



Online Ethics Center
FOR ENGINEERING AND SCIENCE

Ethics and Engineering: Gender Discrimination & Sexual Harassment

Author(s)

Martin Peterson
Isaac Sabat

Year

2023

Description

This teaching module is designed to introduce undergraduate engineering students to the ethics of diversity and inclusion in engineering. Diversity equals the human qualities that differentiate us from one another. When we talk about diversity we are talking about characteristics that are potentially stigmatized, or devalued within a specific context. Topics covered in the module include: Stereotype, Prejudice, Discrimination, Implicit Bias, Sexual Harassment.

Body

Module

This module is available in PowerPoint format [here](#).

Instructor's Notes on this module

Preface

This teaching module has been developed with support from the project “The Ethics of Diversity--Fortifying Ethical Infrastructure to Prevent and Address Sexual Harassment in STEM Research & Practice Settings”, NSF award 1835178. The material described has been tested and evaluated (together with a module on sexual harassment prevention) in the following peer-reviewed paper:

Sabat, I, Evan Nault, Susan Fortney, Martin B Peterson, Debjyoti Banerjee “Diversity, inclusion and equity in the engineering curriculum: Evaluating the efficacy of a new teaching module”, *Advances in Engineering Education*, forthcoming, Volume 11, Issue 3: 54-76, 2023.

Implicit Bias and Gender Discrimination

An ingroup is a social group to which a person psychologically identifies as being a member. By contrast, an outgroup is a social group to which an individual does not identify.

- Categorization Effects
 - Rate people from your team relative to the class, or rate people within engineering compared to the A&M student body from 1-100 on a list of positive traits (e.g., kind, happy intelligent). Most students will choose numbers greater than 100% on average.
 - Mere categorization of people into groups is sufficient to increase attraction to those in our group and devalue members outside of our group (e.g., you’re also more likely to favor those within your specific subfield of engineering).
- Confirmation Bias
 - We’re more likely to remember behaviors that we observe from the out-group that confirm our stereotypes, and forget behaviors that disconfirm those stereotypes.
- External vs. Internal Attributions
 - In-Class Experiment: Pick somebody from your group/class and rate them from 1 to 100 on big-5 personality traits. Then rate yourself on these traits.

Students will use more extreme scores for others. The same difference can be seen in how we view in-group vs. out-group members.

- We are also more likely to ascribe stable, internal attributions to outgroups members while recognize and ascribe situational or external attributions to ingroups members.

- Out-group Homogeneity
 - We're also more likely to view outgroup members as homogenous, while recognizing the variability within our ingroups.

Gender Discrimination in Engineering

With regard to gender, women earn 81% of what men earn within comparable positions. This gap is even more pronounced amongst women of color, with black women earning 62%, Latina women earning 54%, and Native American women earning 58% of what white men earn. These gaps exist even when controlling for various factors such as industry, occupation type, and education level.

Women are promoted less and “protected” from challenging “stretch assignments”, especially after becoming pregnant or having children. Men, on the other hand, experience a “fatherhood bonus”, and are rated more positively after the birth of a child.

These reduced salaries and barriers to promotion are often seen in a phenomenon known as the glass ceiling effect. This refers to the fact that women experience barriers in achieving top-level positions within organizations. In 2019, only 6.6% of CEO positions at Fortune 500 companies were held by women.

Not only do women face challenges in obtaining these positions, they also experience pushback and resistance to serving in these positions.

One study found that when people are asked to identify the leader of a group from a picture of men sitting around an oval table, they almost always chose the man sitting at the head. When shown an identical picture except with a woman sitting at the head, people usually choose one of the men sitting on the side of the table (Porter, Lindauer Geis, & Jennings, 1983). Thus, women clearly face barriers to being perceived as leaders.

What Is Sexual Harassment?

Sexual harassment has been defined by the Equal Employment Opportunity Commission as 'unwelcome sexual advances, requests for sexual favors, and other verbal or physical harassment of a sexual nature'. While sexual harassment commonly happens to women, anyone can be a victim of sexual harassment.

Harassment is unwelcome and undesired. While people are aware that sexual coercion and unwanted physical touch are forms of sexual harassment, they may not know that pressuring someone for a date, making remarks about a person's body, sexual orientation, or appearance and sexual jokes can all be forms of sexual harassment. Sexual Harassment can occur in a variety of different ways.

Types of Sexual Harassment

Verbal - Sexual teasing or jokes (Even if they are not targeting individuals within the organization), asking someone out repeatedly, using demeaning or gender-based language and insults (Ex. Babe, sexy, slut), and inappropriate comments about someone's body

Nonverbal - Leering, stalking, derogatory gestures Ex. "At one hackathon, while most of us were in the office late one night and on a video call to someone working remotely, one of the women at the company took time to present her work of the evening. During this, a male coworker (who no longer works at the company) decided to make lewd sexual gestures behind her, as a joke to the remote coworker on the video call."

Visual - sexually explicit pictures, comics, emails, or texts

Physical - Groping, assault

Sexual harassment is illegal when it creates a hostile working environment or when it is "pervasive and severe". To be severe, harassment usually has to be more than an once-off instance (with the exceptions of severe behaviors like groping, overt sexual harassment, and instances with major power imbalances). If this "minor" incident is repeated over time it can severely affect your well-being and sense of safety in your environment.

There are two types of sexual harassment: **Quid pro Quo** and **Hostile Work Environment**

Quid Pro Quo harassment is probably the most form you are most familiar with. This occurs when the harasser (Usually a supervisor) asks for a sexual favor as condition for something. This can occur as a trade of sexual favors for a benefit “If you go out with me I can recommend you for that promotion” or a threat “If you don’t go out with me I’ll reduce your hours”.

The second type of sexual harassment is called a Hostile Work Environment. A hostile work environment can occur as a result of a single aggressive incident but more often is a series of smaller, more “minor” incidents taking place over a series of time. This doesn’t have to involve a person in a position of authority and frequently involves multiple parties.

Here is an exercise on identifying sexual harassment in the workplace. For each scenario, write down whether you think it is Quid pro Quo harassment, Hostile Work Environment harassment, or neither. Afterwards, we’ll discuss why each scenario is or isn’t a form of sexual harassment. [Read each scenario out loud.]

1. **Hostile Work Environment** Work is not the place for sexual jokes, remarks, or comments. This individual incident is sexual harassment.
2. **Not Sexual Harassment** This is not sexual harassment but rather an example of sexism. Your coworker is neither requesting sexual favors nor making remarks of a sexual nature.
3. **Quid pro Quo Harassment** Even though the graduate student stopped when she declined, he is punishing her because she would not go out with him, making this Quid pro Quo harassment.
4. **Hostile Work Environment** Sexual harassment is not always about attraction. Just because your co-worker is heterosexual doesn’t make this behavior okay. By engaging in this behavior, he is creating a hostile work environment.
5. **Quid pro Quo Harassment** In this case, the manager seems to be withholding benefits to his subordinate based turning down his advances. This is Quid pro Quo harassment and should be reported.
6. **Hostile Work Environment** Even if nobody states they are uncomfortable, tolerating these jokes sends a message that sexual harassment is acceptable in your workplace. These instances do not have to be directed at a specific person to count

as sexual harassment.

7. **Not Sexual Harassment** Asking a co-worker on a date (in a polite way at an appropriate time) is not necessarily sexual harassment. This would be considered harassment only if the coworker continually asks out or flirts with his colleague.

8. **Hostile Work Environment** Discussions about your coworkers sex lives are inappropriate and should not occur in a workplace context. This is sexual harassment and creating a hostile work environment.

STEM & Factors that Make a Workplace More Likely to Have Sexual Harassment

There have been several factors identified that make a workplace more likely to have sexual harassment. Workplace climates that do not actively work against or call out instances of sexual harassment communicate that harassment is acceptable, allowing harassers to continue or escalate their behavior. Many workplaces do not discuss what behaviors are sexual harassment or who to report harassment to.

The biggest factor found in workplaces with sexual harassment is a **high level of unbalanced power dynamics**. Positions of power (Like being a supervisor) in the workplace give harassers the ability to affect the victim, creating a situation in which victims don't feel like they have a choice. In the next slide we'll talk more about how power dynamics contribute to sexual harassment.

Examples of Power Dynamics: Position in organization or society, level of ability or privilege

There are several theories as to why people sexually harass. We often assume that sexual harassment occurs because harassers are attracted to their victims. However, the most supported theories are power based, meaning that harassers use sexual harassment as a way to gain or maintain power or because they feel entitled to harass because of their power. When we look at research, we find that people with lower power in society (such as gender, or sexual minorities) or organizations (such as newly employed or lower level employees) as well as those who violate societal norms (including gender nonconforming people and women in traditionally masculine fields) are more likely to experience sexual harassment. Additionally, because harassers often have power over those they harass, workers are less likely to confront someone about their behavior.

There are several aspects of STEM fields that make individuals **more likely to be targets** of and have less power to speak out about experiences of sexual harassment.

1. Due to the funding structures of many STEM fields, students work closely with and depend on their advisors to be successful.
2. As mentioned earlier, these fields are typically male dominated
3. And have “macho” cultures that reward student for being assertive, aggressive, and dominant. In these environments, sexual harassment is viewed as more acceptable.
4. Likewise, these fields often operate on strict systems of meritocracy, in which nothing matters except for one’s productivity. As such, issues related to harassment are often ignored and targets can be punished for speaking up.
5. Relatedly, these fields often rely on informal communication networks, making it difficult for targets who speak out about their supervisors to find alternate employment.
6. Lastly, these organizations typically have climates that tolerate sexual harassment behaviors. Specifically, leaders (typically male) often fail to take complaints seriously, sanction perpetrators, or protect complainants from retaliation.

While sexual harassment commonly happens to women, anyone can be a victim of sexual harassment. 42% of women and 15% of men have experienced sexual harassment in their workplace. This increases by a significant amount when female engineers are surveyed. Despite women only having 14% of engineering jobs, over half of female engineers reported sexual harassment in their workplace. Women in STEM are more likely to report discrimination and experienced sexual harassment.

Despite how common sexual harassment is, only 10% of people report their harasser. There are many reasons why people do not report sexual harassment but the most common reason is fear about how it will affect their career. When the harasser is a supervisor or at a higher level in the workplace, people may fear being passed over for promotions or even being fired. Workplaces that do not take sexual harassment seriously can lead to lack of reporting because “that’s just how the

workplace is”; causing feelings of guilt or shame when people are harassed.

Consequences of Sexual Harassment

Experiencing sexual harassment has several poor outcomes including:

1. Decreased satisfaction with one’s job, one’s supervisors, and one’s coworkers.
2. Decreased organizational commitment and increased withdrawal from the organization
3. Decreased job performance
4. Increased stress and decreased mental and physical health
5. Increased imposter syndrome (belief that success occurred not due to your own accomplishments, but because you got lucky or somehow manipulated someone’s opinion of you; feeling like you don’t actually belong)

In addition to these things all being harmful to the person experiencing sexual harassment, these negative outcomes can also permeate a team or organization, contributing to an unhealthy work or academic environment.

There are a variety of strategies you can use to combat sexual harassment in your workplace. First, you should familiarize yourself with your workplace’s sexual harassment policy and know who to report harassment to. Look around your workplace for sexual harassment. If you see sexual harassment, tell the harasser that their behavior is unacceptable. Harassers often believe that their behavior is ok or that everyone does it. Calling out sexual harassment provides support to your coworkers and communicates that your workplace does not tolerate harassment.

Bystander effect is a common problem that effects the lack of intervention in sexual harassment events.

Bystander effect is the belief of the bystander (witnessing the event) that the situation doesn’t necessarily call for help or that if it does, someone else who is also witnessing the event would/could help instead of themselves. There are five steps to combating the bystander effect problem, which goes hand in hand with the importance of knowing what to do in accordance with your workplace policies, or the

situation you are in. (Nickerson, 2014).

If your coworker tells you they have experienced harassment, take them seriously! False complaints are very rare. Ask your coworker how you can best support them!

Rights

Use of Materials on the OEC

License

CC BY-NC

Resource Type

Educational Activity Description

Topics

Diversity

Discipline(s)

Computer, Math, and Physical Sciences

Social Justice, Equity and Inclusion

Teaching Ethics in STEM

Engineering

Publisher

Online Ethics Center