



# **Executive Summary**

THE **2023** STATE OF INCLUSION BENCHMARK IN CYBERSECURITY





# THE DAY-TO-DAY EXPERIENCES OF WOMEN IN CYBERSECURITY

Previous studies have illustrated that the representation of women in cybersecurity is much lower than it should be, but can't explain why or how we can improve matters. In collaboration with DEI firm Aleria, WiCyS spearheaded a first-of-its-kind assessment to discern the real causes of disparities in the experiences of women in cybersecurity. This groundbreaking data will help us understand how to best pinpoint and remove the barriers that keep women from being recruited, hired, retained and advanced at the same rate as men.

The first annual State of Inclusion Benchmark in Cybersecurity assessment was completed by collecting data from just over 1,000 employees including approximately 35% men and 65% women, representing more than 20 different organizations.

# **KEY FINDINGS**

# GENDER DISPARITIES



Workplace experiences of women are dramatically worse than men across virtually every category. When averaged across all experience categories, women are excluded at a rate **2X** higher than men.



Women are roughly **5X** more likely than men to cite their Direct Managers and Peers as sources of experiences that interfere with their satisfaction and their ability to perform at their peak.

# **TOP FOUR CATEGORIES OF EXCLUSION:**

Respect • Career & Growth Access & Participation • Recognition

# **SOURCES OF EXPERIENCES OF EXCLUSION:**

58% Leadership • 50% Direct Managers 39% Peers • 10% Policy

#### RECURRING THEMES FOR WOMEN'S EXPERIENCES OF EXCLUSION:

gender bias • social exclusion • professional exclusion • tokenism • lack of feedback • underutilized skills • glass ceiling • menial tasks • inadequate compensation • being passed over for promotions • inadequate recognition

# ADDITIONAL EXAMPLES OF WORKPLACE EXCLUSION:



### (DIS)ABILITIES:

Folks that identified with a (dis) ability had higher sources of exclusion compared to those enjoyed by members of the majority (i.e, white, cisgender, heterosexual man with no disabilities) at a level comparable to the impact of gender.



### **INTERSECTIONALITY:**

When considering all identity traits, it was found that the level of exclusion continued to increase depending on the degree of intersectionality (the number of identity traits by which an individual differs from a member of the majority).

# WICYS STRATEGIC PARTNERS:

# PARTICIPANTS THAT IDENTIFIED AS EMPLOYEES OF WICYS STRATEGIC PARTNERS HAD:

49% fewer experiences of exclusion • 64% higher self-reported levels of job satisfaction





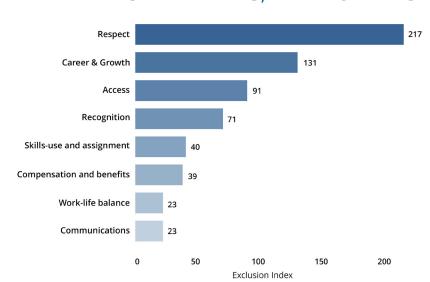
# QUANTIFYING INCLUSION: WHAT IS HAPPENING AND WHY IT IS HAPPENING

The collected data was used to calculate the exclusion index, a numerical value that combines:

- **Prevalence:** the proportion of participants who shared at least one experience
- **Severity:** the average number of experiences shared per person
- **Frequency:** one-time or recurring

Taken together, the qualitative (verbal descriptions) and quantitative (categorization) data provides powerful insights for the 2023 State of Inclusion Benchmark in Cybersecurity, providing guidance for the entire cybersecurity sector.

# WHAT IS HAPPENING, AND HOW IT IS INFLUENCED BY GENDER

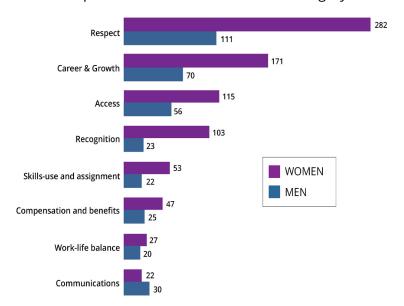


To understand what is happening, the rank-ordering of the Experience Categories is shown to the left.

Respect is the category with the highest overall exclusion index at 217, followed by Career & Growth, Access and Recognition.

It is very common for the Respect category to have the highest score, especially in technical fields. However, what is unusual is the sharp difference in exclusion index between Respect and the rest of the categories, confirming that Respect is a major issue in cybersecurity.

The addition of participants who identify as men for the complete 2023 State of Inclusion Benchmark makes it possible to separate the index scores of each category on the basis of gender.



# HOW MUCH HIGHER IS THE EXCLUSION INDEX FOR WOMEN THAN FOR MEN IN EACH CATEGORY?

Recognition: **4.5** times

Respect: 2.5 times

Career & Growth: 2.4 times

Access: 2.1 times

The figure shows a staggering difference in the overall experiences of women compared to men. By doing a deeper dive into the Career & Growth category, the data highlights a glass ceiling occurring for women at the 6-10 year tenure mark in their careers. Nearly half of women (48%) shared experiences related to Career & Growth compared to only one quarter of men (26%).

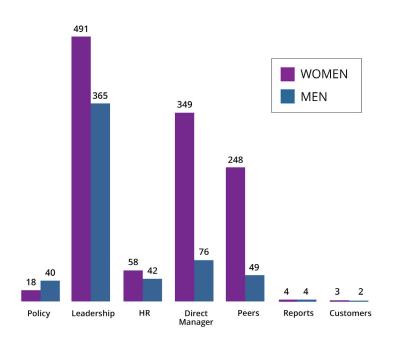




# WHY IT IS HAPPENING

When participants share an experience they select one or more sources of experiences. The exclusion index is then calculated for each source to understand what or who is causing experiences to happen.

# **Sources of Experiences of Exclusion:**



# HOW MUCH HIGHER IS THE EXCLUSION INDEX FOR WOMEN THAN FOR MEN IN EACH SOURCE?

Peers: **5.1** times

Direct Manager: 4.6 times

Leadership: 1.3 times

These discrepancies speak clearly to the pervasive problem in this field: women have much worse experiences than men, especially when it comes to the most frequent interactions, which typically take place with Peers and Direct Managers.

# **Heatmap:**

	WOMEN						
	Policy	Leadership	HR	Direct Manager	Peers	Reports	Customers
Access	13	50	13	38	38	6	4
Career and Growth	13	71	25	59	30	1	0
Communications	4	17	6	18	15	5	2
Compensation and benefits	12	32	20	26	9	1	0
Recognition	5	48	10	43	31	2	3
Respect	8	78	19	63	67	8	7
Skills-use and assignment	7	34	9	28	23	3	2
Work-life balance	6	21	5	18	17	0	2

	MEN						
	Policy	Leadership	HR	Direct Manager	Peers	Reports	Customers
Access	12	29	10	10	12	5	2
Career and Growth	9	36	8	19	8	2	1
Communications	7		9	7	7	4	2
Compensation and benefits	6	19	12	12	2	1	
Recognition	2	18	2	11	7	1	0
Respect	10	37	11	14	19	4	4
Skills-use and assignment	4	18	4	8	8	2	3
Work-life balance	8	16	6	7	5	2	2

The heatmaps above show the exclusion score for every combination of category (rows) and source (column) for women (left) and men (right). The darker the shading, the higher the score. It is immediately obvious that women, much more so than men, struggle with lack of Respect from Leadership, Direct Manager and Peers. They also show much higher scores for Career & Growth, Access and Recognition.



# THE DAY-TO-DAY EXPERIENCES OF WOMEN IN CYBERSECURITY

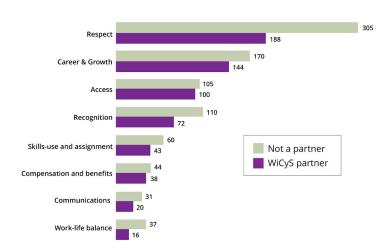
Beyond the statistics, the detailed experiences shared by participants offer poignant examples of the day-to-day experiences that impact women. The table below shows a few representative experiences drawn from some of the recurring themes encountered. These statements were shared with permission.

Generally disrespectful behaviors	"After introducing myself, I have had individuals ask to speak to a 'guy who works in IT' instead of me."
	"I work in an environment that is at least 80% male. Some of my male colleagues curse too much, belch, and joke about inappropriate things for an office."
Sexually inappropriate	"I don't feel comfortable wearing the clothing I feel my best in, because when I do, men in my department stare at my body."
	"Colleagues would play pornographic movies as I arrived to meetings. One time a colleague played a movie like this when we were meeting with a customer."
	"A male manager took me to a strip club and then kissed me."
Social exclusion	"Male peers would have important work conversations at lunch when I was not with them ignoring my absence, hence my potential contribution."
	"I was not invited to lunch, whereas other white colleagues were included."
	"Work and industry 'social' events are oriented towards the majority (males), e.g., whisky tasting and golf days."
Underappreciated skills and experience	"As a software engineer I was being assigned business analyst work only. I told my manager I wanted to do engineering work and not administrative work. My manager then went to my department and complained that I was not being a team player and was too 'emotional' in the workplace."
	"I was the main subject matter expert at a meeting but some attendees directed substantive discussion and attention gestures at the men in the room instead of talking to me."
Lack of proper recognition	"When you come up with an idea, its met with silence, then someone else repeats your idea and everyone gets all over it."
	"A previous boss told me that I should draft a document because I was good at it but gave the credit to someone else so they could get promoted."
Requests to do menial tasks	"Male leaders regularly decide to host lunches for employee appreciation, then expect the female employees who were also in leadership, to do the ordering/setting up/clean up."
	"Peer continues to make comments indicating their work is harder and more important than mine. Then asks me to schedule meetings for them as I have more time and I am 'good at organizing'."
Tokenism	"When I was promoted to Level 6 as a Chief Engineer, male colleagues talked behind my back saying that I only got the position because I was a woman."
	"Was advised that I was assigned to a task force because they needed/wanted someone who 'didn't have something between their legs'."





# THE IMPACT OF WICYS PARTNER STATUS



Additionally, it was found that employees of WiCyS strategic partner firms enjoyed greater inclusion.

Non-partner employees had roughly 1.5X more experiences of exclusion than WiCyS strategic partner employees.

Looking at individual categories, we see that employees of WiCyS strategic partners enjoy greater inclusion in all categories, especially in Respect and Recognition.

# CONCLUSIONS: WHY MEASURING INCLUSION MATTERS

The 2023 State of Inclusion Benchmark in Cybersecurity is the first-ever assessment to report extensive inclusion data across an entire industry sector. This is a watershed moment, not only for the field of cybersecurity, but for how organizations in general think about the impact of DEI on their employees.

Our partner, Aleria, has shown conclusively through other studies that:

# INCLUSION IS WHAT YOU DO, DIVERSITY IS WHAT YOU GET.

What INCLUSION means to an employee:









What INCLUSION means to an organization:









# INCLUSION IMPACTS THE BOTTOM LINE

Aleria has created an interactive calculator that, given an organization's revenues, number of employees and level of diversity, can estimate the total loss resulting from some groups having lower levels of inclusion.

For instance, consider a company generating \$1 billion in revenues with 4,000 employees, of whom 25% identify as women and 10% as people of color. Using average exclusion scores, Aleria can estimate that the company is losing roughly \$12 million per year from productivity losses and another \$11 million from unwanted attrition, for a total annual loss of \$23 million simply because it is treating women and people of color differently than white men.





# **WHAT'S NEXT**

Inclusion is a journey, let the WiCyS State of Inclusion Benchmark be the launching pad. Once an understanding of the importance of inclusion is acknowledged, the journey has begun. Each company approaches next steps in a variety of ways but some might include:

- Share the WiCyS State of Inclusion Benchmark with key stakeholders within the organization.
- Check out WiCyS inclusive resources here: <a href="https://www.wicys.org/resources/wicys-inclusive-resources-center/">https://www.wicys.org/resources/wicys-inclusive-resources-center/</a>.
- Encourage all within the organization to become a WiCyS member, join the mentor/mentee program and participate in all WiCyS efforts as we continue to build a gender-diverse workforce.
- While working on strategies to improve respect for women in cybersecurity, ensure that career growth and opportunites for women on cybersecurity teams are identified, clearly mapped out and communicated. Ensure that management are coached appropriately and there is proper investment in these initiatives.
- Identify the financial impact of inclusion utilizing Aleria's inclusion calculator here: <a href="https://www.aleria.tech/inclusion-calculator">https://www.aleria.tech/inclusion-calculator</a>.
- Dive deeper and have an individual State of Inclusion assessment conducted company-wide.
- Stay tuned to WiCyS as we will be parsing out the data further, identifying additional gaps and building programming efforts throughout 2024 to help overcome these challenges.

Anything that an organization can do to identify and mitigate issues that cause exclusion can expect to see a significant boost in its bottom-line financial results. Furthermore the organization will experience an increase in the overall satisfaction of all its employees, and higher, more sustainable levels of diversity as the employees most impacted by exclusion will enjoy the largest gains.

The primary purpose of our State of Inclusion Benchmark is to help the cybersecurity sector understand how their actions and behaviors prevent women from having greater participation and greater success in their careers. This complements the WiCyS mission to provide many forms of support to women in the industry. It is also clear that measuring inclusion can also show organizations how much money they are losing every year, and how much money they could save by embracing initiatives to support women—and every other employee who is not a member of the majority.

To learn more, visit <a href="https://www.wicys.org/initiatives/wicys-state-of-inclusion/">https://www.wicys.org/initiatives/wicys-state-of-inclusion/</a> or contact info@wicys.org.



