ANITA
B.ORG
EVIDENCE & INFLUENCE

2022
Technical
Equity
Experience
Survey

Navigating the tech ecosystem:
Insights on roadblocks and
accelerators for women &
non-binary technologists

A MESSAGE FROM OUR CEO

Research plays a crucial role in all of society. Why? By nature, we are curious, therefore we seek answers. But aren't we all tired of reading report after report, telling us the same thing over and over again, yet the needle never moves in the right direction? Here's an example for you…Black women are having the worst experiences in the workplace and in school. This is not new or surprising information, and evidently, demonstrating this fact repeatedly is not producing the change we want — no, we NEED — to see. I, for one, am ready for action. I'm ready for change.

So, what are we at AnitaB.org doing with the information? We provide the tech ecosystem with consistent annual metrics on the state of intersectional gender equity in tech in two ways. The Top Companies for Women Technologists report sheds light on the state of diversity and structural equity in the tech workforce, while the annual Technical Equity Experience Survey sheds light on the lived experiences, goals, and needs of technologists. These programs are specifically designed to work in concert with one another — the valued input we get from women and non-binary technologists ultimately informs the kinds of structural equity practices on which we assess and score Top Companies participants, in an attempt to improve both the representation and individual experiences of marginalized genders in tech.

And we don't stop there, also looking into our own organization and how we serve others. All our AnitaB.org programming includes a focus on Black, Latinx, Native American, and Pacific Islander (BLNP) women and non-binary technologists. Our Apprenticeship Pathway Program aims to increase the representation of Black, Latinx, Indigenous, and LGBTQIA women, men, and non-binary people in the tech industry. During this program, apprentices get paid to learn and, upon successful completion, can convert to a full-time software development career.

All organizations need to focus on BLNP technologists. Anywhere gender is measured in an organization, it should also be measured at the intersection of gender and race. But measurement is only the beginning. Metrics should be used to identify specific problem areas in which to intervene to improve the circumstances. For example, year over year Black tech women TechEES respondents have felt the least psychologically safe on their teams, and their psychological safety has been steadily decreasing for the last few years. To address this, company leaders must measure psychological safety on teams at the manager level and look at the scores specifically for Black women in order to identify managers who are negatively impacting psychological safety and put in place training and accountability systems to improve team safety.

You see, it's what we do with the information that matters. We at AnitaB.org are striving to be the change we want to see across the tech ecosystem, with the Apprenticeship Pathways Program, our AnitaB.org Mentorship Program, and much more. We challenge others to do the same. Together, we can create an equitable way forward.

Brenda Darden Wilkerson

- President and CEO, AnitaB.org

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EXECUTIVE SUMMARY

1708
Total Responses

87.2% Technologists

72.7% Women

1.9% Non-binary

18.4% Black, Latinx, Native American, or Pacific Islander (BLNP)

16.8% LGBTQIA

15.3% People with Disabilities

DISCRIMINATION AND HARASSMENT IN THE TECH ECOSYSTEM

Discrimination & Harassment

Percent of women technologists who have experienced the following in the field of tech:

Discrimination 92.5%   **Harassment** 86.8%

69.0%
69.0% of women technologists with disabilities experience **disability discrimination** in the field of tech.

64.7%
64.7% of women technologists who are caregivers experience **discrimination because of their parental duties**. This is 6.5X more than men who are caregivers.

53.7%
53.7% of LGBTQIA women technologists experience **discrimination based on their sexual orientation**.

STUDENTS
Women tech students experience more **gender, racial/ethnic, and sexual harassment** than women in the workplace.

ENTRY LEVEL
Only **53.2%** of entry-level women technologists feel comfortable taking a risk on their team, indicating that workplaces provide the least amount of **psychological safety** for them.

Entry-level women technologists report the lowest **work-life balance**, with only **57.7%** feeling like their work and non-work lives are balanced.

MID-LEVEL
81.3% of mid-level women technologists experience **burnout**, making burnout worst for tech women at this stage.

Out of all career levels, mid-level women technologists are least likely to see themselves still **working at their current place of work a year** from now, with only **61.7%** expressing this sentiment.

SENIOR LEVEL
At the senior level, **41.1%** of women technologists feel like they work a **second shift of unpaid labor** in their home, more than tech women at any other career level.

The most likely to experience being **gaslit in the workplace** are senior-level women technologists, with **56.4%** of them reporting such experiences.

Tech women face unique challenges depending on their career level and intersecting identities. Unique and intentional interventions are needed to find a way forward to achieve intersectional gender equity in tech.

INTRODUCTION

Despite progress in recent years, there is still a long road ahead to create a tech ecosystem where all women and non-binary technologists can thrive. The current journey through the tech ecosystem was originally designed by and for cis straight white men and is full of roadblocks and obstacles for women and non-binary technologists. Some of these obstacles affect almost all marginalized genders, for instance over 90% of all women & non-binary technologists report experiencing discrimination at school or work in 2022. Other obstacles disproportionately affect certain technologists, for instance Black women technologists report the lowest feelings of belonging, retention, and fair pay. In short, the current tech ecosystem is a pothole-riddled highway with only a few on-ramps and rest stops, and too many off-ramps for women &non-binary technologists.

To open the way forward to a more equitable tech world, this report breaks down research data into three chapters. Chapter one presents the overall state of women's experiences in the field of tech, identifying the places where the journey is smoothest and those where it is most difficult. Chapter two analyzes the data by career level—including student, entry, mid, and senior levels—to reveal how the tech landscape affects women at different stages of their journey. Finally, chapter three analyzes the data by intersectional identity, focusing on women and non-binary technologists who are caregivers, disabled, LGBTQIA, non-binary and Native American or Pacific Islander. This chapter highlights places where the current pathways in tech are particularly inaccessible or unsafe for some groups of technologists. Throughout, this report recommends "The Way Forward," data-driven strategies for improving women's experiences in tech. We recommend not merely fixing the potholes on the existing road, but also improving the entire infrastructure to build a branching network of accessible paths that lead the way forward for the whole tech community.

Chapter 1
The State of Women Technologists

Chapter 1 provides an overview of the key constructs AnitaB.org uses to measure women and non-binary technologists' lived experiences in the tech ecosystem including discrimination, harassment, psychological safety, belonging, retention, and pay equity. This chapter looks at the current state of these constructs as well as how they have changed over time and provides suggested interventions to create positive change for the future. This chapter shows that Black women continue to have some of the worst experiences in tech, and many of their experiences seem to have worsened between 2021 and 2022. Likewise, parental discrimination against women technologists who are caregivers rose this year, and parental discrimination remains much higher for women than for men who are caregivers. In providing an overview of this year's data, we do not present a simple analysis of what "all women" experience. That is, we do not merely present the overall numbers for all women combined—monolithic statistics do not serve anyone. Rather, we break down the data by intersectional identity to capture a more nuanced picture of different women's journeys through the tech world.

92.5% OF WOMEN TECHNOLOGISTS ARE EXPERIENCING DISCRIMINATION

In 2022, technologists continue to experience pervasive discrimination in their field. Women technologists, in particular, are 1.6X more likely than men technologists to experience any type of discrimination, and they are also significantly more likely than men to experience each type of discrimination measured this year: gender, racial/ethnic, sexual orientation, caregiving/parental duties, disability, and age. Gender and disability discrimination remain the most prevalent forms of discrimination experienced by women technologists in 2022. Unfortunately, overall discrimination against tech women decreased by only 1 percentage point from 2021 to 2022, while discrimination based on gender, age, and parental duties increased. It is important to note that gender and racial discrimination are predictors of decreased belonging, retention, and job satisfaction for tech women in the workplace, and all forms of discrimination have multiple long-term negative impacts on an individual's health.[1]

Experience of Discrimination

Percent of technologists who report experiencing any type of discrimination in the last 12 months

Women **92.5%**
Non-binary **95.2%**
Men **57.5%**
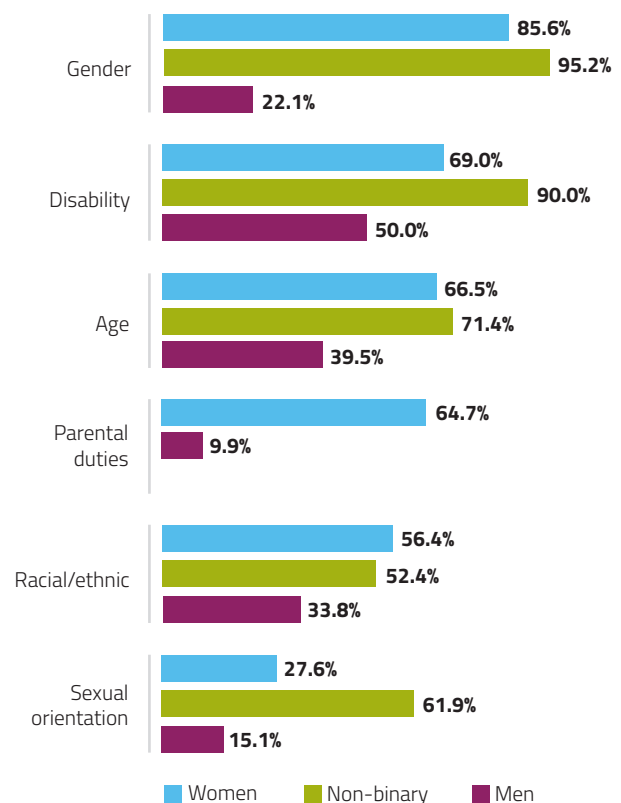
Racial/Ethnic Discrimination

Overall, 56.4% of women technologists report experiencing racial and/or ethnic discrimination in the field of tech. For Black, Latinx, Native American, and Pacific Islander (BLNP) women technologists collectively, 79.9% report experiencing this type of discrimination. When looking at individual racial/ethnic groups, Black women report the highest levels of racial/ethnic discrimination, which was also the case last year.

Asian	Black	Latinx	White
69.0%	87.9%	75.0%	28.5%
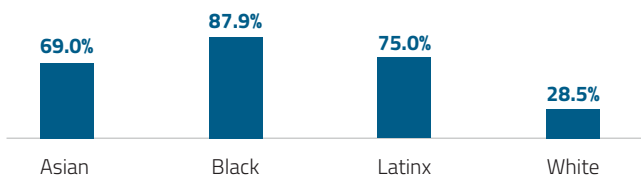
"I was discriminated [against] because I was pregnant in a previous company. That strengthened my resolve to succeed as a tech leader and raising a family. As a result I am an ardent advocate for working mothers in tech."
- *Senior-level Asian woman*

Types of Discrimination Experienced by Technologists

Percent of technologists experiencing each type of discrimination*

Type	Women	Non-binary	Men
Gender	85.6%	95.2%	22.1%
Disability	69.0%	90.0%	50.0%
Age	66.5%	71.4%	39.5%
Parental duties	64.7%		9.9%
Racial/ethnic	56.4%	52.4%	33.8%
Sexual orientation	27.6%	61.9%	15.1%

Women   Non-binary   Men

Note: Parental duties reports the percent of caregivers who experience discrimination. Disability reports the percent of technologists with a disability who experience discrimination.

1. Miller, H. N., LaFave, S., Marineau, L., Stephens, J., & Thorpe Jr, R. J. (2021). The impact of discrimination on allostatic load in adults: An integrative review of literature. *Journal of Psychosomatic Research, 146,* 110434.

GENDER-BASED HARASSMENT OF TECH WOMEN MARGINALLY DECREASES IN 2022 BUT REMAINS PREVALENT

In 2022, a staggering 86.8% of women technologists report experiencing at least one type of harassment. Gender harassment is measured with statements about being treated differently because of gender, being put down because of gender, or receiving offensive sexist remarks. Sexual harassment is measured with statements about receiving crude sexual remarks, unwanted sexual attention, or physical touch that makes the respondent feel uncomfortable. Women experience more overall harassment than men in the tech ecosystem. Alarmingly, women who work in person are significantly more likely to experience sexual harassment than their counterparts who work remotely, and women technologists experience higher rates of sexual and racial/ethnic harassment than non-technologist women in the workplace. Although almost all women technologists are experiencing harassment, very few are reporting it to their employer or school authorities. It is crucial for companies and schools to ensure that reporting structures are in place so that individuals can report harassment safely and without any negative repercussions.
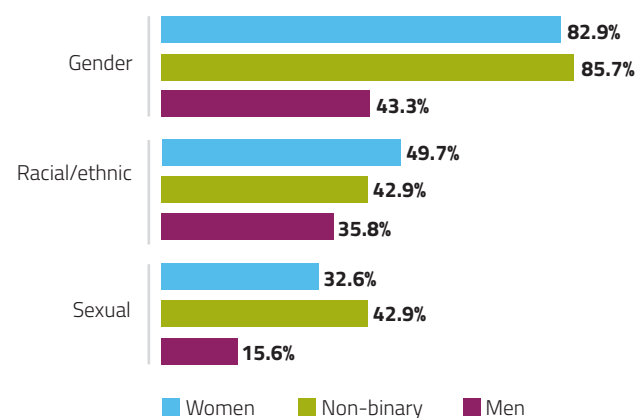
Experience of Gender Harassment
Percent of women technologists experiencing gender harassment in the last 12 months

2022 | 82.9%
2021 | 87.5%
2019 | 69.0%
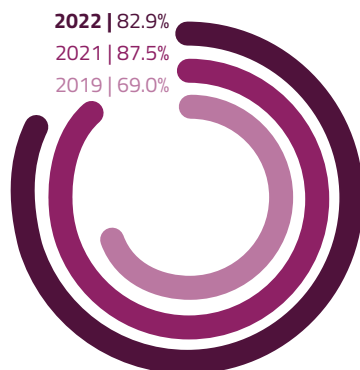
Types of Harassment Experienced by Technologists
Percent of technologists experiencing each type of harassment

Gender
- 82.9%
- 85.7%
- 43.3%

Racial/ethnic
- 49.7%
- 42.9%
- 35.8%

Sexual
- 32.6%
- 42.9%
- 15.6%

Women   Non-binary   Men

"The year of harassment and eventual sexual assault from my then manager, and how everyone around me must have noticed but stayed silent. I never had bad confidence or doubted myself or my skills before this time, but it just made me quiet. As this was at the start of my career, I was just seen as the quiet, careful one as I was walking on eggshells in the hallways, never as a future leader. I lost years of being myself, and it took time before I recovered from that, both mentally and in terms of career prospects."
– *Mid-level White woman*

ACTIONS TAKEN BY WOMEN TECHNOLOGISTS AFTER BEING HARASSED OR DISCRIMINATED AGAINST

Felt anger or got mad

Accepted it as a fact of life

Talked to someone outside their place of work

Directly confronted the person who harassed or discriminated against them

Reported the harassment or discrimination to their employer

Left their employer

Moved to a different place in their organization

Sought legal action

THE WAY FORWARD: A CALL TO ACTION

EXECUTIVES

INDIVIDUALS

Learn how to intervene when you hear or witness discrimination, harassment, microaggressions, or bias.

- Provide an anonymous reporting system for discrimination or harassment, preferably through a third-party organization or ombuds.

- Assess whether employees understand how to report discrimination or harassment and whether they feel safe reporting.

- Assess harassment during anonymous organizational culture surveys and examine results at multiple intersections.

SLIGHT INCREASE IN BELONGING FOR TECH WOMEN

When workers feel accepted for who they are and appreciated for their unique qualities, they feel like they truly belong at their workplace. A sense of belonging is vital for any workplace, as belonging is correlated with many positive outcomes, such as job satisfaction and work-life balance. In 2022, 67.1% of women technologists report a sense of belonging in their workplace, which is a slight improvement from the 63.5% reported in 2021. Interestingly, tech women report a slightly higher sense of belonging in the workplace than their non-technologist counterparts.

Feelings of Belonging
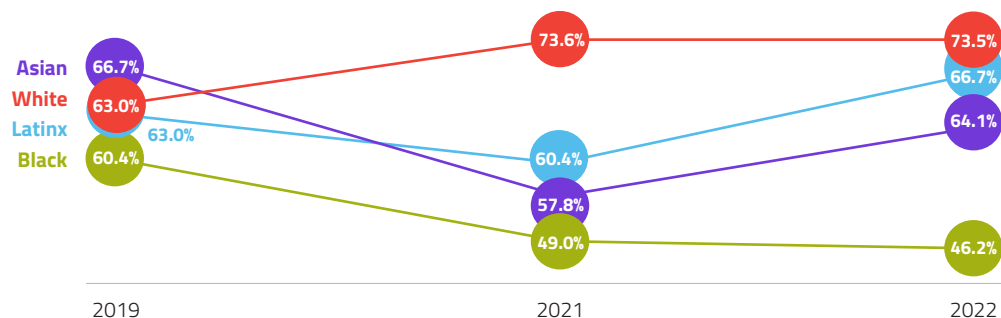Percent of technologists who report feeling a sense of belonging at their workplace

Women	67.1%
Non-binary	80.0%
Men	69.5%

Belonging Relationships
For women technologists, increased feelings of belonging are correlated with (p<=0.00001):

↑ Increased job satisfaction

↑ Increased comfort asking for a promotion

↑ Increased feelings of being able to be authentic self

↑ Increased professional network

↑ Increased work-life balance

↓ Decreased feelings of burnout

Feelings of Belonging Over Time
Percent of women technologists who have a sense of belonging at their workplace

	2019	2021	2022
Asian	66.7%	57.8%	64.1%
White	63.0%	73.6%	73.5%
Latinx	63.0%	60.4%	66.7%
Black	60.4%	49.0%	46.2%

"[I need help] dealing with difficult male personalities when that difficult male personality is your boss. Struggling with feeling like your career growth is intentionally stunted, despite general themes of praise and high performance."
- Mid-level Native American woman

SENIOR LEADERS MUST HOLD MANAGERS ACCOUNTABLE FOR CREATING PSYCHOLOGICAL SAFETY FOR BLACK TECH WOMEN

Psychological safety occurs when someone feels valued on their team and can share their ideas, questions, and mistakes without fear of negative consequences. Fear in the workplace inhibits learning and cooperation because it diverts mental resources away from the parts of the brain that process memory and information, thus impairing analytic thinking, creativity, and problem solving.[2] Although women technologists have significantly higher psychological safety than non-tech women in the workplace, 19.9% of women technologists feel unsafe taking risks on their current team. Black women technologists also have lower psychological safety than their counterparts of other races/ethnicities continuing a troubling trend seen year over year. For women technologists, increased psychological safety is correlated with increased job satisfaction, intent to stay at their current workplace, feelings of belonging, and feelings of work-life balance, as well as decreased feelings of burnout. For organizations, psychological safety is linked with reduced turnover and increased productivity.
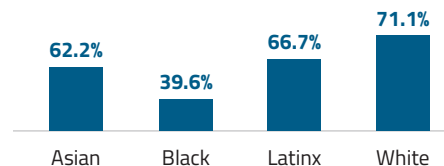
Feeling Valued for Unique Characteristics
Percent of technologists who report feeling valued for their unique characteristics (e.g., perspectives, skills, competencies, knowledge, or information) at their place of work

By gender

Women 64.6%
Non-binary 80.0%
Men 73.5%

By race/ethnicity for women

Asian	Black	Latinx	White
62.2%	39.6%	66.7%	71.1%

THE WAY FORWARD: A CALL TO ACTION

EXECUTIVES

- Measure psychological safety at the manager level to better understand how management is impacting the daily experiences of tech women and women of color. Train managers on how to build psychological safety on their teams.

- Create Employee Resource Groups (ERGs)/ affinity groups for historically-excluded communities and reward & recognize participation in these groups.

MANAGERS

- Demonstrate interest and show concern for professional development of direct reports.

- Ensure employee workload is reasonable; encourage employees to ask for help by modeling and rewarding help–seeking and self-care behaviors.

2. Edmondson, A. C. (2018). *The fearless organization: Creating psychological safety in the workplace for learning, innovation, and growth.* John Wiley & Sons.

BAD MANAGEMENT AND A LACK OF OPPORTUNITIES ARE PUSHING TECH WOMEN OUT

The AnitaB.org Top Companies for Women Technologists report found that in 2022 women technologists left their companies at higher rates than tech men. Similarly, in this survey, only 63.9% of women technologists see themselves working at their current workplace in a year, compared to 70.9% of men technologists. Black, Latinx, Native American, and Pacific Islander (BLNP) women technologists collectively are exiting their companies at the highest rates, and Black women technologists are the least likely to see themselves at their current workplace in a year. This comes as no surprise, as BLNP women technologists continue to have some of the worst experiences in the tech ecosystem.

Feelings of Retention by Gender
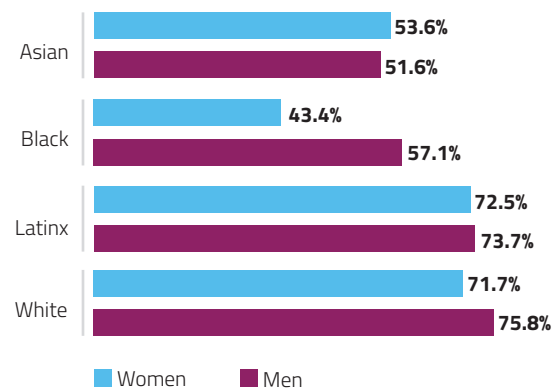Percent of technologists who see themselves working at their current workplace in a year

Women	63.9%
Non-binary	92.9%
Men	70.9%

Feelings of Retention by Race/Ethnicity
Percent of technologists who see themselves working at their current workplace in a year

Race/Ethnicity	Women	Men
Asian	53.6%	51.6%
Black	43.4%	57.1%
Latinx	72.5%	73.7%
White	71.7%	75.8%

■ Women   ■ Men

Top Five Reasons Women Technologists Stay at Their Current Workplace

1. Advancement opportunities

2. Coworkers

3. Enjoyment of current work responsibilities

4. Compensation

5. Mission alignment with individual values

> "[My current job] is a good fit for where I am today in my career and has enough challenges for me to stretch and grow to the next level (in my opinion) in my career. Hopefully, it will propel me further into the right direction of my career."
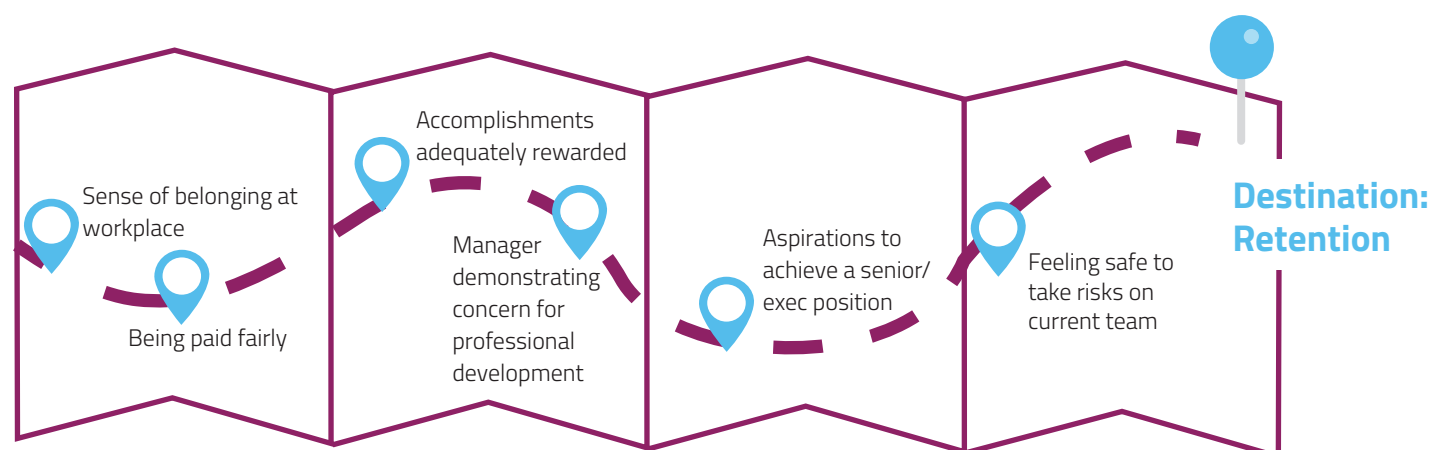> *- Mid-level Asian woman*

RETENTION RELATIONSHIPS

For women technologists, increased intent to stay at their current workplace is correlated with (p<=0.00001):

↑ Increased job satisfaction

↑ Increased comfort asking for a promotion

↑ Increased feelings of being paid fairly

↑ Increased feelings of belonging at their workplace

↑ Increased feelings of psychological safety

↑ Increased feelings of professional and personal support from their manager
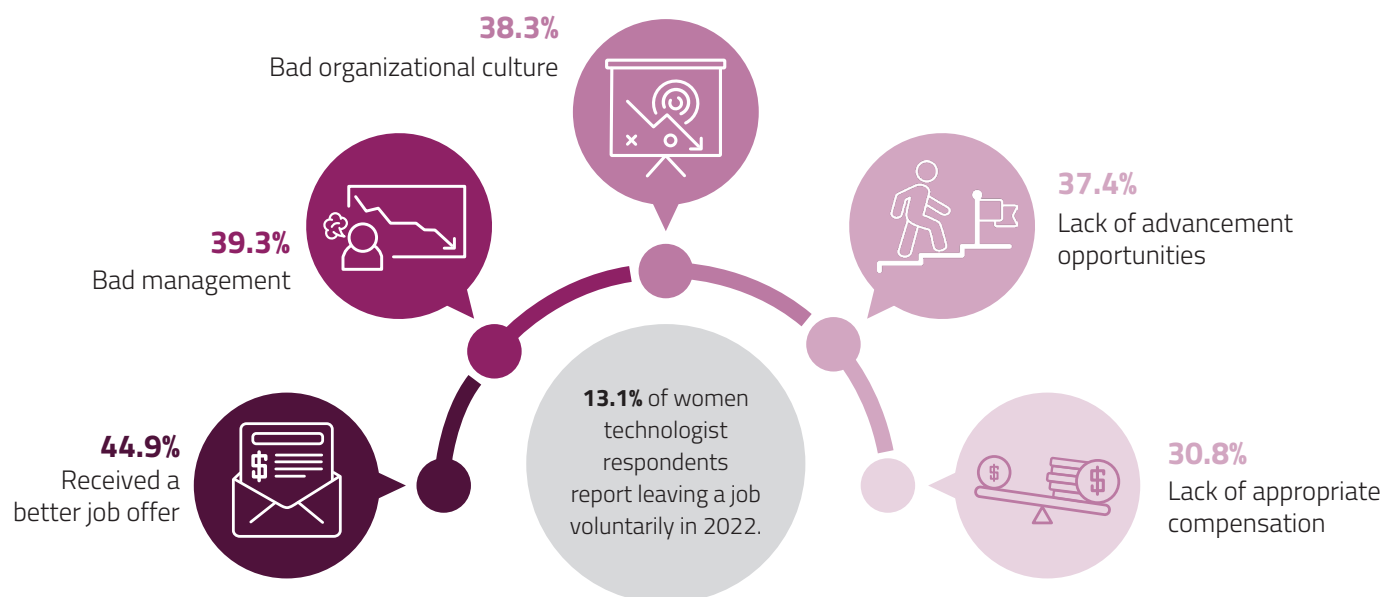
↓ Decreased feelings of burnout

DRIVERS OF RETENTION FOR WOMEN TECHNOLOGISTS

The six main drivers of retention for women technologists (p<0.00001):

Sense of belonging at workplace

Being paid fairly

Accomplishments adequately rewarded

Manager demonstrating concern for professional development

Aspirations to achieve a senior/exec position

Feeling safe to take risks on current team

Destination: Retention

VOLUNTARILY ATTRITION

Top five reasons women technologists are leaving their job

38.3%
Bad organizational culture

39.3%
Bad management

37.4%
Lack of advancement opportunities

44.9%
Received a better job offer

13.1% of women technologist respondents report leaving a job voluntarily in 2022.

30.8%
Lack of appropriate compensation

THE WAY FORWARD: A CALL TO ACTION

EXECUTIVES

- Participate in AnitaB.org's annual Top Companies for Women Technologists program to receive a thorough assessment and benchmark of your organizational policies and procedures that are linked with greater retention for women & non-binary technologists.

- Ensure employees are being paid fair market value for their skillset/role. The number one reason tech women leave their job is that they received a better job offer, which is in line with broader research that the easiest way to get a large salary increase is to change companies. Since the cost of replacing an employee can be three to four times the position's salary, it is in the company's and employee's best interests to provide competitive salaries to those who stay with companies long-term.

- Formally evaluate managers and take action where employee scores for management are low.

MANAGERS

- Hold "stay interviews" to learn about how to better ensure employees' specific needs and goals are being met, as well as what sorts of issues might make them want to leave their current place of work.

- Focus on professional development and opportunities for advancement for direct reports.

COMPANIES MUST PERFORM ROUTINE INTERSECTIONAL PAY EQUITY AUDITS TO ADDRESS THE PERSISTENT LACK OF FAIR PAY FOR BLACK WOMEN

The tech industry is making strides towards pay transparency, as more organizations are adopting pay transparency policies. Furthering this trend toward equity, 17 states in the United States have passed pay transparency laws, although only 7 of these states require employers to list a salary or salary range on job descriptions. Despite this progress, the latest data indicate that there is still a long road ahead. In 2022, only 57.5% of women technologists feel that they are being paid fairly for their work, and Black tech women are the least likely to feel they are being paid fairly. These feelings are well justified, as research shows that year-over-year Black women, on average, are paid the least.
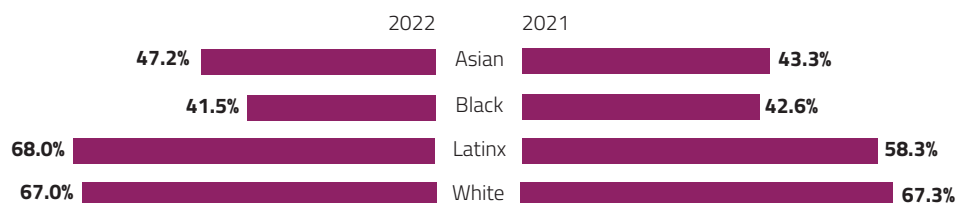
Feelings of Fair Pay

Percent of women technologists who feel they are paid fairly for their work

By year
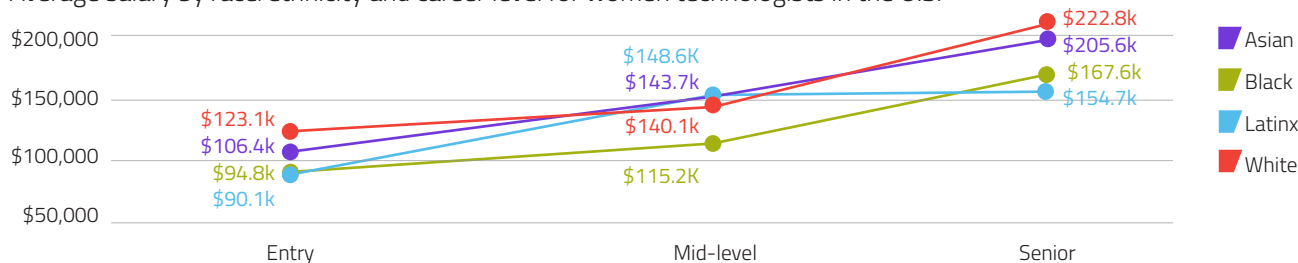
2022 | 57.5%
2021 | 54.0%
2019 | 58.0%

By race/ethnicity

	2022		2021
Asian	47.2%		43.3%
Black	41.5%		42.6%
Latinx	68.0%		58.3%
White	67.0%		67.3%

Salary by Race/Ethnicity

Average salary by race/ethnicity and career level for women technologists in the U.S.

	Entry	Mid-level	Senior
White	$123.1k	$140.1k	$222.8k
Asian	$106.4k		$205.6k
Black	$94.8k	$115.2K	$167.6k
Latinx	$90.1k	$148.6K / $143.7K	$154.7k

Legend: Asian, Black, Latinx, White

THE WAY FORWARD: A CALL TO ACTION

EXECUTIVES

■ Formalize an intersectional pay equity policy and conduct an annual intersectional pay equity audit.

■ Include salary or salary range on all job descriptions.

■ Increase formal salary transparency for current employees.

INDIVIDUALS

■ Review salary information at the levels.fyi website to ensure you are paid fairly.

■ Individuals, especially men, should share their current salary with women and non-binary coworkers in similar roles.

POLICY MAKERS

■ Enact the Paycheck Fairness Act.

■ Pass national salary history ban legislation.

Chapter 2: Career Level

Ideally, women technologists are following the path leading toward career advancement and leadership roles. But women & non-binary technologists face obstacles at every stage along this road, at every career level from student to executive. Moreover, there is a wide off-ramp for women, as women's representation drops off at each new career level. Accordingly, this report breaks down women technologists' experiences by career level in order to identify the specific problems and most effective interventions at each level. For instance, this report finds that women tech students experience the most sexual harassment; entry-level women technologists feel the least safe and the most burnt out; mid-level technologists experience the most discrimination and face barriers to advancement; and senior-level women technologists have the greatest sense of being gaslit and working a second shift of unpaid labor at home. We need to fix the road at every career stage to create a future where more women are making it to their leadership destination, paving the way to a more inclusive and innovative future.

STUDENTS

In 2019, women received 21.0% of all computer science degrees in the United States, which is lower than the overall representation of tech women in the workplace. While some things improved for women tech students in 2022—such as academic satisfaction, networking, and mentorship—much room for improvement remains. For instance, women tech students' sense of belonging decreased from 2021 to 2022, with Black women reporting the greatest decrease. Even more alarmingly, in 2022 as in 2021, tech students report experiencing higher rates of gender, racial/ethnic, and sexual harassment than tech women in the workplace. Because academic institutions are many technical women's first introduction to the tech ecosystem, these institutions must implement more rigorous safety protocols and more effective anti-harassment education to protect women tech students.

REPRESENTATION OF TECH STUDENTS IN THE UNITED STATES
Computer and information sciences bachelor's degrees conferred in 2018-2019 by gender and race/ethnicity[3]

Asian
- 4.0%
- 12.0%

Black
- 2.0%
- 6.0%

Latinx
- 2.0%
- 8.0%

White
- 8.0%
- 43.0%

Women | Men
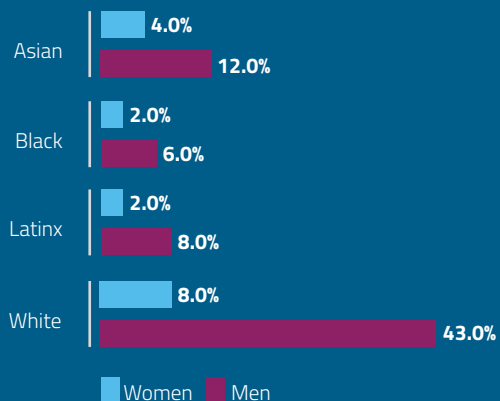
2018-2019 is the most current data available from the National Center for Education Statistics.

3. *Digest of Education Statistics.* National Center for Education Statistics (NCES) Home Page, a part of the U.S. Department of Education. (2020). Retrieved March 22, 2023, from https://nces.ed.gov/programs/digest/d20/tables/dt20_322.50.asp?current=yes
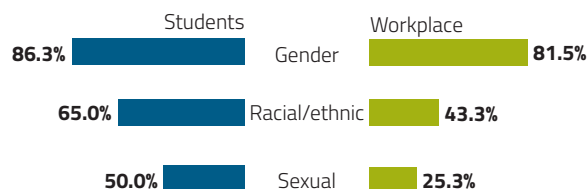
WOMEN TECH STUDENTS ARE REPORTING HIGHER LEVELS OF HARASSMENT THAN WOMEN TECHNOLOGISTS IN THE WORKPLACE

HARASSMENT

Women who are tech students are experiencing harassment at school at higher rates than women in the workplace.

Percent of women technologists who experience each type of harassment

Students		Workplace
86.3%	Gender	81.5%
65.0%	Racial/ethnic	43.3%
50.0%	Sexual	25.3%

ACADEMIC SATISFACTION

Women tech students report higher levels of academic satisfaction than men tech students. Academic satisfaction also increased slightly for women tech students this year, up from 7.5 out of 10 last year.

7.7 Women

6.8 Men

PROFESSIONAL NETWORKS

In 2022, 53.3% of women tech students have a robust professional network in tech. This marks a great improvement from 2021, when only 39.8% of women tech students had a robust network.

BELONGING

The majority of women tech students report feeling a sense of belonging in the field of technology (81.3%). However, some racial/ethnic groups experienced a decrease in belonging from 2021, with Black women tech students reporting the largest decrease.

2021		2022
85.4%	Asian	86.5%
84.8%	Black	50.0%
75.0%	Latinx	75.0%
85.2%	White	75.0%
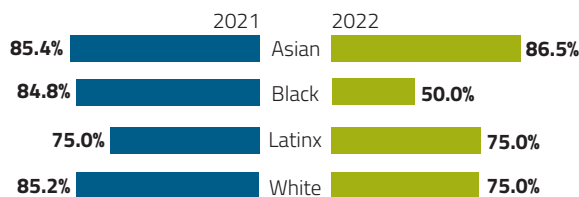
"Working with classmates has improved my college experience. I would often not say anything in class groups because I would be the only woman or only POC. I then realized that when you don't speak out, it kind of feels like you don't retain as much information in terms of discussing a topic for class or asking questions to your classmates about the homework (even if they are "dumb" questions)."
– Student Latinx woman

MENTORSHIP

48.8% of women studying to be technologists report having a strong relationship with a mentor in tech. Although, this number is low, it marks an increase from 2021, when only 38.2% of women tech students reported the same.

BURNOUT

72.8% of women tech students are experiencing burnout. Students in industry recognized certificate programs or technical training programs have the highest rates of burnout (91.7%).

Burnout Relationships
Increased burnout for students is correlated with:

- ↓ Decreased sense of belonging in tech
- ↓ Decreased professional network in tech
- ↓ Decreased relationships with a mentor in the field of tech

Percent of women tech students who are experiencing burnout

- 91.7% — Industry recognized certificate or tech training programs
- 84.3% — Undergraduates
- 68.8% — Masters or Doctorates
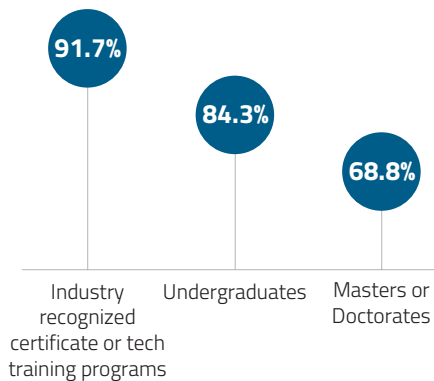
SCHOOL-LIFE BALANCE

Only 49.8% of women tech students feel like their academic and non-academic lives are balanced. Black, Latinx, Native American, or Pacific Islander (BLNP) women tech students report the lowest balance between school life and non-school life.

Percent of women tech students who feel like their academic and non-academic lives are balanced

- 54.2% — Caregivers
- 44.4% — LGBTQIA
- 40.0% — People with disabilities
- 32.0% — BLNP
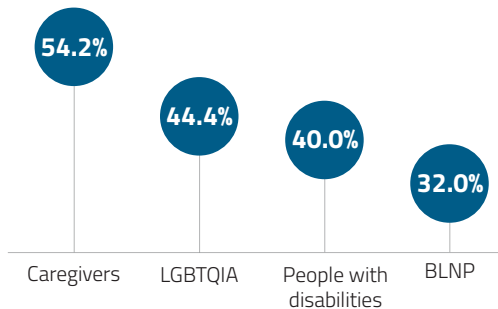
THE WAY FORWARD: A CALL TO ACTION

SCHOOLS

- ■ Increase transparency and accountability around campus sexual harassment. Be transparent about the rate of sexual harassment on campus and how it is being addressed.

POLICY MAKERS

- ■ Establish and fund pathways and minimum thresholds for federal agency recruitment from HBCUs, HSIs, TCUs, and rural colleges for government tech positions and apprenticeships.

- ■ Pass the reauthorization of the Workforce Innovation and Opportunity Act.

INDIVIDUALS

- ■ Become an AnitaB.org Member. The top 3 supports women tech students say they need are mentorship, help finding a job, and connecting with peers. AnitaB.org Membership provides members with:
- ■ Multiple tech mentorship opportunities including: 1:1 mentorship, group mentorship, monthly speed mentoring, and monthly mentoring circles.
- ■ Hiring events, career & professional development webinars, and career coaching.
- ■ Local and regional tech networking events in over 40 locations across 15 countries.

ENTRY

According to Top Companies for Women Technologists, 33.8% of all entry-level technologists are women. It is critically important to increase women's representation at the entry level, but doing so will be difficult given the current deplorable state of entry-level women's experiences in tech. This year we found that women technologists at the entry level are having the worst experiences of all career levels: they have the lowest sense of belonging, psychological safety, retention, work life balance, and professional network, while they also have the highest rates of burnout and sexual harassment. The entry-level experience is fundamental to the professional careers of technologists, as it is relatively easy for those who have negative experiences at this level to switch jobs, switch organizations, or switch fields altogether. If we hope to retain more women on the road toward leadership, we must improve the situation for these women at this most vulnerable stage of their career journey.
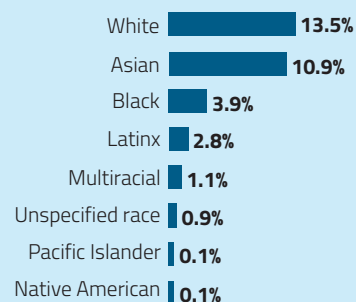
CURRENT STATE OF ENTRY-LEVEL TECHNOLOGISTS
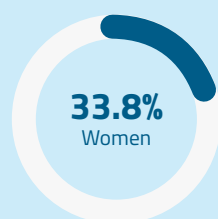
Representation of Tech Women

33.8%
Women

- Top Companies for Women Technologists '22

Representation of Tech Women by Race

Race	Percentage
White	13.5%
Asian	10.9%
Black	3.9%
Latinx	2.8%
Multiracial	1.1%
Unspecified race	0.9%
Pacific Islander	0.1%
Native American	0.1%

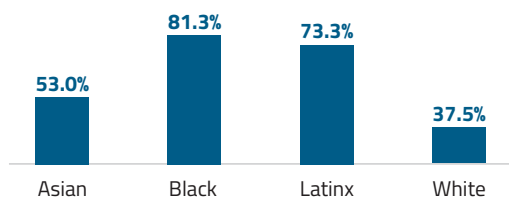# ENTRY-LEVEL WOMEN ARE HAVING THE WORST EXPERIENCES IN TECH

SEXUAL HARASSMENT

Out of all career levels, entry-level women technologists are experiencing the most sexual harassment. 36.5% of entry-level women technologists report experiencing sexual harassment in the past year, with the highest rates reported among Latinx women in tech (40.0%).

SENSE OF BELONGING

Entry-level women technologists have lower experiences of belonging in the workplace than other career levels. However, entry-level women technologists have a greater sense of belonging than entry-level men technologists.

RACIAL/ETHNIC HARASSMENT

Out of all career levels, entry-level women technologists who are Black, Latinx, Native American, or Pacific Islander (BLNP) are experiencing the most racial/ethnic harassment, with 77.4% reporting being harassed in the past 12 months.

Percent of entry-level women technologists who experience racial/ethnic harassment

Asian	Black	Latinx	White
53.0%	81.3%	73.3%	37.5%

Percent of entry-level technologists who have a sense of belonging at their workplace

By gender

Women 57.3%
Men 51.2%

By race/ethnicity for women

Asian	Black	Latinx	White
52.4%	33.3%	72.7%	69.7%
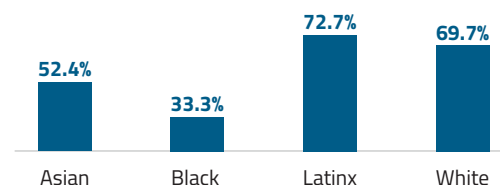
ADVANCEMENT AND LEADERSHIP

Most entry-level women technologists are not comfortable asking for a promotion. Yet, 54.7% hope to obtain a senior or executive position at their current place of work.
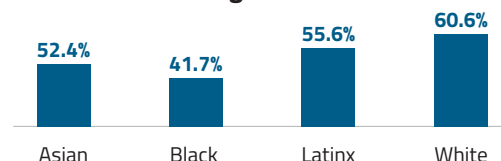
Percent of entry-level technologists who feel comfortable asking for a promotion

Women 44.7%
Men 51.2%

PSYCHOLOGICAL SAFETY

Entry-level women technologists have the lowest psychological safety out of all career levels. Half of all entry-level women technologists do not feel comfortable taking a risk on their team.
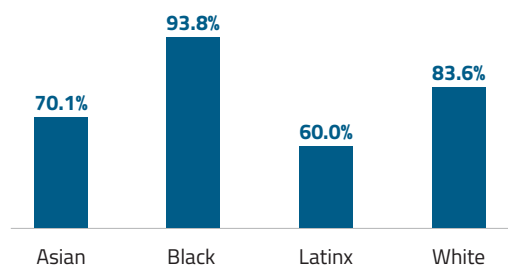
Percent of entry-level women technologists who feel safe taking a risk at work

Asian	Black	Latinx	White
52.4%	41.7%	55.6%	60.6%

BURNOUT

Although tech women on average experience the most burnout at mid-level, Black tech women at entry level have the highest levels of burnout of any racial/ethnic group at any career level.

Percent of entry-level women technologists who are experiencing burnout

| Asian	Black	Latinx	White
70.1%	93.8%	60.0%	83.6%

RETENTION

Only 56.8% of entry-level women technologists see themselves working at their current place of work a year from now. This is the lowest percent out of all career levels.

WORK-LIFE BALANCE

Compared to women technologists in other career levels, entry-level women technologists report the lowest work-life balance. Only 57.7% of entry-level women technologists feel like their work and non-work lives are balanced.

Percent of entry-level women technologists who feel their work and non-work lives are balanced

BLNP*	LGBTQIA	Caregivers	People with disabilities
55.2%	52.9%	45.0%	15.0%
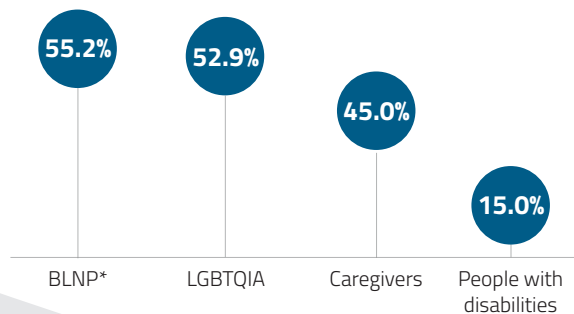
Black, Latinx, Native American, or Pacific Islander

PROFESSIONAL NETWORKS

Of all women technologists, those at entry level report the least robust professional networks in the field of tech. Only 48.9% of entry-level women technologists have a robust professional network.
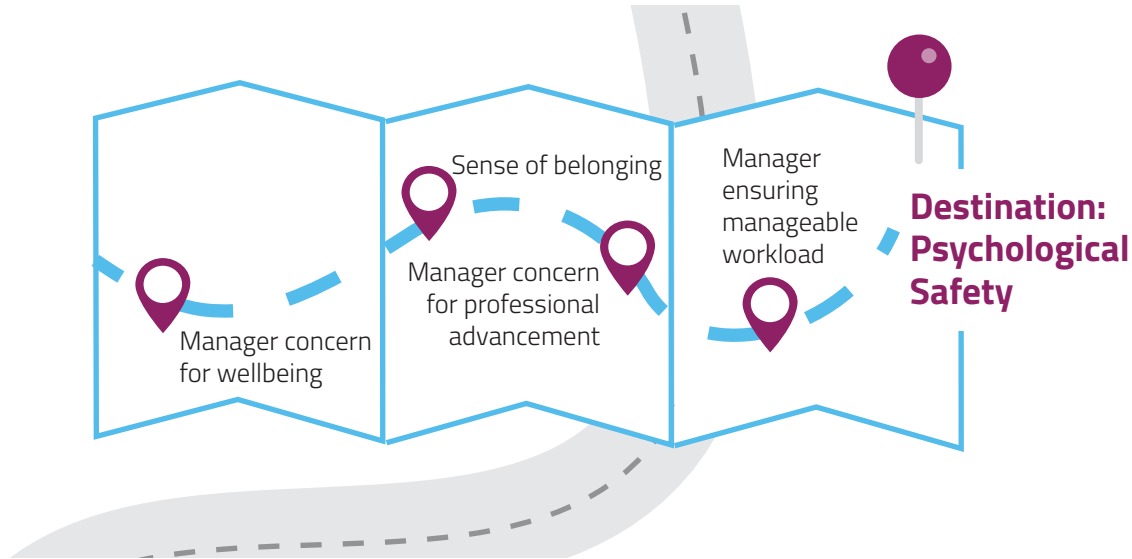
Professional Network Relationships

Having a robust network in tech is correlated with (p<=0.002):

- ↑ Increased job satisfaction
- ↑ Increased feelings of belonging in the workplace
- ↑ Increased psychological safety
- ↑ Increased work-life balance
- ↓ Decreased feelings of burnout

THE WAY FORWARD: ENTRY-LEVEL WOMEN TECHNOLOGISTS

DRIVERS OF PSYCHOLOGICAL SAFETY FOR ENTRY-LEVEL WOMEN TECHNOLOGISTS

Entry-level women technologists have the lowest levels of psychological safety. The significant drivers of psychological safety for entry-level tech women are ($p < 0.00001$):

Sense of belonging

Manager concern for wellbeing

Manager concern for professional advancement

Manager ensuring manageable workload

Destination: Psychological Safety

TOP 3 SUPPORTS NEEDED BY ENTRY-LEVEL WOMEN TECHNOLOGISTS

We asked technologists what types of support they needed during this stage of their career:

1. Mentorship

2. Connections with peers

3. Professional/career coaching

THE WAY FORWARD: A CALL TO ACTION

EXECUTIVES

MANAGERS

- Formalize career sponsorship and mentorship programs to increase tech women's networks. Having a strong mentor is correlated with decreased sexual harassment for entry-level tech women.

- Provide formal training to managers to help entry-level technologists manage their workload.

- Ensure company's performance management strategy is not rewarding burnout behaviors.

- Build an environment where it is safe to ask for help — this is significantly linked to both increased psychological safety and decreased burnout.

- Encourage and model time off and self-care for entry-level technologists to help avoid burnout.

MID-LEVEL

Mid-level tech women face the most gender, sexual, and parental discrimination in the workplace of all career levels, and those who are Black, Latinx, Native American, or Pacific Islander (BLNP) also experience the most racial and/or ethnic discrimination. These experiences might help explain why the greatest decrease in tech women's representation occurs between mid (28.0%) and senior (23.0%) levels. Mid-level is thus a pivotal stage along the career road, and senior and executive leadership gaps can never be closed without greater investment in and advancement of mid-level tech women.[4]
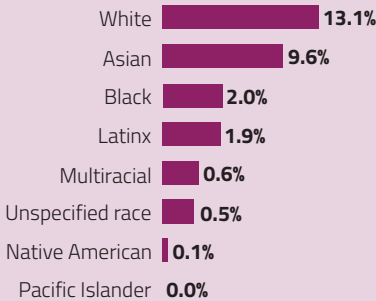
CURRENT STATE OF MID-LEVEL TECHNOLOGISTS

Representation of Tech Women

28.0%
Women

- Top Companies for Women Technologists '22

Representation of Tech Women by Race

White	13.1%
Asian	9.6%
Black	2.0%
Latinx	1.9%
Multiracial	0.6%
Unspecified race	0.5%
Native American	0.1%
Pacific Islander	0.0%

4. Ashcraft, C., McLain, B., & Eger, E. (2016). *Women in tech: The facts.* Colorado, CO, USA: National Center for Women & Technology (NCWIT).

MID-LEVEL WOMEN TECHNOLOGISTS ARE EXPERIENCING THE HIGHEST LEVELS OF BURNOUT

GENDER HARASSMENT

Mid-level women technologists are experiencing more gender harassment than those at other career levels, which was also true in 2021. 86.2% of mid-level tech women report being harassed in the past 12 months.

ADVANCEMENT AND LEADERSHIP

Overall, only half of mid-level women technologists feel comfortable asking for a promotion. Yet, 63.0% hope to obtain a senior or executive position in the future.
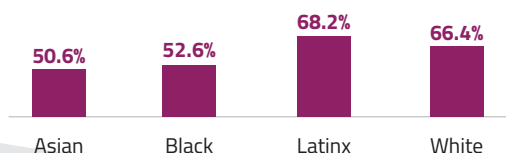
Percent of mid-level technologists who feel comfortable asking for a promotion

Women	53.4%
Non-binary	80.0%
Men	64.8%

PSYCHOLOGICAL SAFETY

Mid-level women technologists are reporting the highest levels of psychological safety. 66.5% of mid-level women technologists feel safe taking a risk on their team, and 79.4% feel that it is easy to ask other members of their current team for help.

Percent of mid-level women technologists who feel it is easy to ask for help at work

Caregivers	LGBTQIA	People with disabilities	BLNP*
82.5%	81.0%	74.1%	71.7%

Black, Latinx, Native American, or Pacific Islander

RETENTION

Only 61.7% of mid-level women technologists see themselves working at their current workplace in a year. The retention of mid-level technologists is essential for increasing women in leadership; many technologists first take on a management role at this level, launching them into their leadership career.
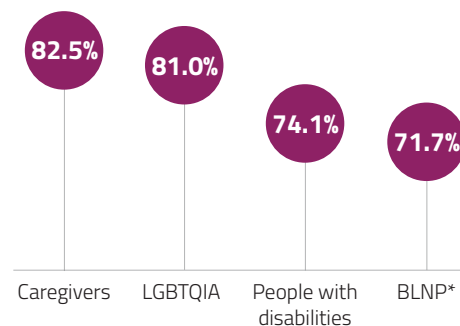
Percent of mid-level women technologists who see themselves at their organization in a year

Asian	Black	Latinx	White
50.6%	52.6%	68.2%	66.4%

Mid-level women technologists report they stay in their current workplace for the following reasons:

Team/coworkers

Compensation

Advancement opportunities

Enjoying current job responsibilities

Direct manager/supervisor

## BEYOND FORMAL RESPONSIBILITIES

Out of all career levels, mid-level women technologists report spending the most time on diversity, equity, inclusion (DEI) and/or employee resource group (ERG) work that falls outside their formal job responsibilities (47.8%). This labor provides companies with many benefits, including improved company culture, a sense of belonging for employees, and diverse perspectives on products and policies. However, this work often goes unrecognized and unrewarded by companies, leading to negative impacts on promotion outcomes.

BURNOUT

81.3% of mid-level women technologists are experiencing burnout, which is higher than women at other career levels and men at mid-level. Tech women with disabilities report the highest levels of burnout at this career level. Burnout is a significant predictor of many physical and psychological problems, including type 2 diabetes, coronary heart disease, and musculoskeletal pain.[5]

Percent of mid-level women technologists who are experiencing burnout

| People with disabilities	Caregivers	LGBTQIA	BLNP*
94.6%	89.1%	83.7%	83.1%
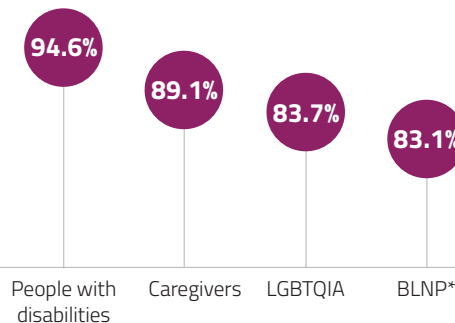
Black, Latinx, Native American, or Pacific Islander

MENTORSHIP

Mid-level women technologists are least likely to report a strong relationship with a mentor in the field of tech. Only 39.5% of mid-level women technologists have a strong relationship with a mentor in tech, which is 1.5X less than mid-level men technologists.

Percent of women technologists who report they have a strong relationship with a mentor in tech

Asian	Black	Latinx	White
44.4%	35.0%	19.2%	39.4%
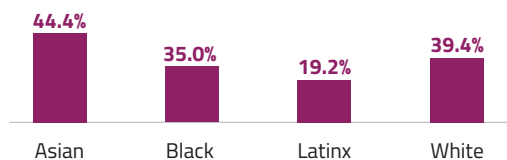
"[The most helpful support would be] having more senior technical women both mentoring and sponsoring me; I have felt more supported and grown more quickly during these times."
- *Mid-level multiracial woman*

### Top Companies for Women Technologists '22 found:

- Companies that recognize ERG participation in performance reviews have **2.6X** more mid-level Black tech women.

- Companies that collect feedback on burnout have **2.8X** more mid-level Black tech women.

- Companies that have an intersectional pay equity policy have **3.1X** more mid-level Black tech women.

5. Salvagioni, D. A. J., Melanda, F. N., Mesas, A. E., González, A. D., Gabani, F. L., & Andrade, S. M. D. (2017). Physical, psychological and occupational consequences of job burnout: A systematic review of prospective studies. *PloS one, 12*(10), e0185781.

THE WAY FORWARD: MID-LEVEL WOMEN TECHNOLOGISTS

DRIVERS OF MID-LEVEL RETENTION FOR MID-LEVEL WOMEN TECHNOLOGISTS

More mid-level tech women intend to leave their current place of work than any other career level. The significant drivers of retention for mid-level tech women are ($p < 0.00001$):

Fair pay

Psychological safety

Sense of belonging

Destination: Retention
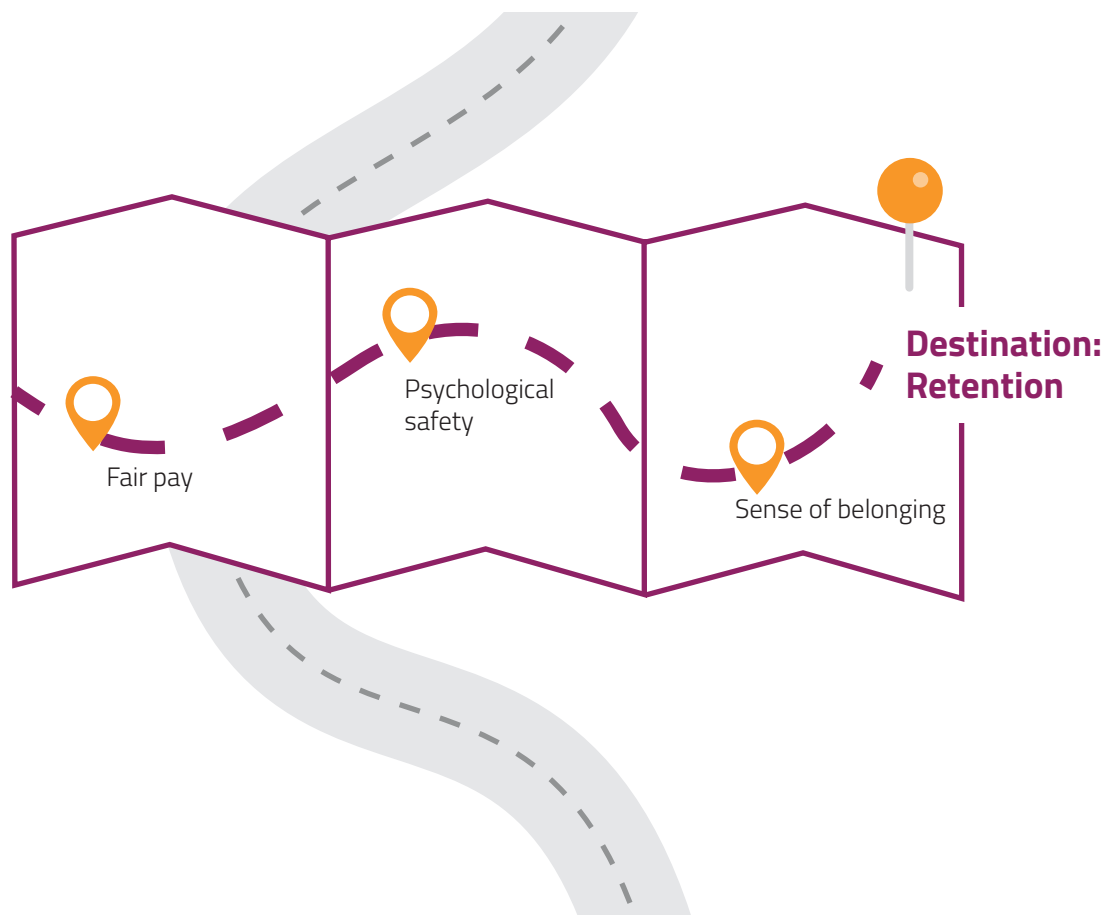
THE WAY FORWARD: A CALL TO ACTION

EXECUTIVES

- Increase pay transparency and ensure pay equity within same job roles through regular intersectional pay equity audits.
- Increase sense of belonging by enacting employee resource groups, affinity groups, and formal mentorship programs.
- Acknowledge and reward time spent outside formal job responsibilities (DEI, ERG, etc.) in performance reviews.

MANAGERS

- Address burnout by reducing workloads, canceling unnecessary meetings, and encouraging taking vacation and sick time.
- Encourage and provide opportunities for professional networking and mentorship.
- Reduce benevolent sexist management practices by giving strong critical feedback on performance and providing opportunities for challenging work assignments.

POLICY MAKERS

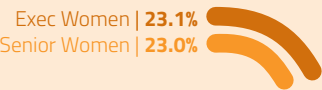- Pass federal pay transparency laws.

SENIOR

According to Top Companies for Women Technologists, women make up only 23.0% of the total senior-level technical workforce and 23.1% of the executive level. Women technologists at the senior level are reporting the best outcomes of all career levels, although they also report the highest rates of being gaslit in the workplace and of working a second shift of unpaid labor at home. It is crucial to promote and retain more women in leadership, as research shows that having women in leadership makes the road smoother for everyone. Companies with women in leadership roles hire more women at all levels,[6] foster greater employee well-being & satisfaction which improves retention,[7] experience fewer mergers, make greater investments in research and development,[8] and promote more environmentally-friendly corporate polices.[9]
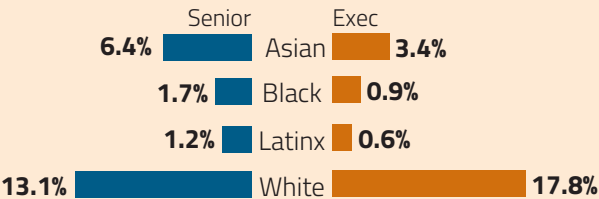
CURRENT STATE OF SENIOR-LEVEL TECHNOLOGISTS

Representation of Tech Women

Exec Women | **23.1%**
Senior Women | **23.0%**

Representation of Tech Women by Race

	Senior		Exec
Asian	6.4%		3.4%
Black	1.7%		0.9%
Latinx	1.2%		0.6%
White	13.1%		17.8%

- Top Companies for Women Technologists '22

6. Duke, S. (2017, November). The key to closing the gender gap? Putting more women in charge. *World Economic Forum* (Vol. 2).
7. Krivkovich, A. (2022). *Women in the Workplace 2022.* LeanIn. Org.
8. Post, C., Lokshin, B., & Boone, C. (2022). What changes after women enter top management teams? A gender-based model of strategic renewal. *Academy of Management Journal, 65*(1), 273-303.
9. Glass, C., Cook, A., & Ingersoll, A. R. (2016). Do women leaders promote sustainability? Analyzing the effect of corporate governance composition on environmental performance. *Business Strategy and the Environment, 25*(7), 495-511.

SENIOR-LEVEL WOMEN TECHNOLOGISTS REPORT BETTER EXPERIENCES AT WORK BUT GREATER CHALLENGES AT HOME
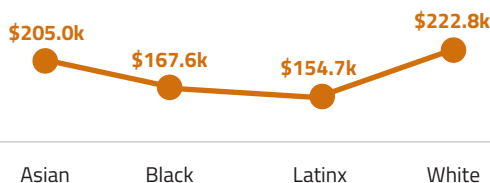
RETENTION

71.1% of senior-level women technologists see themselves working at their current place of work in a year. This is the highest percent out of all career levels. Retention for both men and women is statistically correlated with tenure at a company and years of technical experience.

SENSE OF BELONGING

Out of all career levels, senior-level women technologists have the highest percent of belonging, with 71.4% of women technologists reporting they feel like they belong at their place of work.

PAY EQUITY

Women technologists at the senior level have the highest percent of respondents (61.9%) who report feeling like they are paid fairly for the work they do. This number is also the highest for men technologists at the senior level (71.4%). However, senior-level Latinx and Black women technologists are being paid less than other senior-level technologists.
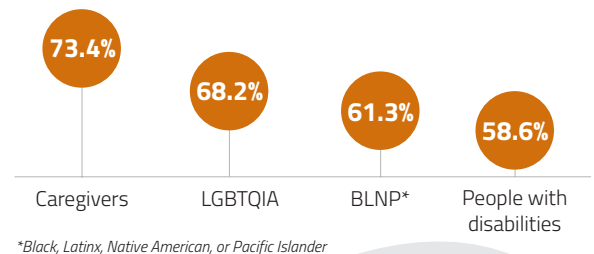
Percent of senior-level women technologists who have a sense of belonging at their workplace

Caregivers	LGBTQIA	BLNP*	People with disabilities
73.4%	68.2%	61.3%	58.6%

Black, Latinx, Native American, or Pacific Islander

Average income by race/ethnicity for senior-level women technologists

Asian	Black	Latinx	White
$205.0k	$167.6k	$154.7k	$222.8k

GASLIGHTING

Although senior-level women technologists are reporting the most positive outcomes out of all career levels, they are the career level with the highest percent experiencing being gaslit. Gaslighting is the act of manipulating a person to a point where they question their own perceptions and memory.[10] Over half of all senior women technologists and almost 75% of Black, Latinx, Native American or Pacific Islander (BLNP) tech women report experiencing someone gaslighting them at their place of work in the past 12 months.

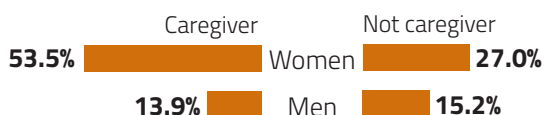### Percent of senior-level technologists being gaslit in the workplace

Women	56.4%
Men	36.9%
BLNP women	74.2%
BNLP men	53.8%

10. Saripalli, V., & Huizen, J. (2022, July 14). *What is gaslighting? Examples and how to respond.* Medical News Today. Retrieved March 22, 2023, from https://www.medicalnewstoday.com/articles/gaslighting

LACK OF LEADERSHIP DIVERSITY

The tech workforce becomes less diverse as you climb the career ladder. 56.6% of tech women and 57.8% of Black, Latinx, Native American, or Pacific Islander (BLNP) technologists report often or very often being the only one in the room of their same gender or race, the highest percentages for both gender and race of all career levels.

Percent of senior-level technologists reporting that they are often or very often the only person of their same gender and/or race in the room at work

	Men		Women
Asian	42.9%		54.4%
BLNP	46.2%		77.4%
White	13.3%		64.0%

WORKING A SECOND SHIFT

Senior women technologists report the highest percent (41.1%) of feeling like they work a second shift of unpaid labor in their home. This is significantly higher than the 14.3% of senior tech men who report this same feeling. Interestingly, while being a caregiver is a positive predictor of working a second shift for senior women, it has no predictive power for senior men. In fact, while senior-level tech women caregivers are almost twice as likely to report a second shift than women who are not caregivers, senior-level tech men caregivers are *less* likely to report working a second shift than their non-caregiving male counterparts.
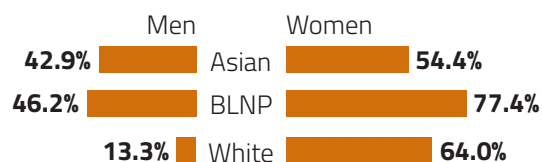
Percent of senior-level technologists who report working a second shift of unpaid labor at home

	Caregiver		Not caregiver
Women	53.5%		27.0%
Men	13.9%		15.2%

> "[The support I most need is help] reaching the next milestone. Lots of support and help for early career & mid career women is out there but no resources or support system focused on moving from mid-Senior roles or Senior-executive and thriving at senior leadership."
> - *Senior-level Asian woman*

THE WAY FORWARD: SENIOR-LEVEL WOMEN TECHNOLOGISTS

DRIVERS OF BELONGING FOR SENIOR-LEVEL WOMEN TECHNOLOGISTS

The significant drivers of belonging for senior-level tech women are ($p < 0.00001$):

Job satisfaction

Psychological safety

Intent to stay

Destination: Belonging

THE WAY FORWARD: A CALL TO ACTION

EXECUTIVES

- Provide formal training to managers on unbiasing the performance management process. Top Companies for Women Technologists found that companies that provide this training have 1.4X more exec tech women than those that do not.

- Institute formal mentorship programs and include junior tech employees to build the pipeline for leadership. Top Companies for Women Technologists found that companies with formal mentorship programs have 5.4X more senior Black women and 8.1X more Black exec women.

- Provide executive-level mentorship and career coaching to senior-level tech women.

- Develop succession plans to intentionally address gender and racial gaps in senior and executive leadership.

- Set targets for tech women and women of color at senior and exec levels.

- Train executives and senior leaders on avoiding gaslighting in the workplace.

- Ensure staff diversity metrics include a specific focus on diversity of leadership and tech leadership; metrics should be reviewed by execs at least quarterly.

Chapter 3: Identities

While women and non-binary technologists experience different obstacles at different career levels, career level is not the only salient way to break down technologists' experiences. Women and non-binary technologists are also individuals who inhabit many different identities. It does a great disservice to these technologists to treat them as a monolithic group with identical experiences and needs. Accordingly, this section analyzes how gender intersects with race/ethnicity, caregiver status, disabilities, and LGBTQIA identity to affect technologists' experiences in the workplace. This report does not aim to cover all potential intersectional identities; rather, it offers a first step toward recognizing the unique opportunities and obstacles that different technologists face. Keep an eye on AnitaB.org's website for our periodic Focus On Series, where we will continue to explore other intersectional identities according to key TechEES constructs.
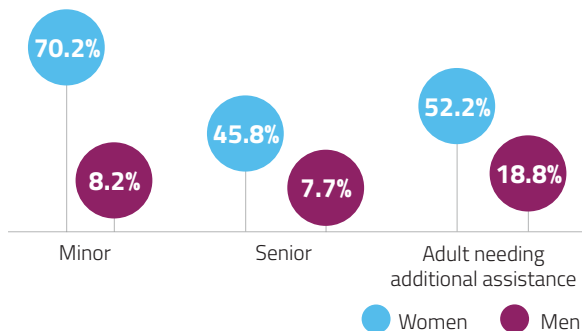
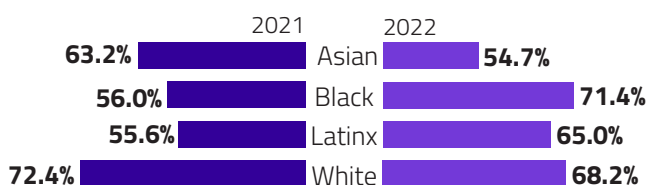# TECH WOMEN CAREGIVERS EXPERIENCE 6.5X MORE PARENTAL DISCRIMINATION THAN MEN

In 2022, we found that 64.7% of women technologists who are caregivers report being discriminated against because of their parental duties. Black women technologists are reporting worse professional experiences than their counterparts of other races/ethnicities. Significant focus needs to be placed on determining what supports are lacking in the workplace for Black technologists who are caregivers.

BURNOUT

Women technologists who are caregivers are 1.3X more likely to experience burnout out compared to men technologists who are caregivers. Black, Latinx, Native American or Pacific Islander (BLNP) tech women caregivers are experiencing the highest percent of burnout.

EXPERIENCES OF PARENTAL DISCRIMINATION

**Percent of tech caregivers who experience parental discrimination by type of caregiving**

Type	Women	Men
Minor	70.2%	8.2%
Senior	45.8%	7.7%
Adult needing additional assistance	52.2%	18.8%

● Women   ● Men

Percent of caregiving technologists who experience burnout

Women	83.1%
Men	62.5%
BLNP Women	87.5%
BNLP Men	50.0%

Percent of women tech caregivers who experience parental discrimination by race/ethnicity

	2021		2022
Asian	63.2%		54.7%
Black	56.0%		71.4%
Latinx	55.6%		65.0%
White	72.4%		68.2%
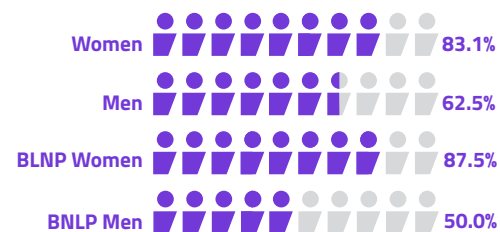
"As a new mom, I hadn't received a pay increase in three years so after my second baby I started looking for a different job in a more inclusive company."
- Mid-level White woman

WORKING A SECOND SHIFT

Tech women caregivers are 1.5X more likely to report feeling they work a second shift of unpaid labor at home than women who are not caregivers. This feeling increases to 2.5X more for women who report that their partner's career is a priority over their own.

THE WAY FORWARD: A CALL TO ACTION

EXECUTIVES

- Provide equal paid caregiver leave for all parents regardless of gender or primary parent status.
- Provide childcare supports to employees such as childcare center discounts, childcare subsidies, emergency backup care, and DCAPS/FSA.
- Implement a caregiver ERG/affinity group and regularly check with them to understand how to better support caregivers in the workplace.
- Invest in returnship programs to bring parents back into the tech workforce.

POLICY MAKERS

- Pass the FAMILY Act and Child Care for Working Families Act.

BURNOUT AND LACK OF BELONGING ARE PARTICULARLY HIGH FOR TECH WOMEN WITH DISABILITIES
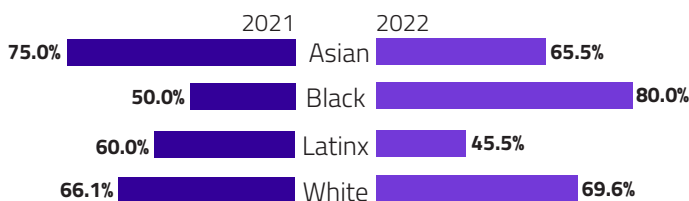
According to the World Health Organization,[11] about 16.0% of the global population live with a disability. In the United States, about 1 in 4 adults have some type of disability according to the Center for Disease Control and Prevention.[12] Given that people with disabilities make up such a large proportion of the population, it is crucial that more technologies are created by and for people with disabilities, to ensure that their unique experiences and perspectives are included in technology design.

DISABILITY DISCRIMINATION

Overall, 66.7% of technologists with disabilities are reporting being discriminated against because of their disability. However, when we look at the breakdown by gender, we see that women and non-binary technologists are experiencing this at higher rates than men.

Women	69.0%
Non-binary	90.0%
Men	50.0%

SENSE OF BELONGING AT WORK

Technologists with disabilities are reporting a low sense of belonging at their workplace. The gender breakdown reveals that in fact, women with disabilities are experiencing an even lower sense of belonging than other disabled genders, with only 50.9% indicating they have a sense of belonging versus 71.9% for men and 71.4% for non-binary technologists.

Percent of disabled tech women who have a sense of belonging by type of disability

Learning disability	Mobility-related disability	Health-related disability	Autism	Mental health condition	Attention deficit
62.5%	57.1%	56.8%	50.0%	49.1%	47.1%

Percent of disabled women technologists who experience disability discrimination by race/ethnicity

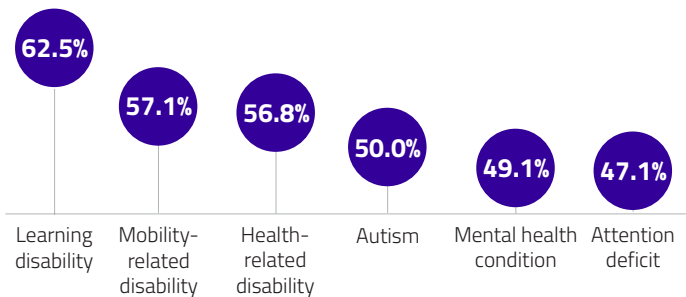|	2021		2022
Asian	75.0%		65.5%
Black	50.0%		80.0%
Latinx	60.0%		45.5%
White	66.1%		69.6%

BURNOUT

Technologists with disabilities are significantly more likely to experience burnout than those without disabilities. However, women technologists with disabilities are **1.3X** more likely to experience burnout then men with disabilities. This may be due, in part, to the **1.8X** greater likelihood of women with disabilities feeling like they work a second shift of unpaid labor in their home, compared to men with disabilities.

> "[We need] a common understanding of class and disability needs and supports to open the gates a bit. So much of getting through grad school and into tech is so hostile to autistic folks (especially networking norms) and assumes a fairly high economic standing already."
> *-Entry-level White non-binary individual*

THE WAY FORWARD: A CALL TO ACTION

EXECUTIVES

- Develop formalized accommodations policies and ensure that employees are not punished for using them.
- Remove ableist language from job descriptions. Instead of using language requiring a specific ability (e.g., speak, lift, walk, etc.) use language that describes the intended action (e.g., communicate, move).
- Train managers on addressing ableism in their management, including learning and attention disabilities.

POLICY MAKERS

- Pass equal pay for workers with disabilities.

11. World Health Organization. (2023, March 7). *Disability*. World Health Organization. Retrieved March 22, 2023, from https://www.who.int/news-room/fact-sheets/detail/disability-and-health
12. Centers for Disease Control and Prevention. (2023, January 5). *Disability impacts all of us infographic*. Centers for Disease Control and Prevention. Retrieved March 22, 2023, from https://www.cdc.gov/ncbddd/disabilityandhealth/infographic-disability-impacts-all.html
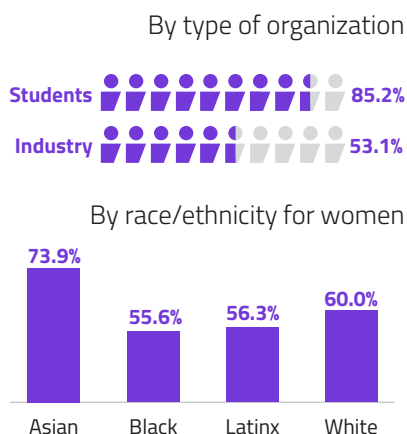
SEXUAL ORIENTATION DISCRIMINATION INCREASES FOR LGBTQIA TECH WOMEN OF ALL RACES/ETHNICITIES

According to Gallup, the percent of U.S. adults who are LGBTQIA is 7.2%.[13] In 2022, we found that 53.7% of women technologists who are LGBTQIA report being discriminated against because of their sexual orientation, up from 50.3% in 2021.

BURNOUT

LGBTQIA technologists tend to have higher values of burnout compared to technologists who are not LGBTQIA. Overall, 78.8% of women technologists who are LGBTQIA report experiencing burnout.

Percent of LGBTQIA women technologists who report often feeling mentally exhausted or drained at the end of a work or school day
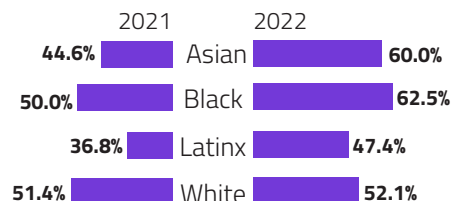
By type of organization

Students 85.2%
Industry 53.1%

By race/ethnicity for women

Asian	Black	Latinx	White
73.9%	55.6%	56.3%	60.0%

SEXUAL ORIENTATION DISCRIMINATION

Percent of LGBTQIA technologists who experience discrimination based on their sexual orientation

By gender

Women 53.7%
Non-binary 68.4%
Men 40.4%

By race/ethnicity for women

	2021	2022
Asian	44.6%	60.0%
Black	50.0%	62.5%
Latinx	36.8%	47.4%
White	51.4%	52.1%

"[The most impactful experience for me has been] joining a company that has a focus on and encourages every employee to bring their authentic self to work. This is the first time in my professional career I felt welcome as a LGBTQ+ woman."
- Senior-level White woman

THE WAY FORWARD: A CALL TO ACTION

EXECUTIVES

POLICY MAKERS

Pass the Equality Act. ■

INDIVIDUALS

Ensure your language does not assume gender, sex, or pronouns of others or their partners. ■

■ Assess and improve structural equity for LGBTQIA employees by participating in the annual Human Rights Campaign's Corporate Equality Index.

■ Push back against public policy targeting the LGBTQIA community, including bills similar to Don't Say Gay/Trans, Drag queen performance bans, and Stop WOKE Act.

■ Formalize LGBTQIA ERGs/affinity groups and regularly check in to see how the workplace can better support its LGBTQIA employees.

13. Jones, J. M. (2023, February 17). *U.S. LGBT identification steady at 7.2%*. Gallup.com. Retrieved March 22, 2023, from https://news.gallup.com/poll/470708/lgbt-identification-steady.aspx

LEADERS MUST TAKE STEPS TO ENSURE NON-BINARY TECHNOLOGISTS ARE SEEN, HEARD, AND SUPPORTED

Research often overlooks numerically small groups because it is impossible and irresponsible to make broad statistical claims based on such small sample sizes. Our sample contained only 24 non-binary respondents; therefore, we cannot make generalizable claims for their experiences in the tech ecosystem. However, it is crucial that small sample sizes do not cause us to further marginalize those individuals who already experience a high degree of marginalization, erasure, and oppression. The data presented in this section strictly reflect the experiences of those who responded to the survey and are not meant to represent the wider experiences of non-binary technologists. Non-binary information was included in other parts of this report whenever at least 10 non-binary people submitted responses.

RETENTION

Non-binary tech respondents are the most likely to report that they see themselves working at their current place of work a year from now.

Women	63.9%
Non-binary	92.9%
Men	70.9%

POSITIVE EXPERIENCES

The non-binary technologists in this sample seem particularly pleased with their current jobs. In addition to retention, when compared to tech men and women, non-binary technologists had the highest levels of belonging, psychological safety, and job satisfaction.

Only **58.0%** of companies provided a non-binary or third gender option to employees in 2022.
-Top Companies for Women Technologists '22
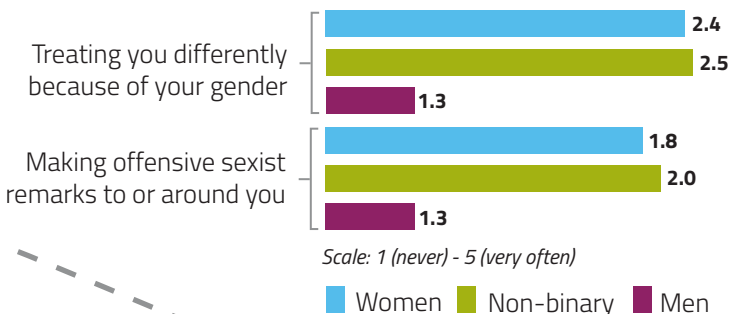
Top 3 Reasons Non-binary Tech Respondents:

Stay in their workplace

1. Team/coworkers

2. Compensation

3. Diversity of workplace

Leave their workplace

1. Lack of challenging opportunities

2. Lack of advancement opportunities

3. Received a better job offer

Non-binary tech respondents are having the worst experiences in the workplace for the following:

Treating you differently because of your gender
- Women: 2.4
- Non-binary: 2.5
- Men: 1.3

Making offensive sexist remarks to or around you
- Women: 1.8
- Non-binary: 2.0
- Men: 1.3

Scale: 1 (never) - 5 (very often)

■ Women ■ Non-binary ■ Men

THE WAY FORWARD: A CALL TO ACTION

EXECUTIVES
- Provide a third gender option and a "prefer to specify" option whenever collecting gender data.
- Report your organization's non-binary gender data even when too small for statistical significance.
- Assess and address the ways your organization reinforces the gender binary (e.g., bathrooms, dress codes, or policies specific to men or women).

POLICY MAKERS

Pass the Gender Recognition Act (New York and California) at the federal level.

INDIVIDUALS

Add pronouns to email signature and virtual platform names; include pronouns with introductions.

INTENTIONAL RECRUITMENT OF NATIVE AMERICAN AND PACIFIC ISLANDER TECHNOLOGISTS IS NEEDED TO ADDRESS THE EXTREME UNDERREPRESENTATION OF THESE GROUPS

Similar to the issue with non-binary respondents, the sample size of Pacific Islander and Native American technologists was too small to make any generalizable claims or to compare in other sections of this report. And yet, it is important that these communities have a voice and visibility. The below data represent only the respondents to this survey and should not be assumed to speak to the broader population of Native American and Pacific Islander communities in tech.

Percent of tech women who are experiencing harassment

Gender/gender identity
- 100%
- 83.1%
- 82.9%

Racial/ethnic
- 60.0%
- 68.2%
- 68.8%

Any harassment
- 100%
- 86.9%
- 86.8%

■ Native American ■ Pacific Islander ■ All tech

Average Job Satisfaction of Technologists

Scale: 1 (least satisfied) – 10 (most satisfied)

Women		All Technologists
7.0	Native American	7.3
6.9	Pacific Islander	7.2

Native American and Pacific Islander women make up only **0.07%** and **0.04%** of the tech workforce, respectively.
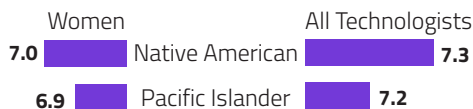
Top Companies for Women Technologists found:

- Companies with a formal process to hold leaders accountable for DEI goals have **1.8X** more Native American tech new hires.

- Companies that publicly release workforce diversity data have **4.2X** more Pacific Islander tech women.

- Top Companies for Women Technologists '22

THE WAY FORWARD: A CALL TO ACTION

EXECUTIVES

INDIVIDUALS

Connect with Native American or Pacific Islander tech women through the following organizations: Asian-Pacific American Communities (APAC); Natives in Tech; Society of Asian Scientists and Engineers (SASE); Tech for AAPI Alliance.

- Sponsor and collaborate with organizations that directly serve Native American and Pacific Islander communities like Natives in Tech and Purple Mai'a Foundation.

- Engage community stakeholders and Asian American and Native American Pacific Islander Serving Institutions (AANAPISI) for recruitment.

METHODS

DATA COLLECTION

The data collection for this report occurred between September 2022 and December 2022. We invited individuals to participate in the anonymous survey during the Grace Hopper Celebration 2022 and solicited additional responses through social media and AnitaB.org newsletters. Additionally, about 25.0% of our respondents came from the paid platform Prolific. The survey was open globally to all adults aged 18 and over of all genders, and both technologists and non-technologists were encouraged to participate. All questions were optional except for the following: informed consent, country of residence, and occupational category.

VALIDATED SCALES

The following validated scales were used to measure key constructs in this study:

- **Sexual Experiences Questionnaire:** Frequency of unwanted sexual attention, touching you in a way that made you feel uncomfortable, making crude sexual remarks to you[14]

- **Ethnic Harassment Experiences Scale:** Frequency of someone making assumptions about you because of your race, asking you to serve as a "spokesperson" for your racial group, treating you differently because of your race, making derogatory comments about your race, telling jokes about your racial group[15]

- **Psychological Safety Scale:** Level of agreement with the statements It is safe to take a risk on my current team, It is easy to ask other members of my current team for help, I feel valued for my unique characteristics at work[16]

- **Perceived Stress Scale:** Level of agreement with the statements At the end of my working or school day, I feel mentally exhausted and drained, I struggle to find any enthusiasm for my work or school, At work or school, I have trouble staying focused, At work or school, I feel unable to control my emotions[17]

- **Work-life Balance Scale:** Level of agreement with the statements I neglect my personal needs, My work/school and non work/school lives are balanced[18]

ANALYSIS BY GROUPED IDENTITIES

The following demographic categories were grouped for purposes of analysis:

- BLNP includes Black/African American, Hispanic/Latinx/Latine, Native American/Alaskan Native/First Nations/Inuit/Aboriginal, Pacific Islander, Native Hawaiian

- Women of color includes women who are Black/African American, Hispanic/Latinx/Latine, Native American/Alaskan Native/First Nations/Inuit/Aboriginal, Pacific Islander, Native Hawaiian, Asian

LIMITATIONS

- Although the survey was open globally, 60.4% of respondents were from the U.S., so results are skewed toward United States experiences. Non-U.S. responses are included in all findings except the average compensation chart in the Pay Equity section of this report.

- Most men respondents were obtained through the paid platform Prolific, thus likely skewing the sample toward respondents more in financial need than the average respondent. Because of this limitation, this report only showcases findings for men when it could be supported through triangulation with other existing data and research.

- This study did not receive a representative sample of key groups in tech including: Native Americans, Pacific Islanders, or non-binary people. These groups are included in the report with the caveat that these findings should not be considered generalizable.

- This study oversampled both women and women of color.

14. Fitzgerald, L. F., Gelfand, M. J., & Drasgow, F. (1995). Measuring sexual harassment: Theoretical and psychometric advances. *Basic and Applied Social Psychology, 17*(4), 425-445.
15. Schneider, K. T., Hitlan, R. T., & Radhakrishnan, P. (2000). An examination of the nature and correlates of ethnic harassment experiences in multiple contexts. *Journal of Applied Psychology, 85*(1), 3.
16. Edmondson, A. (1999). Psychological safety and learning behavior in work teams. *Administrative Science Quarterly, 44*(2), 350-383.
17. Cohen, S., Kamarck, T., and Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior, 24*, 386-396.
18. Brough, P., Timms, C., O'Driscoll, M. P., Kalliath, T., Siu, O.-L., Sit, C., & Lo, D. (2014). Work–life balance: A longitudinal evaluation of a new measure across Australia and New Zealand workers. *The International Journal of Human Resource Management, 25*(19), 2724–2744. https://doi.org/10.1080/09585192.2014.899262

Conclusion

To create a more inclusive and equitable tech ecosystem, it is not enough to fix the holes that currently exist in tech women's path. Any single road will not work equally for all women technologists. Rather, the way forward must be a network of paths, each tailored for technologists with different identities and at different career levels. Organizations must be aware of their own employees' intersectional identities, seek feedback on their unique experiences, and address their specific needs. They must measure the outcomes of their processes and policies at multiple intersections, to ensure they are equitable for all. They must continue to push for equity even when the political climate makes doing so feel fraught or dangerous. Where there is a roadblock, remove it; where there is a gap, bridge it; where there is a dead-end, forge a new way forward.
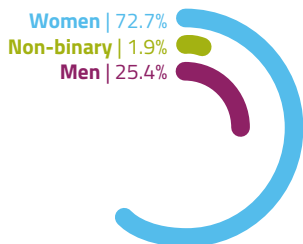
RESPONDENT UNIVERSE

The survey received a total of 1,708 responses. All demographic questions in the survey were optional except for occupation. The demographics of our entire sample are as follows:
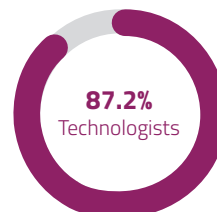
GENDER (N=1524)
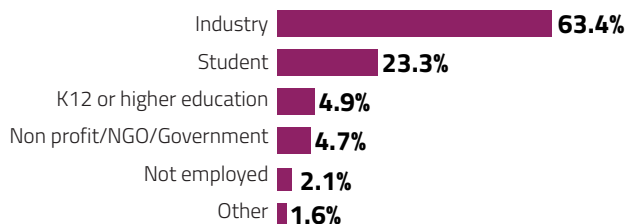Respondents specified to select their gender:

Women | 72.7%
Non-binary | 1.9%
Men | 25.4%

TECHNOLOGIST (N=1505)
Respondents specified whether they considered themselves a technologist:

87.2%
Technologists

OCCUPATION (N=1520)
Respondents specified their current occupational category:

Industry	**63.4%**
Student	**23.3%**
K12 or higher education	**4.9%**
Non profit/NGO/Government	**4.7%**
Not employed	**2.1%**
Other	**1.6%**

CAREER LEVEL* (N=1435)
Respondents specified their career level:

Intern	Entry	Mid	Senior*
10.0%	**24.9%**	**37.5%**	**27.6%**
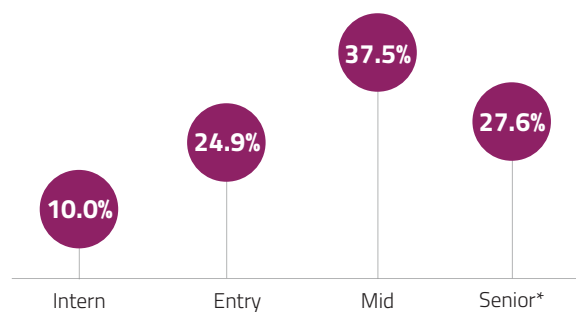
LGBTQIA (N=1523)
Respondents specified whether they are in the LGBTQIA community:

16.8%
LGBTQIA
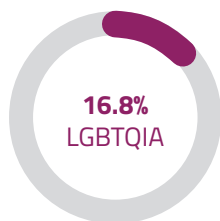
CAREGIVERS (N=1422)
Respondents specified whether they are a caregiver:

29.8%
Caregivers

PEOPLE WITH DISABILITIES (N=1439)
Respondents specified whether they have a disability and/or chronic illness:

15.3%
Disabled

RACE AND ETHNICITY (N=1505)
Respondents were asked to indicate their race and ethnicity. Multiple identities could be chosen:

	%Total	% Women
White	47.3%	39.9%
Asian or Asian American	37.3%	44.6%
Hispanic/Latinx/Latine	9.0%	8.9%
Black or African American	8.3%	8.0%
Self-identify	2.5%	3.1%
Middle Eastern or North African	1.3%	1.0%
Native American/Alaska Native/First Nations/Inuit/Aboriginal	0.8%	0.6%
Pacific Islander or Native Hawaiian	0.8%	0.7%

Due to our small sample of executive respondents, we combined senior and executive respondents into the senior level.

About AnitaB.Org

At AnitaB.org, we envision a future where the people who imagine and build technology mirror the societies for whom they build it. We connect, inspire, and guide women & non-binary individuals in technical fields, as well as organizations that view technology innovation as a strategic imperative.

Our social enterprise supports women in technical fields, the organizations that employ them, and the academic institutions that train future generations. A full roster of programs helps women grow, learn, and develop their highest potential.

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