The Effects of Artificial Intelligence on the Working Lives of Women

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Context: Inequalities in Access and Connectivity

- Women experience gaps in internet access and digital skills.
  - Lower levels of education, formal education
  - Social / cultural norms
- ITU: women’s and men’s access to the internet differs around the world.
- What paths can society take to mitigate the negative impacts of AI for women, and - more than that - how can we create tools and strategies to close existing gaps?
AI-Driven Changes to Skill Requirements
Automation

• Who are the most exposed? Women or men? It is unclear...
• Women are more likely to work in positions that require interpersonal skills → lower potential for automation
• Women are under-represented in management, more complex positions → greater risk for automation

![Figure 2.1 Risk of automation by gender in select LAC countries](image)
Changes in Job Skills in Demand

- **Digital skills** to maintain and manage AI systems
  - UNESCO 2019: On average, women are 25% less likely to know how to use ICT for basic purposes

- **AI skills** to create, develop, and interact with AI systems
  - Women are less than 1/3 of those registered for ICT studies at the university level (UNESCO, 2019a)
  - Women are at risk of being excluded from the benefits of technological innovation (Bustelo et al, 2019)

- **Unique human abilities** to work on tasks at which AI is less effective
AI Impacts on Job Searches
Advertising of Jobs

- Online platforms: AI to target and advertise specific vacancies
- Challenges
  - biases in targeting
  - access issues could limit how people find out about open positions
  - gender-biased language

Hiring Systems

- AI is changing recruitment practices
- HR specialists use the systems and automate things like:
  - reviewing CVs, scheduling interviewing, issuing offers, etc.
  - etc
- AI can result in better HR performance
- Challenge: data created by humans can carry biases that affect decisions

Public Employment Services

- AI can add value: improving matching algorithms or by segmenting applications (to facilitate offers of assistance).
- Can be beneficial for women:
  - Can promote greater inclusion of groups, like women, who face discrimination in the labour market
  - AI allows for the creation of algorithms that address dimensions specific to women applicants
- More common in Europe, public employment services (PES) have limited use in LAC.
  - IDB supports these initiatives, especially through fAIr LAC tools
Impact of AI Use in the Workplace
The Impact of Monitoring on Women

- Women are 49% more likely than men to have concerns related to workplace privacy and being monitored via workplace video surveillance (Stark et al., 2020).
- Algorithmic management techniques and flexibility: allow managers to oversee staff
  - Advantageous for people who need flexibility
  - Cost: can replicate existing gendered stereotypes and patterns with domestic roles associated with women
  - Women tend to be more concerned about privacy issues related to teleworking from home
  - Telework can partially “invisibilize” women workers, if working from home were penalized in the future
- New tools for monitoring sexual harassment or racism

AI and Gender Stereotypes

- Stereotypes and the way in which women are seen at work:
  - Impacts on their positions and opportunities
- AI systems could reinforce stereotypes
  - Can learn and replicate racist, homophobic, and sexist ideas (Neff y Nagy, 2016).
  - Vincent (2018): Gmail Smart Compose tool
    - Suggests that the phrase “I am meeting an investor next week” should be followed by “Do you want to meet with him?”
- Challenges
  - When data used to train AI algorithms is not representative of society
  - Lower levels of internet access for women
  - Data used to train AI can contain ingrained gender stereotypes
- Gender stereotypes can cause a vicious cycle when they impact women's interest, opportunities, and confidence to pursue specific occupations
Conclusions and Findings

- Reskilling and upskilling of women workers
- Creating incentives for women in STEM
- Considerations for contextual and cultural complexity
- Leveraging multi-stakeholder approaches
- How gender stereotypes are formed
- Broaden applied research
Thank you!

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