



TESSIAN

THE FUTURE IS CYBER

# Opportunity in Cybersecurity Report 2021

Cybersecurity has jobs, money, and *finally* cred.  
So how do you break in?

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**49%**

of female practitioners said COVID-19 affected their career as a woman in cybersecurity in a **positive** way.

[Jump to Page 5 ↗](#)**94%**

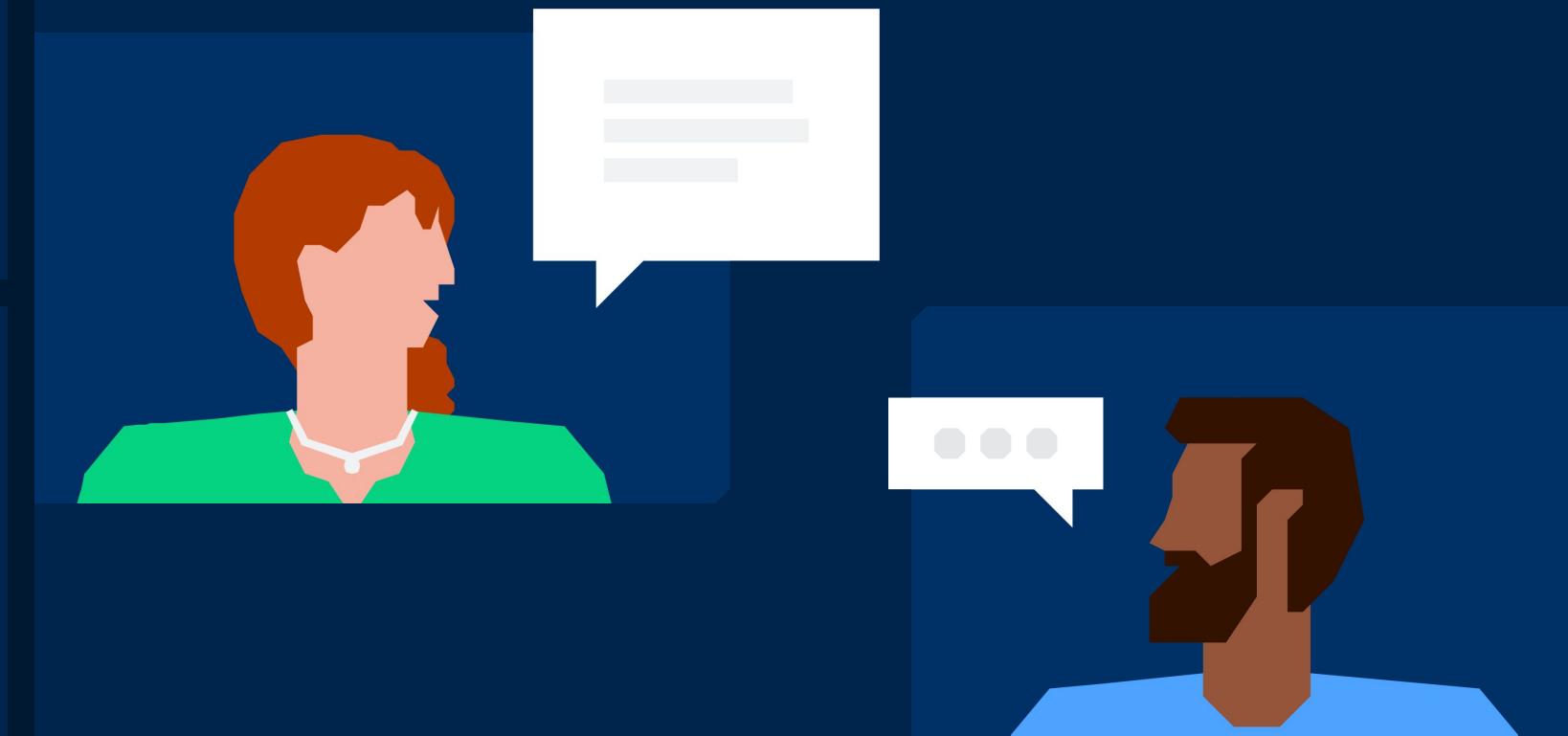
of cybersecurity teams hired new staff members in 2020.

[Jump to Page 4 ↗](#)**↓13% YoY**

This year, 53% of women in cyber say there's a gender bias problem versus 66% surveyed in 2020.

[Jump to Page 5 ↗](#)**76%**

of 18–25 years old say cybersecurity is interesting.

[Jump to Page 6 ↗](#)**88%**

of 18–25 years old say cybersecurity is important.

[Jump to Page 6 ↗](#)**1/3**

of recent grads say they would consider a job in the field.

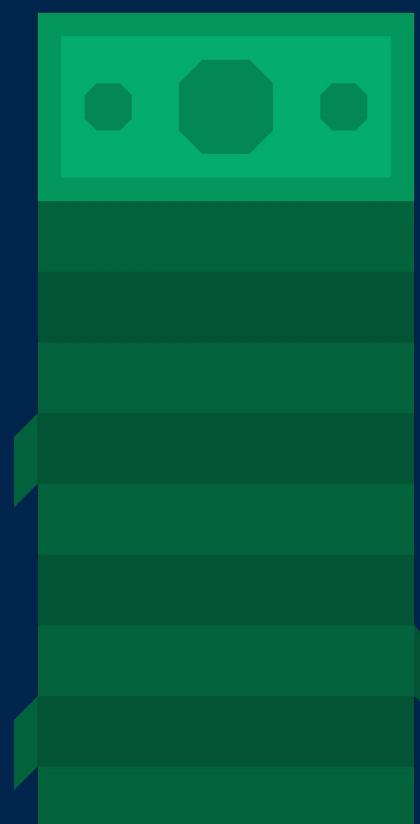
[Jump to Page 7 ↗](#)**x2**

Men are almost twice as likely as women to consider a job in cybersecurity.

[Jump to Page 7 ↗](#)

## Equal pay

47% of women working in cybersecurity said equal pay would help encourage new entrants.

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# (Re)Introduction

Last year, Tessian explored the skills gap in cybersecurity through the lens of the disproportionately low percentage of women working in the field. (The workforce is almost twice as likely to be male.)

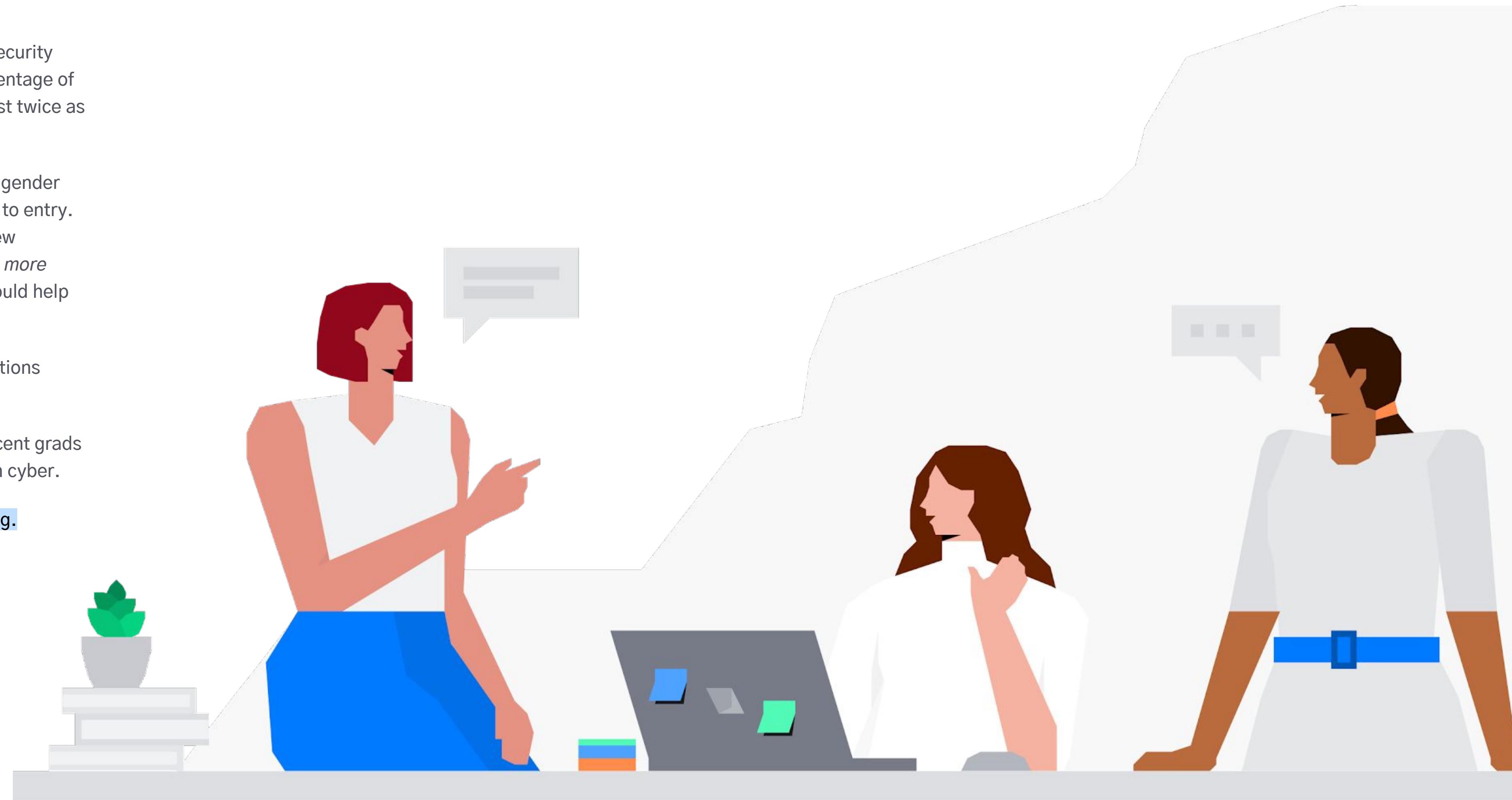
We learned that while – yes – women *did* recognize gender bias in the industry, that wasn't the biggest barrier to entry. Instead, when asked what would help encourage new entrants, working professionals actually said that *a more accurate perception of the industry in the media* would help the most.

This year, we asked women in the field similar questions and...things have changed. **For the better.**

We also went straight to the source, and probed recent grads about their potential interest in pursuing a career in cyber.

The bottom line? **Interest in cybersecurity is growing.**

That's great, because we're still hiring.



# Cybersecurity is pandemic-proof.

COVID-19 has had a profound effect on unemployment rates. But, as the global job market has contracted, cybersecurity appears to have expanded, putting IT and security professionals in high demand.

In fact, according to LinkedIn's [2020 Emerging Jobs Report](#), 10 of the 15 roles with the most significant annual growth are related to computer software, IT, or network security. And, for the first time, the well-known skills gap has actually [diminished](#).

This is backed up by our survey data. 94% of cybersecurity teams [hired new staff members in 2020](#).

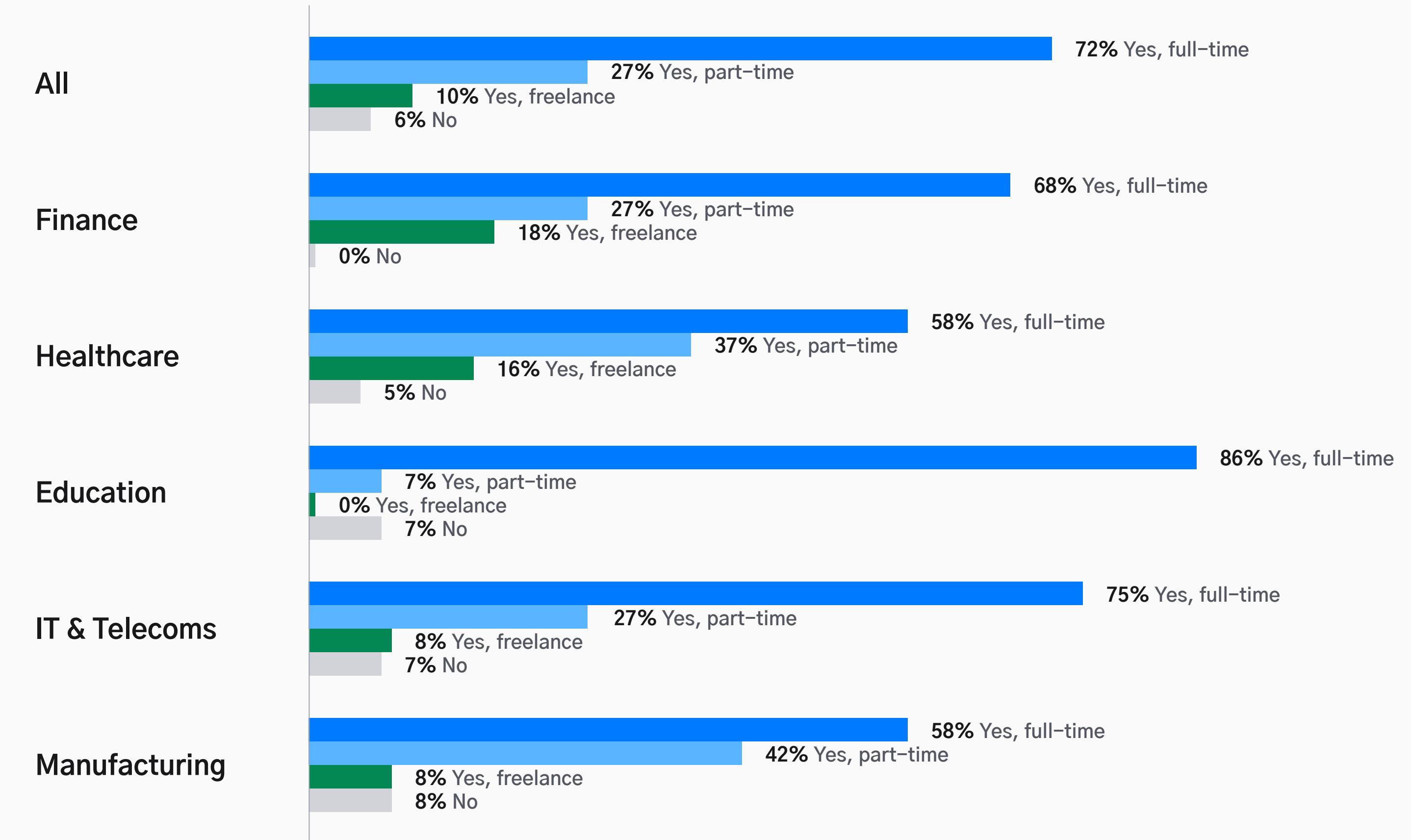
This hiring trend isn't isolated; it's consistent across industries, from Healthcare to Legal.

"We've seen a major shift this last year. Most companies have embraced remote working, giving cybersecurity teams access – some for the first time – to a global talent pool. That's one less barrier to entry, not just for women, but for everyone."



JOHANNA YDERGÅRD  
VP, Detectify Crowdsource

Did your cybersecurity team hire new people to support your department this year?



# Job security, despite uncertainty.

“Uncertain” may have been the buzzword of 2020, but it can’t be used to describe women working in cybersecurity.

89% report feeling secure in their jobs. In the midst of a global recession, what may be even *more* striking is that nearly half (49%) also said that COVID-19 affected their career as a woman in cybersecurity in a positive way.

Is it increased investment in IT that’s driving this contentment? The flexibility of working from home? Or, could it have something to do with reduced gender inequality?

Last year, we asked women if they believed there was a gender bias problem in cybersecurity. [66% said yes](#). This year, it’s down to 53%. Progress.

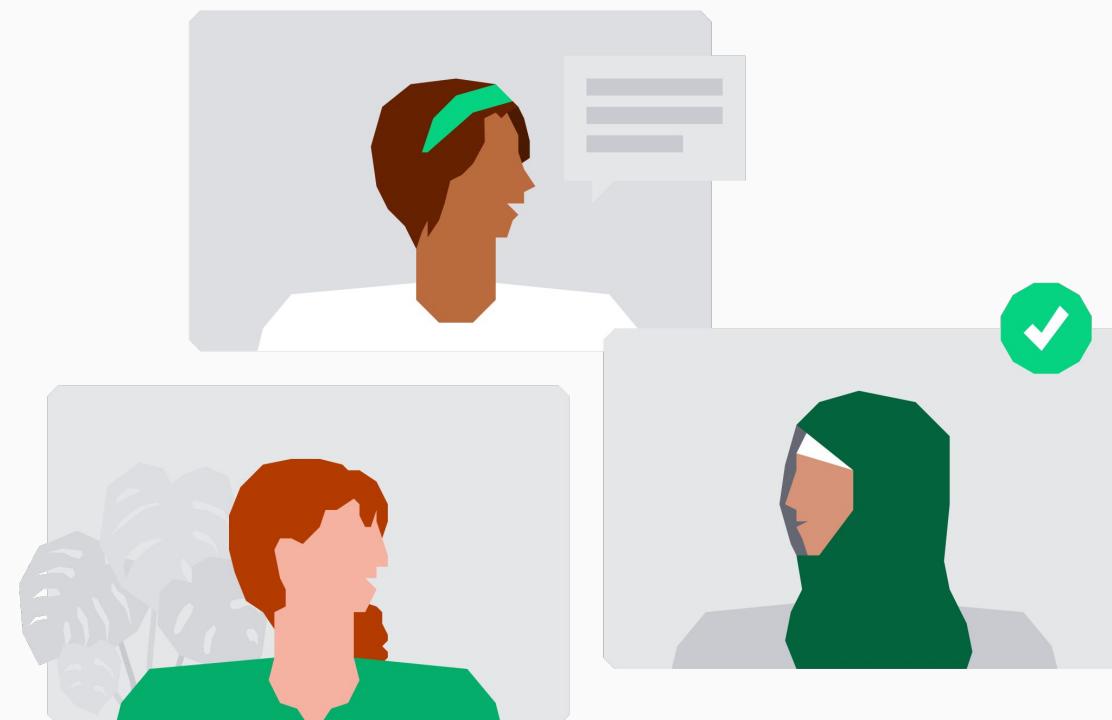
TESSIAN RESEARCH

## Opportunity in Cybersecurity Report 2020



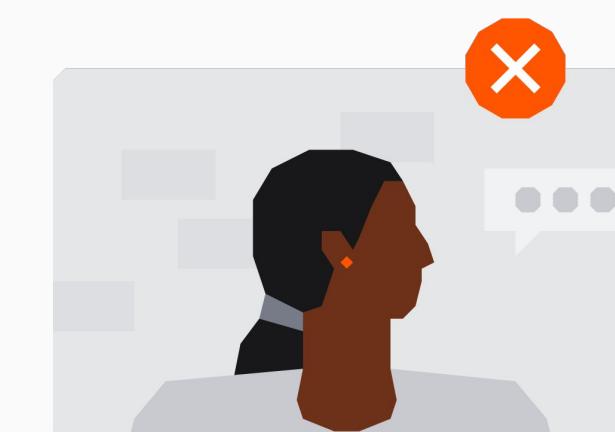
LEARN MORE

Has COVID-19 affected your career as a woman in cybersecurity?

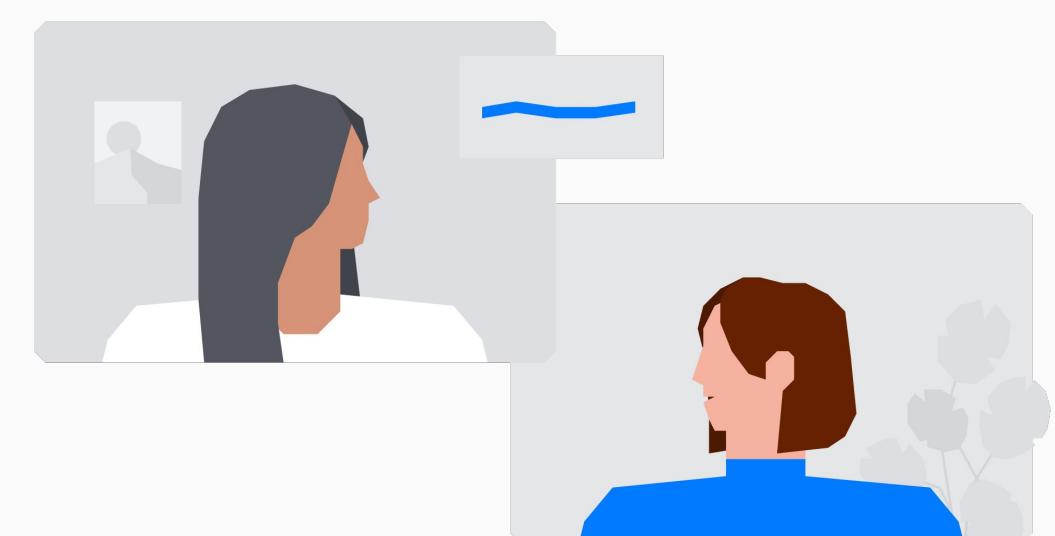


**49%**  
Yes, in a positive way

**42%** No Impact



**9%**  
Yes, in a negative way



To what extent do you agree or disagree with the following statement:

Cybersecurity as an industry/field is important

Disagree 1%

88% Agree

Neither agree nor disagree 11%

Cybersecurity as an industry/field is interesting

Disagree 6%

76% Agree

Neither agree nor disagree 19%

## The voice of a generation.

In 2020, [42% of women](#) working in cybersecurity said that one of the biggest deterrents for new entrants was that the industry isn't considered "cool" or "exciting".

We went directly to the source by asking recent graduates. Our data tells a different story.

76% of 18–25 years old said that cybersecurity is interesting. 88% said it's important. Male and female...the sentiment is the same across the board.

We may be biased, but it makes sense.

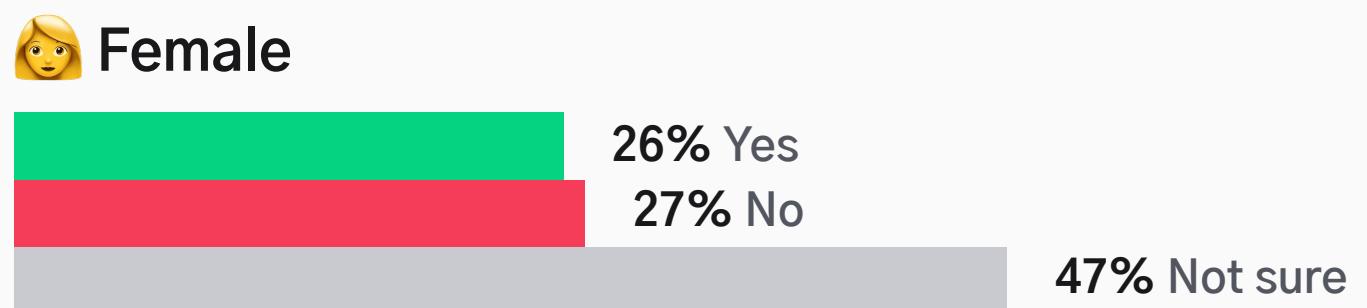
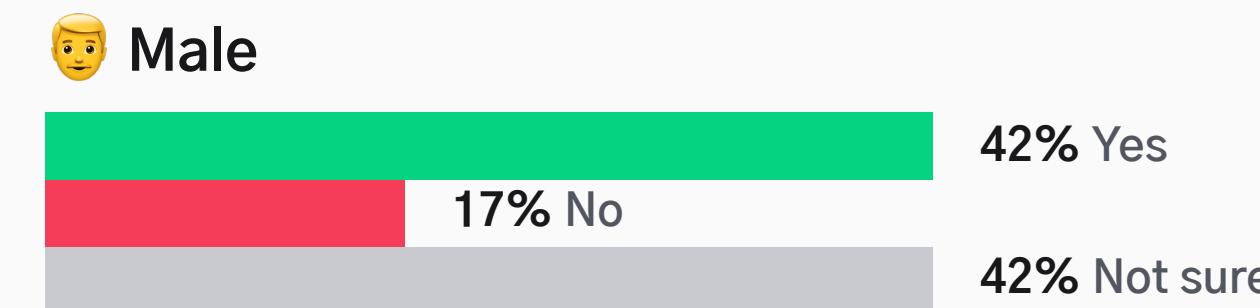
In the last year, cybersecurity has been associated with TikTok, the US presidential election, Twitter, and Bitcoin. It's mainstream and high stakes. **But, it's still up to security leaders and hiring managers to communicate the impact these roles can (and do) have.**



"Every day, you'll read about a cybersecurity breach, a privacy issue in big tech, or some type of online scam. While none of these things are "good" news, they should excite – or least motivate – people! Cybersecurity is leading the way in solving these problems. Why not be a part of it?"

**VANESSA MIRANDA**  
Head of Engagement at Cyber Collective

## Would you consider a job in cybersecurity?



Not good at programming  
Its' the future 🚀  
Don't want to work behind a computer all day 💻

I would feel good knowing that my work is important  
I think it's important, but I don't think I would qualify. I'm not the best with tech

Don't know enough about it  
Ever-changing, not boring  
To help the world

Money money money my dude 💰💰💰  
I wouldn't know where to start  
I'm not skilled with computers or coding

I don't really know what it is  
I think it's both interesting and essential  
Someone has to protect our data

Not technically minded 😊  
I am more of a creative person ✎

Source: Open ended responses from survey respondents

## On the fence.

Despite Gen Z describing cybersecurity as “interesting” and “important”, just 31% say they would consider a job in the field, with men almost twice as likely than women.

But, there’s hope. The majority of recent grads don’t seem to have a strong preference either way. Nearly half (45%) just aren’t sure whether or not cybersecurity is for them.

When asked why, many were worried that they didn’t have the skills they’d need to thrive. Others weren’t sure how to navigate a career change.

That means there’s work to be done. To make the industry more appealing, we have to first make it more accessible by painting a clear picture of what the work actually entails and how to break into the industry.

# Soft skills matter, too.

IT skills and knowledge of computer science and engineering may be prerequisites for *some* roles in cybersecurity. But *all* roles require soft skills.

In 2020, we asked cybersecurity professionals what the most important skills are to thrive in various roles. While data analytics stole the top spot, creativity, collaboration, and people management were all highly revered, too.

If you ask women working in cybersecurity, though, skills aren't the biggest barrier to entry.

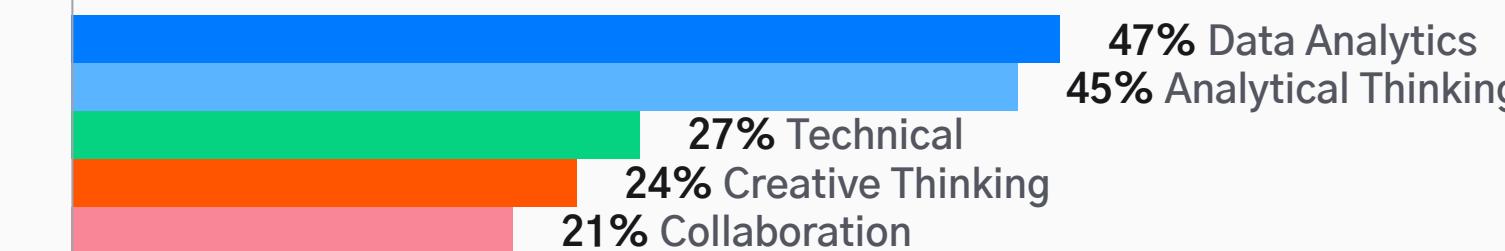
"I think people view cybersecurity as a black art. But, it's really not that obscure! There's an incredible range of opportunities available, and not all of them require technical skills."



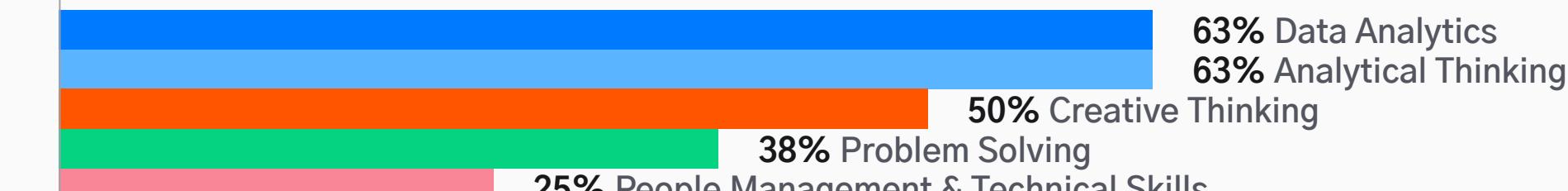
SWATI LAY  
CTO, Funding Circle

What do you think are the most important skills to thrive in your role?

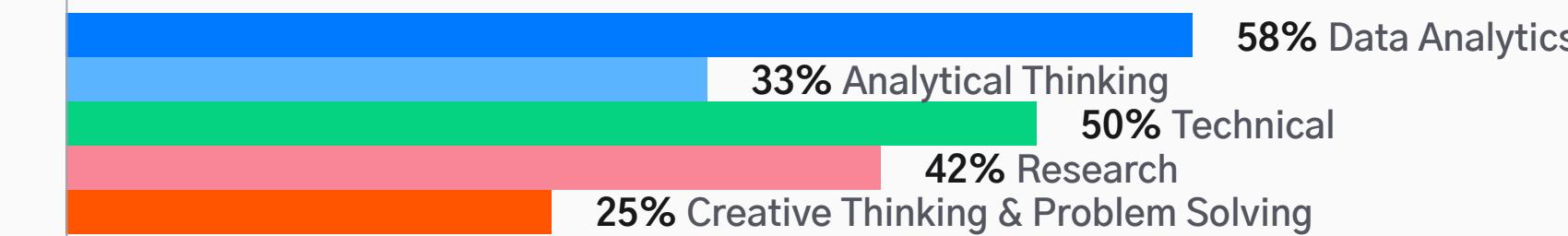
All Roles



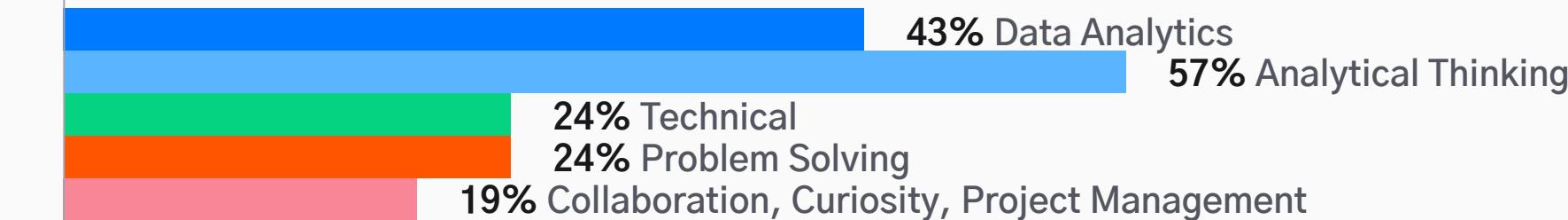
CISO



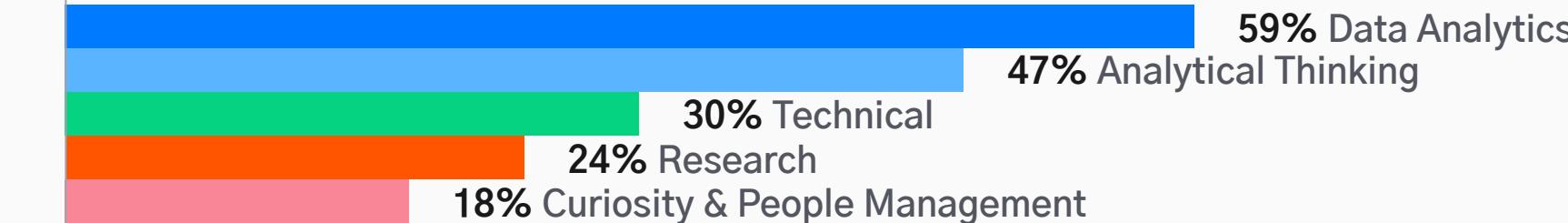
Network  
Engineer



Risk &  
Compliance



Data  
Scientist



# Money talks.

According to female practitioners, there are a lot of things that would encourage other women to consider roles in the field.

Role models and apprenticeship programs. A greater emphasis on STEM subjects. Cybersecurity-specific curriculums.

But, more than anything else....money. More specifically, equal pay.

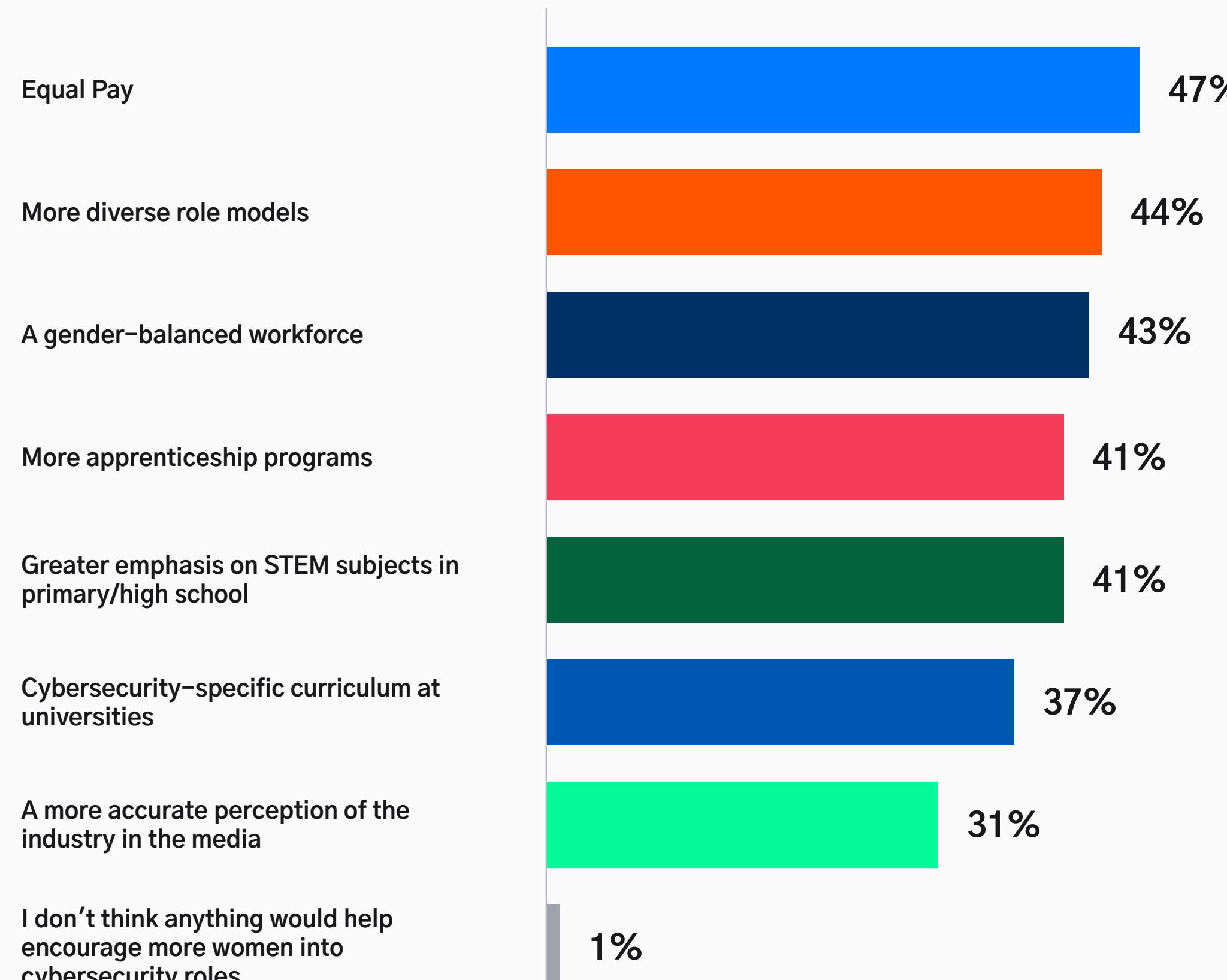
Closing the pay gap wouldn't just benefit the women taking home checks. If women earned as much as their male counterparts, the economic impact of the entire industry would increase, with a further \$12.7 billion added in the US and £4.4 billion in the UK.

"We can't underestimate the power of role models. There's nothing more inspiring than seeing other women in leadership positions speaking on a panel, being vocal on LinkedIn, or using another platform to champion diversity in cybersecurity. That visibility is so important to encourage the next generation. Even small things, like encouraging more diversity in movies and TV. It's always "the IT guy". This doesn't paint an accurate picture of the work we do or who's doing it."



MEL MASTERSON  
Security Principle, Sequoia Capital

## What do you think would help encourage more women into cybersecurity roles?



The following resources have all been recommended by the women who contributed to this report.

This list includes cybersecurity-specific groups and organizations focused on female empowerment. Some are regional while others are global and, whenever possible, we've included relevant links to help direct you to the right page.

It's worth noting that many of the women cite their local chapters of these larger organizations as being the most inspiring and helpful, so we recommend that you dig a little deeper to find meet-ups and other events close to you.



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Information Systems Security Association International **ISACA****(ISC)<sup>2</sup>****LEAN IN****meetup****pyladies** **WISE** **WITI** **Women in CYBERSECURITY  
WiCys** **WOMEN WHO  
CODE<sup>®</sup>****Girls in Tech™** **WOMEN  
IN SECURITY  
AND PRIVACY****DAY OF  
SHECURITY**



Tessian Cloud Email Security intelligently prevents advanced email threats and protects against data loss, to strengthen email security and build smarter security cultures in modern enterprises.

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#### TESSIAN CAREERS

Diversity and Inclusion are top priorities at Tessian, and our team is growing.

Want to join us?

[EXPLORE JOBS →](#)

## Methodology

Tessian commissioned Opinion Matters to survey 200 female cybersecurity professionals (100 in the UK and 100 in the US). Survey respondents occupied various roles including CISO, network engineer, security architect, incident response, pen tester, security analyst, software developer, data scientist, risk & compliance, and security operations .We also surveyed 1,000 18–25 year olds (both male and female, and in the US and the UK) to gauge interest in the field.

CEBR provided data that quantified the potential economic impact of more women in cyber, including the impact of equal pay. Finally, we interviewed cybersecurity professionals with diverse backgrounds, which provided invaluable context for this report.

Publically available third-party research was also used, with all sources listed in the downloadable PDF. Percentages may not always add up to 100% due to rounding.

