

Hugo Ferpozzi , Martina Lassalle

Hugo Ferpozzi , Martina Lassalle

©2023, HUGO FERPOZZI , MARTINA LASSALLE



This work is licensed under the Creative Commons Attribution License (<https://creativecommons.org/licenses/by/4.0/legalcode>), which permits unrestricted use, distribution, and reproduction, provided the original work is properly credited. Cette œuvre est mise à disposition selon les termes de la licence Creative Commons Attribution (<https://creativecommons.org/licenses/by/4.0/legalcode>), qui permet l'utilisation, la distribution et la reproduction sans restriction, pourvu que le mérite de la création originale soit adéquatement reconnu.

IDRC GRANT / SUBVENTION DU CRDI : - TECHNOSCIENTIFIC LABOUR AND GENDER EQUITY IN ARGENTINA: COMPARING BARRIERS AND OPPORTUNITIES FOR WOMEN IN THE PUBLIC AND PRIVATE SECTORS



Technoscientific labor and gender equity in Argentina: comparing barriers and opportunities for women in the public and private sectors

Emerging findings

umai
Universidad
Maimónides

ccts

Centro de Ciencia,
Tecnología y Sociedad

Our research project is set out to understand the dynamics that shape women's participation in areas of STEM at different stages of their professional careers

Research goals

1. characterize recruitment, promotion, and evaluation dynamics
2. determine how these dynamics have an effect on women's career paths and employment structures in STEM

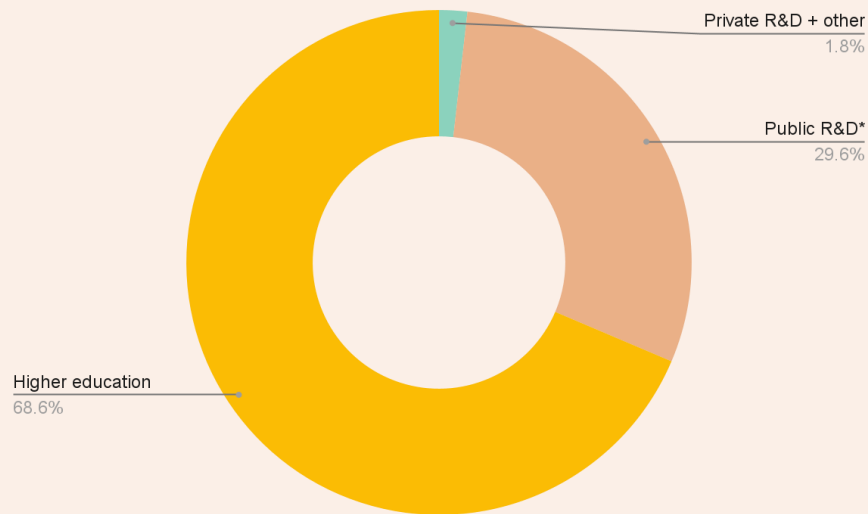
Areas and organizations under study

1. **Public research organizations:** National Atomic Energy Commission (CNEA) and National Agricultural Technology Institute (INTA)
2. **Private sector:** software and IT firms (SSI) assembled in the Chamber of Argentinian Software Industries (CESSI)

Methods

1. Quantitative analysis of women's participation, career paths, and employment structures*
2. Qualitative analysis of institutional and scientific regulations; focus group + semi-directed interviews with researchers, software developers, and management

Argentina: overall distribution of researchers by R&D environment



CNEA, INTA and CONICET are by far the largest employers in public R&D

Source: SICYTAR (2022)

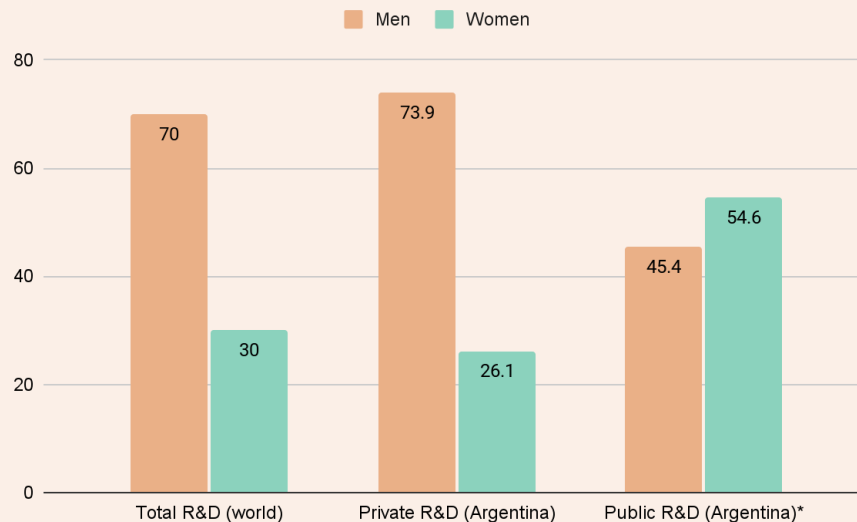
(*) Note: based on 2015 data. Difficulties estimating actual number of researchers and gender distribution due to inconsistent data, multiple affiliations, and underreporting of actual research activities in public research organizations and overreporting in higher education.

Gender distribution by research area

Multiple
affiliation
+
Inconsistent
official data



negative
consequences over
measurement,
gender policies, and
careers structures

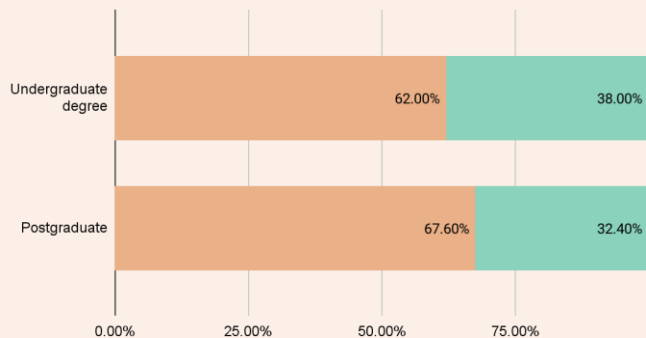


Source: D'Onofrio MG & MV Tignino (2018) Indicadores diagnósticos sobre la situación de las mujeres en ciencia y tecnología en Argentina y Banco de acciones en género y ciencia; Taller Mujeres en ciencia y tecnología: hacia una participación con equidad; Ministerio de Educación, Cultura, Ciencia y Tecnología. Ciudad Autónoma de Buenos Aires.

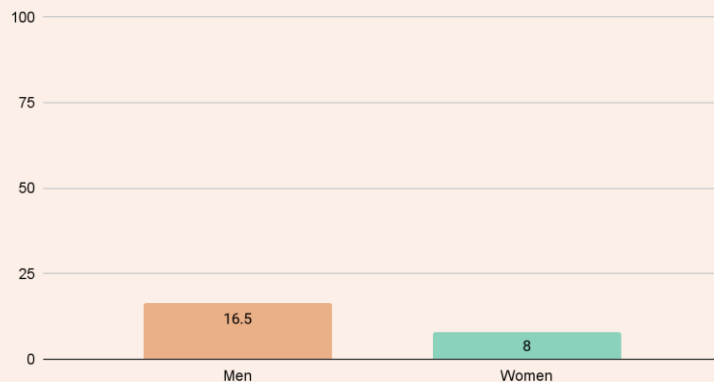
Women's participation in STEM education and R&D in Argentina

Distribution of STEM researchers is commensurate with distribution of graduates in engineering and technology.

Distribution of graduate and postgraduates in engineering and technology by gender



% of researchers in STEM areas



Source:

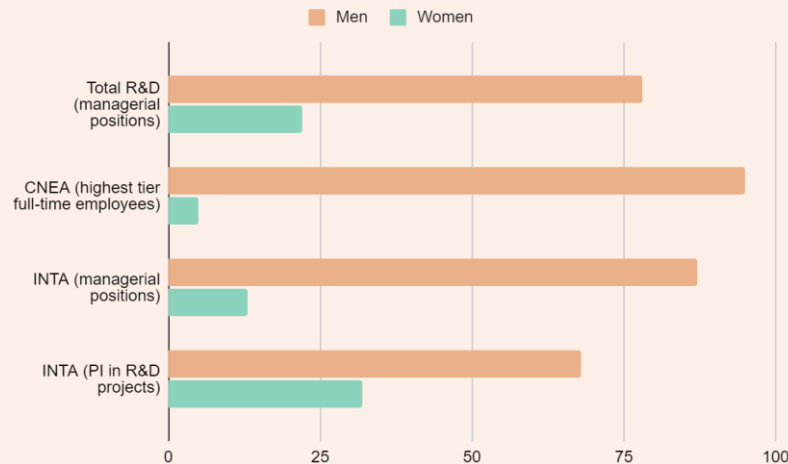
-D'Onofrio MG & MV Tignino (2018)

-Barandiarán S; Lapido N; Cartechini J & Desages M. (2021) Diagnóstico sobre la situación de las mujeres en ciencia y tecnología. Documento de Trabajo N°8. Ciudad de Buenos Aires, February 2021.

Glass ceiling and access to higher positions

Working hypothesis: women's participation in higher R&D positions limited by evaluation mechanisms that indirectly favor men (e.g., lead roles, access to funding, preferred fields of expertise, etc.)

- However, advancement in scientific careers is limited by the lack of formal scientific careers paths in both CNEA and INTA.
- Occupying managerial positions appears as the only means for advancing to higher positions, which is used mostly as a formal procedure for raising salaries (e.g. seniority).

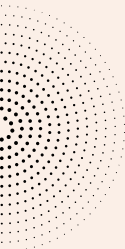


Source:

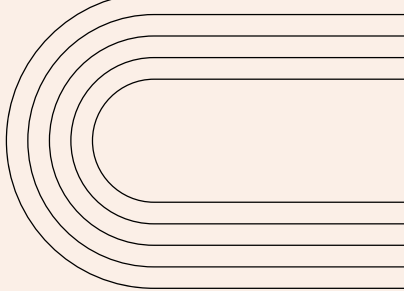
-D'Onofrio MG & MV Tignino (2018)

-Komar Varela C & Aizcorbe J (2019) Primera aproximación al análisis desde una perspectiva de género de la situación de las trabajadoras en la Comisión Nacional de Energía Atómica. In: Congreso Internacional Género en Ciencia, Tecnología e Innovación. Santa Fe.

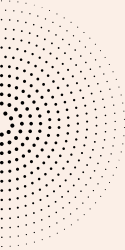
-Barandiarán S, Lapido N, Cartechini J & Desages M (2021)



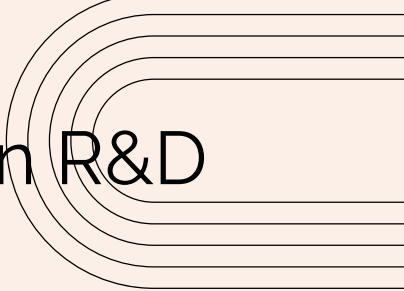
Double affiliation: reinforcing effects over lack of formal career structures



- 01 CNEA and INTA increasingly host researchers with diverse institutional affiliations (e.g. researchers formally employed by CONICET who conduct research at CNEA or INTA). This creates **different formal frameworks for working benefits, institutional life, and scientific reward systems within a single institution**. For instance, seniority benefits at INTA are only provided to employees with a permanent contract.
 - 02 Double affiliation can **exclude researchers from scientific opportunities** such as eligibility for internal funding at both CNEA and INTA.
 - 03 Double affiliation also entails **different evaluation mechanisms** and therefore the type of achievements and performance that workers are expected to show.
- 



Scientific careers + family life balance in R&D



- 01 In this context, **reconciling work and family life** helps female researchers avoid obstacles in their careers and be on a par with their male peers.
 - 02 **Motherhood, housework, and care of children/elders appear as an obstacle to the advancement and stability of scientific careers.** Care duties fall mainly on women, which puts them at disadvantage compared to their male peers.
 - 03 **Maternity policies depend on workers' affiliation**, which results in different sets of benefits and obstacles for women within the same institution. Double affiliation may also exclude researchers from institutional benefits, such as access to daycare and kindergarten facilities. Working hours are subject to biometric control when employed directly by these institution, which complicates mothers' work/family balance due to childcare schedules.
- 