted attention
4. Sexual comments
5. Verbal harassment

### WHITE MEN

1. Bullying or berating behavior
2. Belittling comments
3. Verbal harassment
4. Inappropriate comments
5. Offensive comments

### NON-WHITE WOMEN

1. Belittling or disrespectful comments
2. Inappropriate comments
3. Sexual harassment
4. Unequal opportunities
5. Verbal harassment

### NON-WHITE MEN

1. Racist comments
2. Belittling comments
3. Inappropriate comments
4. Bullying behavior
5. Offensive humor

## SOURCES OF DISCRIMINATION OR HARASSMENT BY DEMOGRAPHIC

### WHITE WOMEN

1. Superior
2. Contractor
3. Peer
4. Client
5. Other Professional

### WHITE MEN

1. Superior
2. Peer
3. Contractor
4. Other Professional

### NON-WHITE WOMEN

1. Superior
2. Peer
3. Contractor
4. Client

### NON-WHITE MEN

1. Superior
2. Contractor
3. Peer
4. Client
5. Other Professional

## LOCATION OF DISCRIMINATION OR HARASSMENT BY DEMOGRAPHIC

### WHITE WOMEN

1. Office
2. Job Site
3. Conference
4. Networking Event

### WHITE MEN

1. Office
2. Job Site

### NON-WHITE WOMEN

1. Office
2. Job Site
3. Conference
4. Networking Event

### NON-WHITE MEN

1. Office
2. Job Site

From these responses, it is apparent that White male respondents experienced the structural engineering profession in significantly different ways than their female and non-White counterparts. For White men, discrimination and harassment most commonly came in the form of berating, bullying, or belittling comments, mostly from their superiors, and mostly in the office.

By contrast, White and non-White women experience less overtly aggressive but more pervasive discrimination and harassment. They describe belittling, inappropriate, or disrespectful comments, sexual comments, and unwanted attention from superiors, peers, contractors, and clients. These instances happen in the office, but also commonly on job sites. Women also described instances of harassment at conferences and networking events; there were no similar or equivalent incidents described by male respondents.

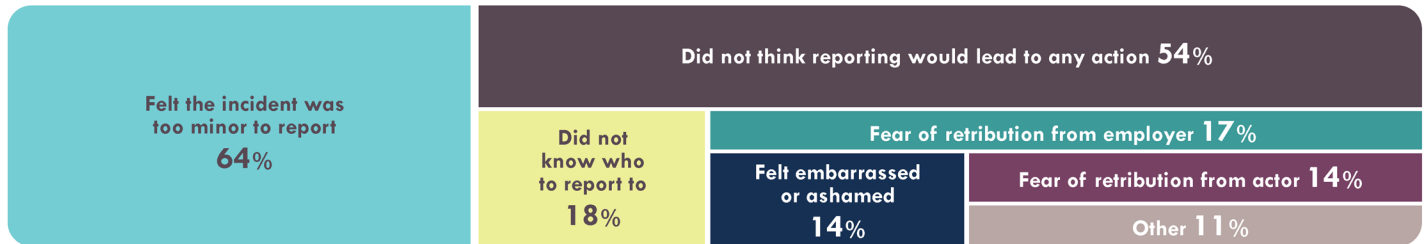
Non-White male respondents gave answers similar to White male respondents in that they reported discrimination or harassment primarily in the office. However, unlike any other category of respondent, they reported racist comments as the most common form of harassment. The other types of discrimination and harassment they experienced mixed the belittling and inappropriate comments common to responses from White and non-White women with the bullying and offensive humor reported by White men.

<sup>3</sup> The survey question indicated that responses would be kept strictly confidential. As such, to preserve buckets of responses that are sufficiently large, racial categories were limited to "White" and "Non-White". For similar reasons, no actual text of any response is included in this report.

# REPORTING

The survey asked respondents if they reported their experiences with discrimination and harassment, and if they did not, asked for their reasoning. Of respondents who experienced discrimination or harassment, only 23% reported their experience. By far the most common reasons for not reporting their experience were that they felt the incident was too minor to report, the expectation that reporting would not lead to anything, or some combination of the two.

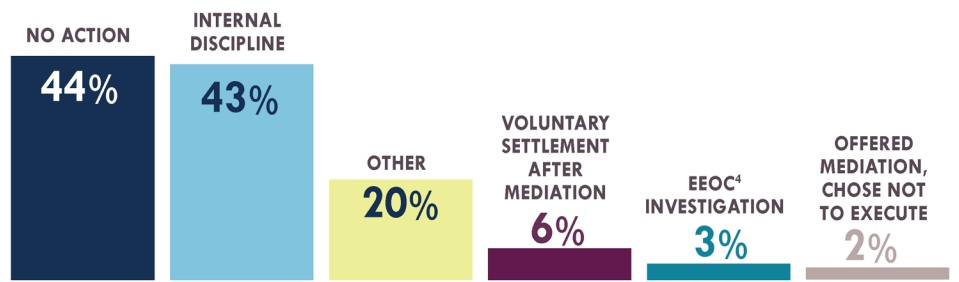
## REASONS FOR NOT REPORTING DISCRIMINATION AND/OR HARASSMENT



Note: Respondents were allowed to select more than one reason. Percentages select the number of respondents that selected each option.

Of the respondents who did report their incidents, 44% said that there was no action following their report. Slightly fewer (43%) said that their employer took internal disciplinary action.

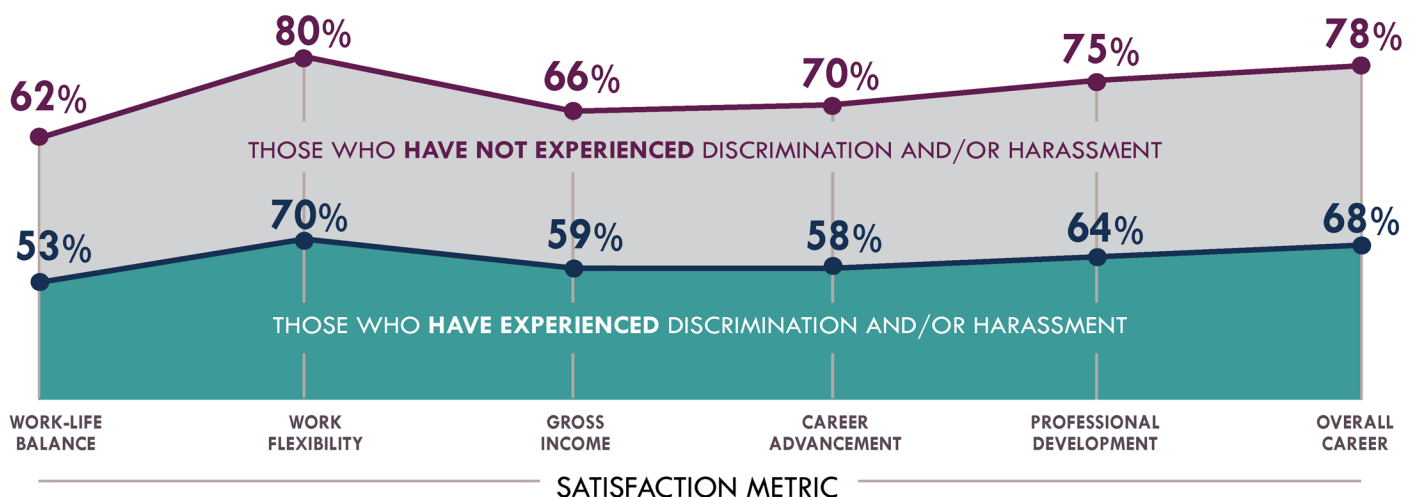
## COMPANY ACTION AFTER REPORTING DISCRIMINATION AND/OR HARASSMENT



# IMPACT ON SATISFACTION

In addition to outlining the prevalence and type of discrimination and harassment, it is important to understand the effects of these occurrences. To do so, the Committee compared the satisfaction of respondents who have and have not experienced discrimination and/or harassment. Universally, respondents who had experienced discrimination and/or harassment reported lower satisfaction over all metrics measured in the survey.

## RESPONDENT SATISFACTION BASED ON EXPERIENCE OF DISCRIMINATION AND/OR HARASSMENT



<sup>4</sup> Note that because respondents could choose multiple answers to this question, these percentages don't add up to 100%. This was allowed to take into account the fact that many respondents experienced multiple instances of discrimination and harassment and the response may have been different at different times.

<sup>5</sup> EEOC stands for the U.S. Equal Employment Opportunity Commission, a federal agency established via the Civil Rights Act of 1964 to administer and enforce civil rights laws against workplace discrimination.

# IMPACT ON RETENTION

Satisfaction is only one way the effect of discrimination and harassment can be measured. The survey also asked respondents currently in the profession about how discrimination and/or harassment may influence a future decision to leave and respondents who had left the profession to rank its impact on why they left. Of respondents in the profession, most indicated that discrimination and/or harassment would contribute “very little” to a potential decision to leave. However, respondents in the profession who had experienced discrimination and/or harassment were about 20% more likely to respond that they had considered leaving.

Among those who had actually left the profession (n=155), “discrimination and/or harassment” was the third most commonly cited factor contributing to leaving, after caring for a dependent and moving to another area. Of these respondents, 76% indicated discrimination and/or harassment contributed “very much” to their decision to leave the profession.

Because of the lack of specific reporting of discrimination and harassment across industries, especially within specialized professions such as structural engineering, it is difficult to compare the results above to those within other industries.

However, there is some research to which comparisons can be made. An analysis in 2017 by the Center for American Progress found that sexual harassment claims to the EEOC came from a wide variety of industries, including the “professional, scientific, and technical services” industry, which encompasses Structural Engineering. In the period analyzed by the data (2005 to 2015), this industry had roughly one EEOC sexual harassment claim for every 1,600 people employed in the industry. By comparison, the “accommodation and food services” industry had one claim for approximately every 960 employees and the “retail trade” had one claim per 1,300 employees.

The analysis above considers only sexual harassment, and only those incidents that were actually reported to the EEOC, but the comparison of the relative prevalence of these claims in other industries suggests that though our industry may have fewer claims of this nature, it is by no means free from them.

The more granular results of the 2020 SE3 Survey on discrimination and harassment, combined with the associated demographic data, support and clarify this assertion: Many survey respondents experienced discrimination and harassment, and women and people of color were significantly more likely to do so. Even if they reported their experience, they may not see action: 44% of reported incidents saw no response.

Furthermore, the qualitative responses to the survey showed that the subjective experience of women and non-White structural engineers in our profession was significantly different than that of their White male colleagues. White men experienced dramatically less harassment, and when they did it was comparatively limited in type and pervasiveness.

This has an effect: The satisfaction of respondents who have been harassed or discriminated against suffered, and they were more likely to consider leaving the profession. Among those who have already left, discrimination and harassment was the third most cited reason for leaving. Fundamentally, it is clear from the data above that discrimination and harassment is prevalent in our profession and has a significant negative impact on our colleagues. As a profession, we must recognize this impact and work toward reducing it.

## TOP 5 FACTORS CONTRIBUTING TO THE DECISION TO LEAVE THE SE PROFESSION<sup>8</sup>

#1

CARING FOR A DEPENDENT  
82%

#2

MOVING TO A DIFFERENT AREA  
79%

#3

DISCRIMINATION AND/OR HARASSMENT  
76%

#4

LOSS OF INTEREST IN STRUCTURAL ENGINEERING  
48%

#5

BETTER FINANCIAL COMPENSATION  
39%

<sup>6</sup> J. Frye, "Not Just the Rich and Famous: The Pervasiveness of Sexual Harassment Across Industries Affects All Workers," 20 November 2017. [Online]. Available: <https://www.americanprogress.org/issues/women/news/2017/11/20/443139/not-just-rich-famous/>.

<sup>7</sup> Based on Bureau of Labor Statistics employment data averaged over the years considered.

<sup>8</sup> The survey asked respondents who left the profession to rate each factor for how much it contributed to their decision to leave the profession on a 4-pt scale, including 'not at all', 'very little', 'somewhat', and 'very much'. The percentages above reflect those who selected 'very much' for each factor.

## DISCUSSION QUESTIONS

1. What can business leaders and managers do to prevent discrimination and harassment in the workplace?
2. About 77% of individuals who experienced discrimination and/or harassment during their careers as structural engineers chose not to report the incidents. Does your organization have a procedure in place for reporting workplace discrimination or harassment incidents? Are you aware of it, and could you advise an employee about it if they came to you?
3. In some jurisdictions, the obligation for employees to receive anti-harassment training is dependent on the size of the firm and the position of the employee. Have you received anti-harassment training? If so, do you feel that it is useful?
4. Do you feel that there are clear and consistent definitions for appropriate and inappropriate behavior among employees in your organization?



The information contained in this report was gathered from an NCSEA sponsored survey administered online by the SE3 Committee in early 2020. The survey is an on-going effort to identify trends, to understand the underlying factors, and to initiate conversations on engagement and equity within the profession. The 2020 SE3 Survey was developed with a focus on key study topics; including career development, compensation, work flexibility, and overall retention, among others. While we believe the information presented in this document is an accurate, unbiased representation of the data received in the survey, the matters discussed are sometimes subject to differences in opinion or approach. As such, neither NCSEA nor its Board, committees, writers, editors, firms, or individuals who have contributed to this report make any warranty, expressed or implied, or assume any legal liability or responsibility for the use or reference to findings, conclusions, or recommendations expressed herein.

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The NCSEA SE3 Committee can be contacted at [se3@ncsea.com](mailto:se3@ncsea.com)

NCSEA

20 N. Wacker Drive, Suite 750  
Chicago, IL 60606

SE3 Committee Publication Team:

Primary Contributors:

Nick Sherrow-Groves, Zahraa Saiyed,  
Rose McClure

Collaborators: Alex Lakocy, Sabrina Duk,  
Maryanne Wachter, Curtis Siegfried,  
Natalie Tse, Cameron Yu