

Working Party on Regulatory Cooperation and Standardization Policies

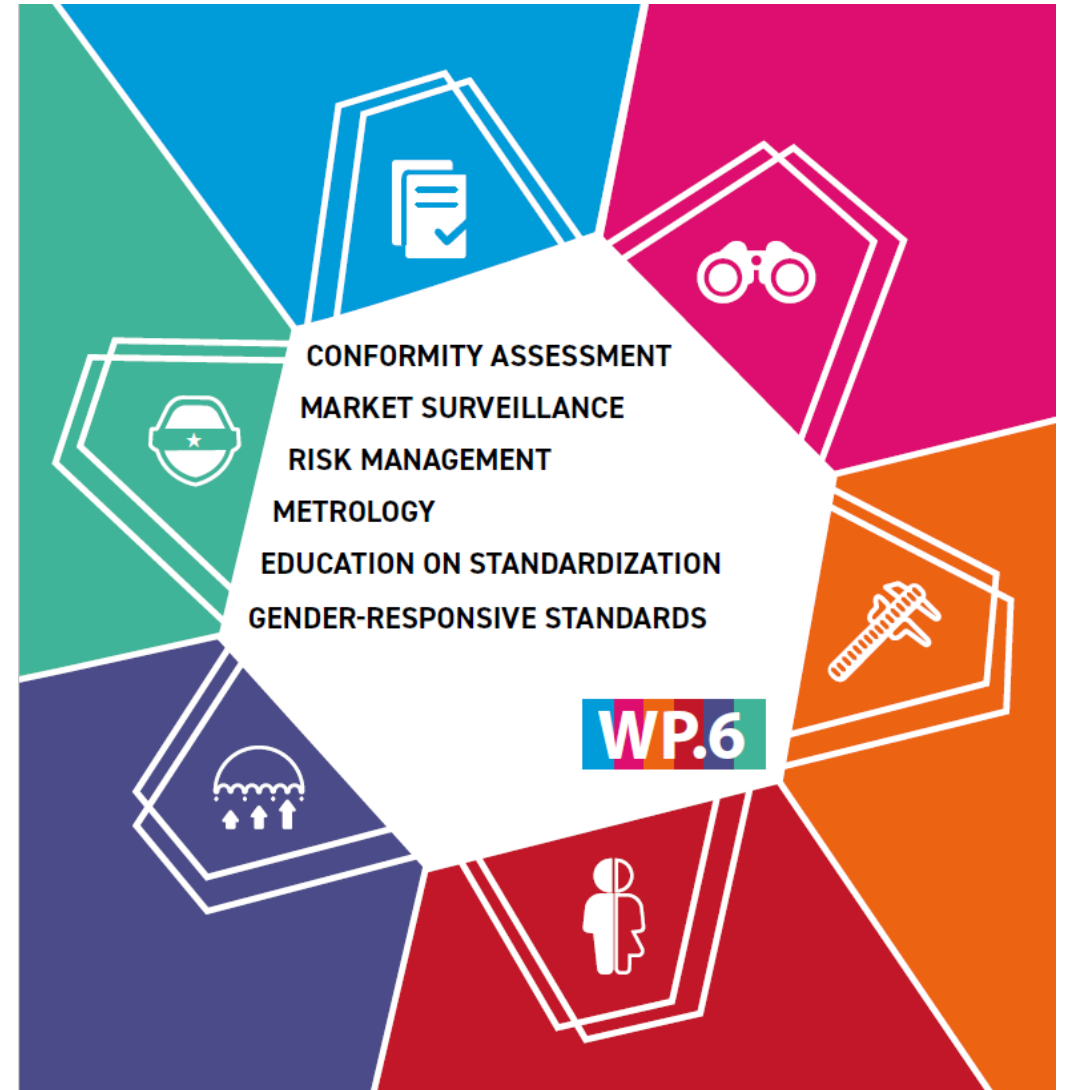
Gender Considerations

Ensuring *Everyone* can Benefit from AI

Michelle Parkouda, Ph.D.
Chair, Team of Specialists – Gender-Responsive Standards

UNECE – [Working Party 6](#)

24/11/2023, Geneva



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Concerns about Bias in AI are not New...



IEEE Spectrum FOR THE TECHNOLOGY INSIDER

ARTICLE | HISTORY OF TECHNOLOGY

Untold History of AI: Algorithmic Bias Was Born in the 1980s > A medical school thought a computer program would make the admissions process fairer—but it did just the opposite

BY OSCAR SCHWARTZ | 15 APR 2019 | 4 MIN READ |

“Safety issues do not distinguish between men and women, hence when writing our requirements, we do not need to distinguish whether a man or a woman shall be protected.”

“We are working on technical products/issues. Our products are neither male nor female nor diverse.”





An illustration of a woman with long, wavy brown hair, wearing a grey sweater and a purple skirt. She is holding a large yellow sign in her left hand and a blue book with a yellow spine in her right hand. The sign has text written on it in purple and yellow. The background is a soft, painterly mix of yellow, orange, and pink.

DECLARATION
FOR
GENDER
RESPONSIVE
STANDARDS

14
MAY
2019

The Gender Declaration

The Declaration, “acknowledge[s] that representation of women in standards development is almost always below parity and that the outcomes for men and women are not explicitly addressed during the standards development process.”

Why Gender Matters for Standards



UNECE

Why Gender-Responsive Standards are Better for Everyone

WP.6 Working Party on Regulatory Cooperation and Standardization Policies

When One Size Does Not Protect All: Understanding Why Gender Matters for Standardization

Standards Council of Canada
Open a world of possibilities.

Canada

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© 2020, Standards Council of Canada
Author: Michelle Peterson, Ph.D.
Member, Research, Standards Council of Canada
Publication: Ottawa, 2020
Actual effort en français dans le titre. Ce titre est une traduction de l'anglais. La question de genre est importante pour la normalisation.

One hundred years – that is how long the World Economic Forum estimates it will take to achieve global gender equality. Europe is expected to close the gap in 54 years while the Pacific will need 163 years. North America¹ is estimated to need 151 years, driven largely by the United States (the US on the global gender gap index, while Canada is ranked 151st).

Importantly, closing the gender gap worldwide has significant consequences. The World Bank, in a study funded partially by the Government of Canada, estimated that gender inequality in earnings cost the global economy \$602.2 billion (USD in 2014).² In 2015, McKinsey estimated that closing the gender gap would mean that women's participation in the economy such that women's participation in the economy would add \$281 billion USD to the global Gross Domestic Product (GDP) in 2025.³ While the estimates vary, there is agreement that societies pay a heavy price for gender inequality.

In addition to the economic impacts, gender inequality also affects health, safety and well-being. The bulk of these effects is seemingly borne by women and is largely due to women not being accounted for in the research and development phases of products and services.⁴ The end result is that women are unnecessarily put at greater risk.

When it comes to health research for men, it is not limited to men. Historically, men have been the focus of research. Understanding the differences between men and women is not ideal either. Human health is not the same for men and women. Specifically, the androcentric model of medicine in the US, or the male model of medicine in 1997 and for several years since, has done little to improve the health of women.

1. World Economic Forum. (2019). Global gender gap report 2019. Geneva: World Economic Forum.
2. World Economic Forum. (2019). Global gender gap report 2019. Geneva: World Economic Forum.
3. World Economic Forum. (2019). Global gender gap report 2019. Geneva: World Economic Forum.
4. World Economic Forum. (2019). Global gender gap report 2019. Geneva: World Economic Forum.
5. World Economic Forum. (2019). Global gender gap report 2019. Geneva: World Economic Forum.
6. World Economic Forum. (2019). Global gender gap report 2019. Geneva: World Economic Forum.
7. World Economic Forum. (2019). Global gender gap report 2019. Geneva: World Economic Forum.
8. World Economic Forum. (2019). Global gender gap report 2019. Geneva: World Economic Forum.
9. World Economic Forum. (2019). Global gender gap report 2019. Geneva: World Economic Forum.

Gender Considerations with AI



Algorithmic Bias

Misuse of Technology

User Uptake

Algorithmic Bias



“Algorithmic bias occurs when algorithms make decisions that systematically disadvantage certain groups of people.”

-- [Simon Friis & James Riley](#)

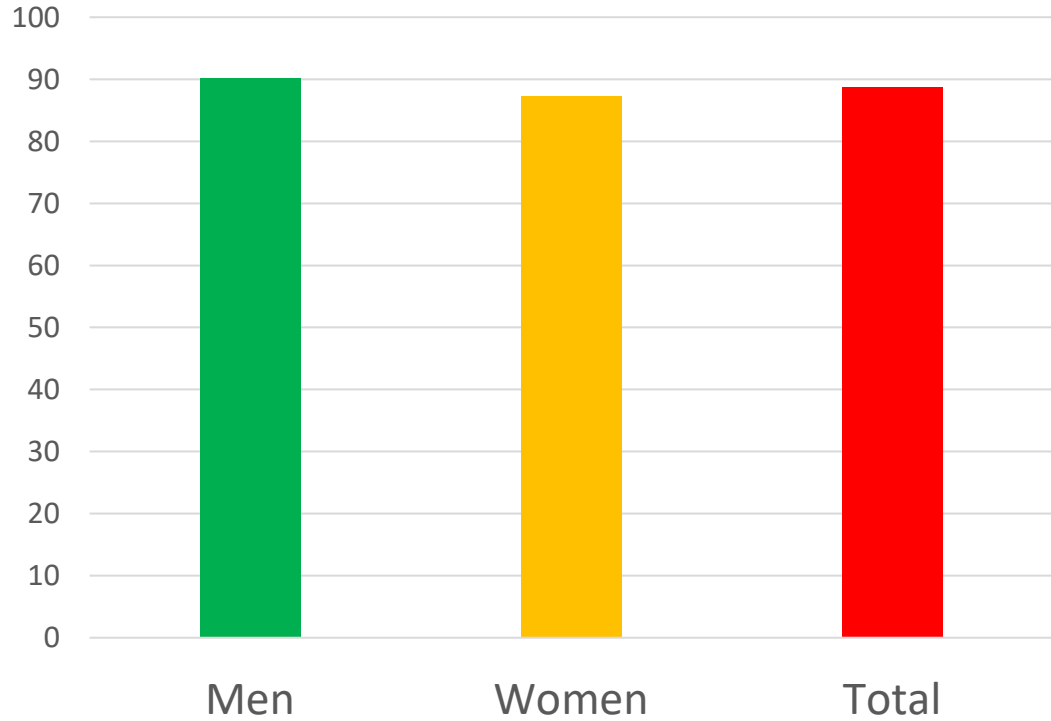
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AI Reflects Society



Percent of People with at Least one Bias



Source: [UN 2023 Gender Social Norms Index](#)

“[Algorithmic bias is not a glitch.] A glitch suggests something temporary that can be easily fixed. I’m arguing that racism, sexism and ableism are systemic problems that are baked into our technological systems because they’re baked into society. It would be great if the fix were more data. But more data won’t fix our technological systems if the underlying problem is society.”

-- Meredith Broussard

Misuse of Technology



LOCAL NEWS >

New Jersey high school students accused of making AI-generated pornographic images of classmates

CBS NEWS
NEW YORK

BY TIM MCNICHOLAS

UPDATED ON: NOVEMBER 2, 2023 / 7:32 PM EDT / CBS NEW YORK



Tech Abuse



- In Canada, the Smart home market technology penetration rate was 32% in 2022 and is expected to increase to 69% by 2028.
- In Canada, women and girls account for 7 out of 10 victims of family violence.
- A study from the UK found that 48% of domestic abuse included technology-facilitated abuse in 2017.



How Smart Home Systems & Tech Have Created A New Form Of Abuse

Designed to make life easy, web-connected devices are being used against women to harass, track, and even lock them in their own homes.

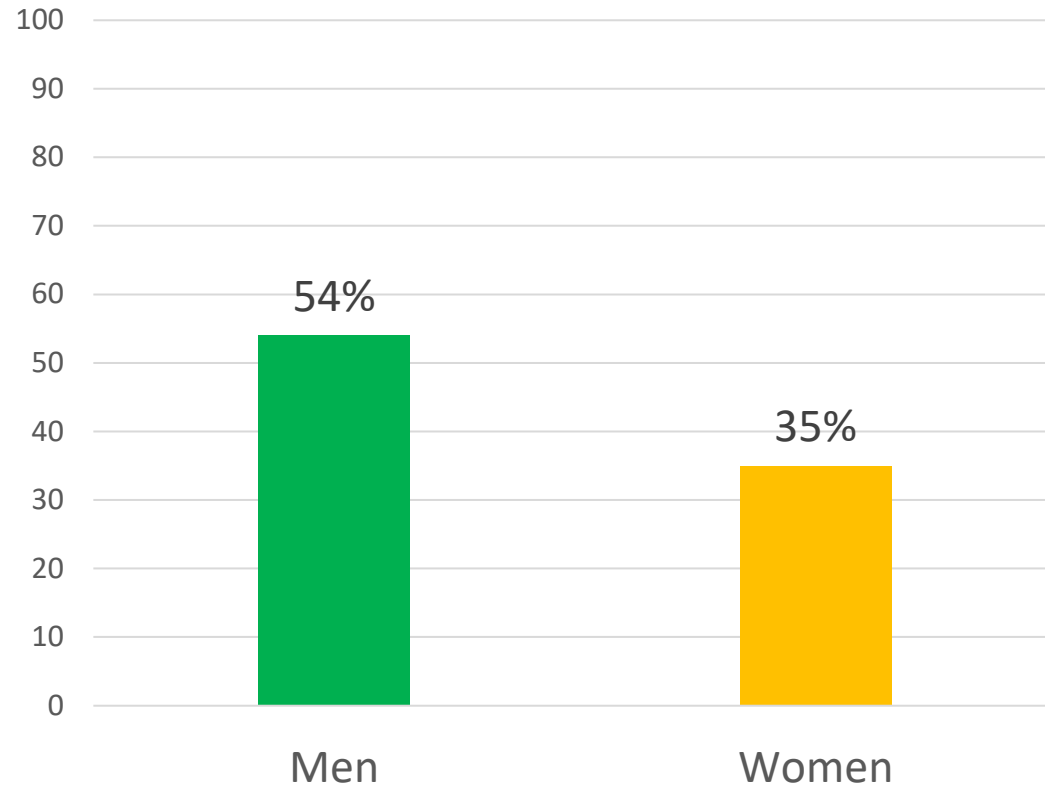
TAKARA SMALL

JANUARY 9, 2019, 8:21 A.M.

User Uptake



Gender Differences in Usage of AI



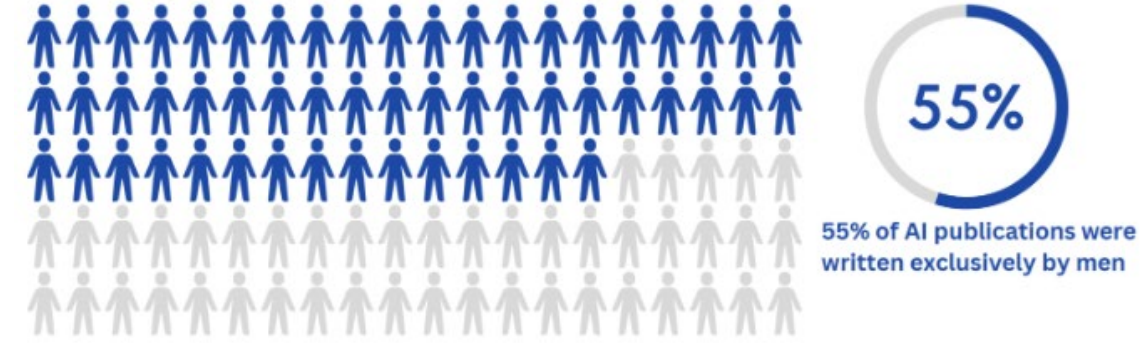
Source: [The AI Gender Gap](#)

If women are not using the technology, then even when it can help to alleviate the gender gap, they may not realize those benefits.

Importance of Representation



Authorship of AI Publications in Academic Journals, Globally by Gender, 2022

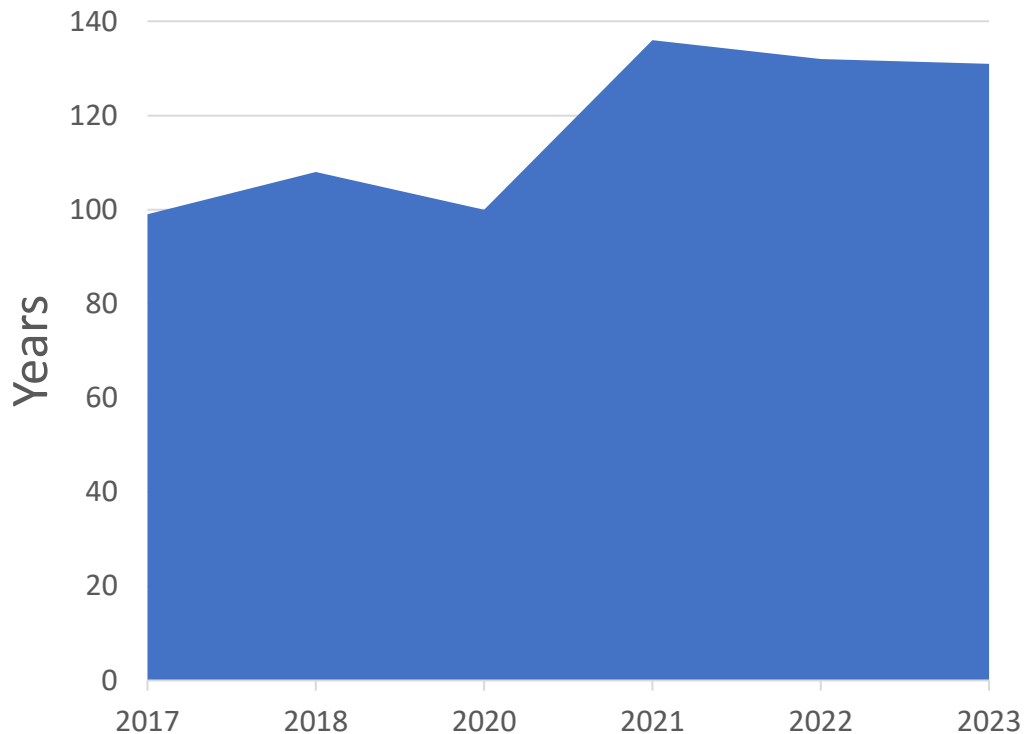


Source: [OECD](#)

Closing the Gender Gap



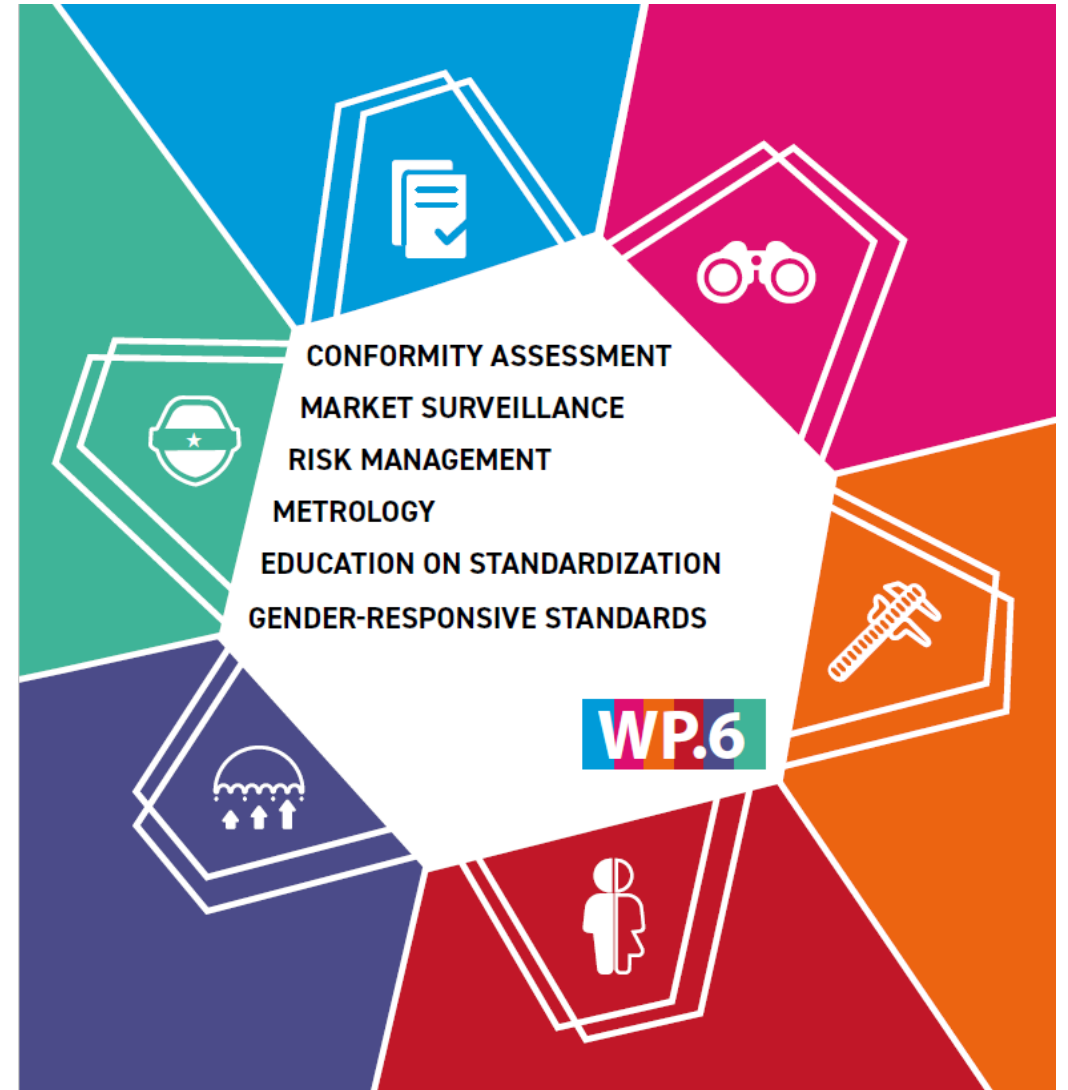
World Economic Forum Estimate of Years to Close the Gender Gap



“Women and girls account for half the world’s population and therefore represent half of its potential. Gender equality is central to all areas of a healthy society, from reducing poverty to promoting health, education, welfare, and well-being of girls and boys. Reducing the gender gap promotes economic development. Societies are unable to unlock their potential and meet the challenges of rapid economic and technological change without harnessing the skills and ideas of their entire population.”

-- [World Bank Group & World Trade Organization](#)

Working Party on Regulatory Cooperation and Standardization Policies



Merci ありがとうございました Hvala Ačiū
شكرا جزيلاً Mahalo Дякую Teşekkür ederim
Рахмат Dankon ඔබට ස්තූතියි Sagbol Ευχαριστώ
Tack Çox sağ ol Dziękuję Ci Obrigado
მადლობთ תודה 감사합니다 धन्यवाद Dankon
Natur nuhun Баярлалаа Хвала вам Dankon
Tak skal du have Diolch Хвала вам
Спасибо Go raibh maith agat Faleminderit Paldies
Grazzi Dank je Рахмат сага Faafetai Rahmat
Grazie Mulțumesc Ačiū Благодаря ти
Gracias 谢谢 សូមអរគុណ Danke
Salamat Aitäh Dankie Takk skal du ha
Ви благодарам Dėkuji Köszönöm Pakka þér fyrir
Дзякуй
धन्यवाद Gràcies Asante
Kiitos

Thank you

Michelle Parkouda, Ph.D.
Chair, Team of Specialists – Gender-Responsive Standards

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