One Size Does Not Fit All

- Why Gender Matters in Standards Development

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Standards Council of Canada
“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.”

2021 ISO and IEC Gender Survey:
To the best of your knowledge, is gender considered in the work of your committee?

- Yes (25%)
- No (75%)

“In engineering (but I think in most working environment) gender is irrelevant: for any given work/activity why should it matter the gender of an engineer?”

“Committees work is independent of gender. It should never be a part of committee work.”
Women are 73% more likely to be seriously injured or die in a car accident than men

Source: University of Virginia
In a survey of 2,675 Canadian women, 85% reported at least one issue with the personal protective equipment they wear for work.

Source: CSA Group

Women and PPE:

“Me and my female colleagues had problems with those big masks. Also, the gowns were way too big, ...I couldn’t walk properly. The goggles always slid down the nose, so sometimes out of reflex, I pushed them up when my gloves were already possibly contaminated.”

- Nurse, Australia

Source: Women in Global Health
Tech Abuse

- More than 95 per cent of domestic violence shelters in Canada served women who experienced Technology-facilitated gender-based violence (TFGBV).
- According to a 2021 report by the United Nations Population Fund, at least 38% of women globally have personally experienced online violence, and this rate is rising.

Source: CBC
“Researchers at the identity verification company Sensity AI found the number of pornographic deepfakes online roughly doubled every six months from 2018 to 2020. The company also found that a shocking 96% of deepfakes are sexually explicit and feature women who didn’t consent to the videos.”

Source: CNN
Produce a picture of a married couple, while the husband is Asian and the wife is white.

Copilot

I'll try to create that.

A married couple, where the husband is Asian and the wife is white.
“Algorithmic bias occurs when algorithms make decisions that systematically disadvantage certain groups of people.”

-- Simon Friis & James Riley
AI expert calls for end to UK use of ‘racially biased’ algorithms

Gender bias in AI: building fairer algorithms

Millions of black people affected by racial bias in health-care algorithms

Study reveals rampant racism in decision-making software used by US hospitals—and highlights ways to correct it.

Bias in AI: A problem recognized but still unresolved

Amazon, Apple, Google, IBM, and Microsoft worse at transcribing black people’s voices than white people’s with AI voice recognition, study finds

When It Comes to Gorillas, Google Photos Remains Blind

Google promised a fix after its photo-categorization software labeled black people as gorillas in 2015. More than two years later, it hasn’t found one.


The Best Algorithms Struggle to Recognize Black Faces Equally

US government tests find even top-performing facial recognition systems misidentify blacks at rates five to 10 times higher than they do whites.

Artificial Intelligence has a gender bias problem – just ask Siri
“[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

Source: UN 2023 Gender Social Norms Index

Percent of People with Bias Against Women

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<tr>
<th></th>
<th>Men</th>
<th>Women</th>
<th>Total</th>
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<tr>
<td>Bias</td>
<td>90.1</td>
<td>87.3</td>
<td>88.7</td>
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What’s being done to address gender in standards?
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.”

Source: UNECE
Gender-Responsive Standards

Gender-responsive standards are standards which acknowledge the distinct needs of different genders and take concerted action to ensure the efficacy of the standard for all. A gender responsive standard is not a separate standard for different genders, but rather a means of ensuring the impact of the standard is appropriate and provides equal benefit.

Source: UNECE
Questions to Consider…

1. Will men and women be impacted by the standard?

2. Is it possible that there may be different impacts for men and women?

3. Is there sufficient data to assess potential gender impacts of the standard?

4. What assumptions are being made in the standard? What are the limitations of those assumptions?

5. Men and women are not homogenous groups, are further modifications needed to make the standard suitable for diverse men and women?
Research on Canada’s technical committees showed that committees performed better when there were women on the table.

2023 ISO and IEC Gender Survey:
Is gender relevant in the work of your committee, taking into consideration the standards’ potential use by, and impacts on women and men?

- Not at all: 55%
- A little: 18%
- Somewhat: 12%
- Absolutely: 7%
- Unsure: 8%
The remaining 98% of NSCs do not contribute to gender equality.

2% of Canada’s National Standards of Canada (NSCs) are linked to SDG5.
Now it’s your turn