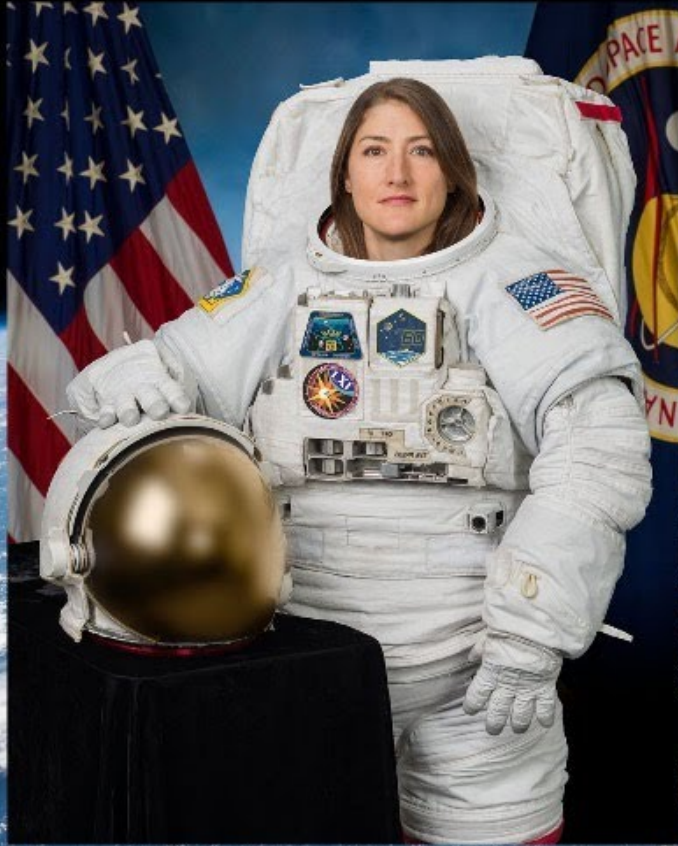


GENDER EQUALITY IN SPACE FIELD

Norilmi Amilia Ismail, PhD
Universiti Sains Malaysia





Margaret Hamilton



Katherine Johnson



4 QUALITY EDUCATION



5 GENDER EQUALITY



GENDER EQUALITY

- Gender equity is the process of being fair to women and men
- Equity leads to equality.
- Gender equality requires equal enjoyment by women and men of socially-valued goods, opportunities, resources and rewards

29%

Globally, only 29% of science researchers are women, although several developing nations are showing a positive trend.

\$12 trillion

Reducing the gender gap may bring as much as \$12 trillion to the global GDP in only few years' time, by 2025.

90%

It has been estimated that 90% of future jobs will require ICT skills, and some 2 million new jobs will be created STEM related fields.

11%

Historically, over 560 people travelled to space. Only 11% of total space travellers have been women.

11 to 15 years

Girls gain strong interest in STEM subjects at the age of 11. They tend to lose it already at the age of 15.

20%

Women represented only 20% of space industry employees in 2016, which is on par with numbers from 30 years ago.

<https://www.unoosa.org/oosa/en/ourwork/topics/spaceforwomen/index.html>



Mazlan Othman



Asma Ismail









Making 'Space for Women' a reality – Next steps

Space for Women Platform

- Central hub for global initiatives under the UN roof for exchange, communication and coordination

Space for Women Champions Network

- Global Network of role models and mentors to promote careers in STEM and the Space Sector

Space for Women Research

- Research on various aspects of women in STEM and Aerospace for evidence based awareness raising

Space for Women Institutional Capacity Building Mission

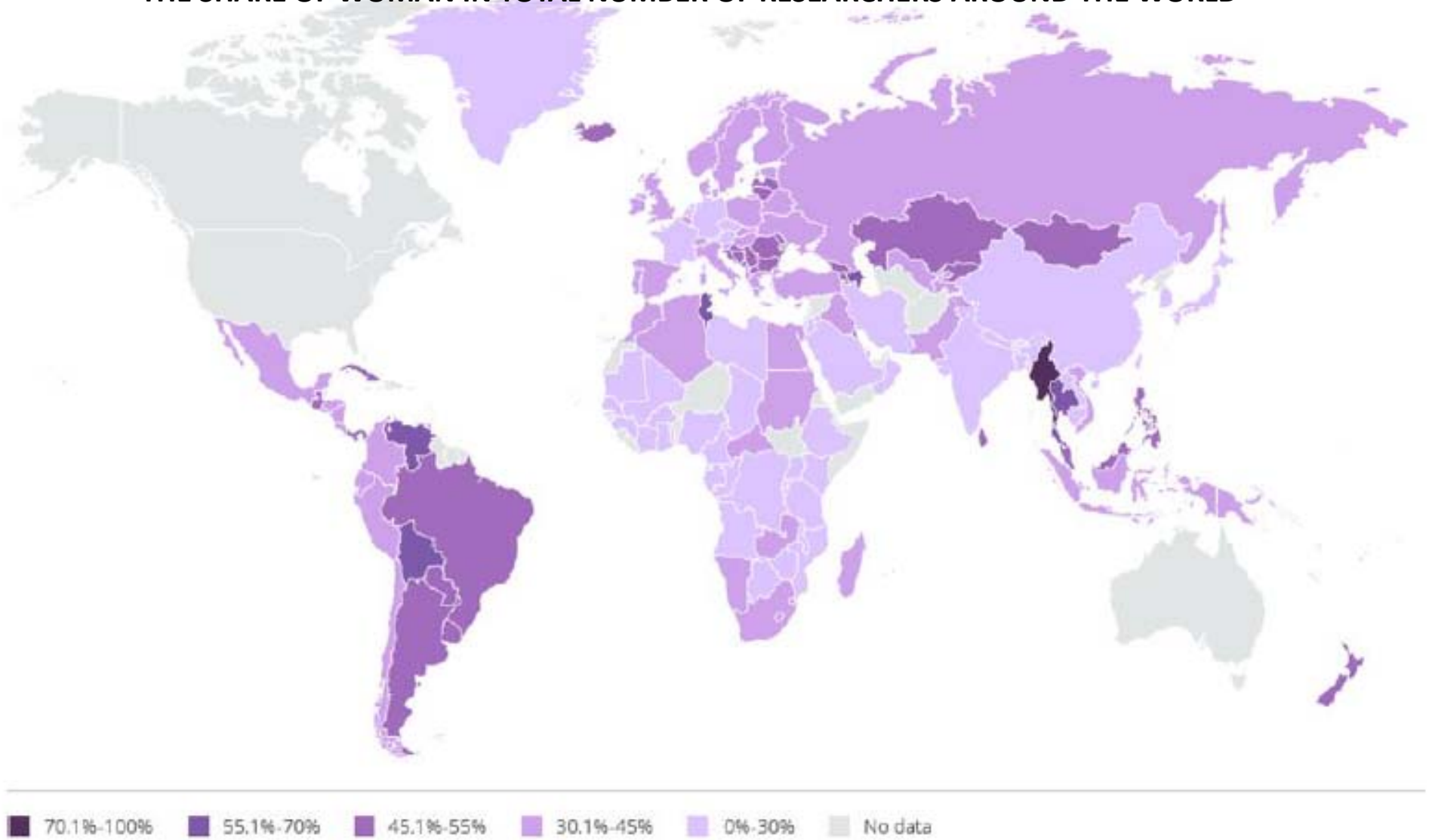
- Team of experts to assess the institutional and enabling environment in a pilot country second half 2019

Space for Women Forum

- Capacity building and awareness raising forum in 2019

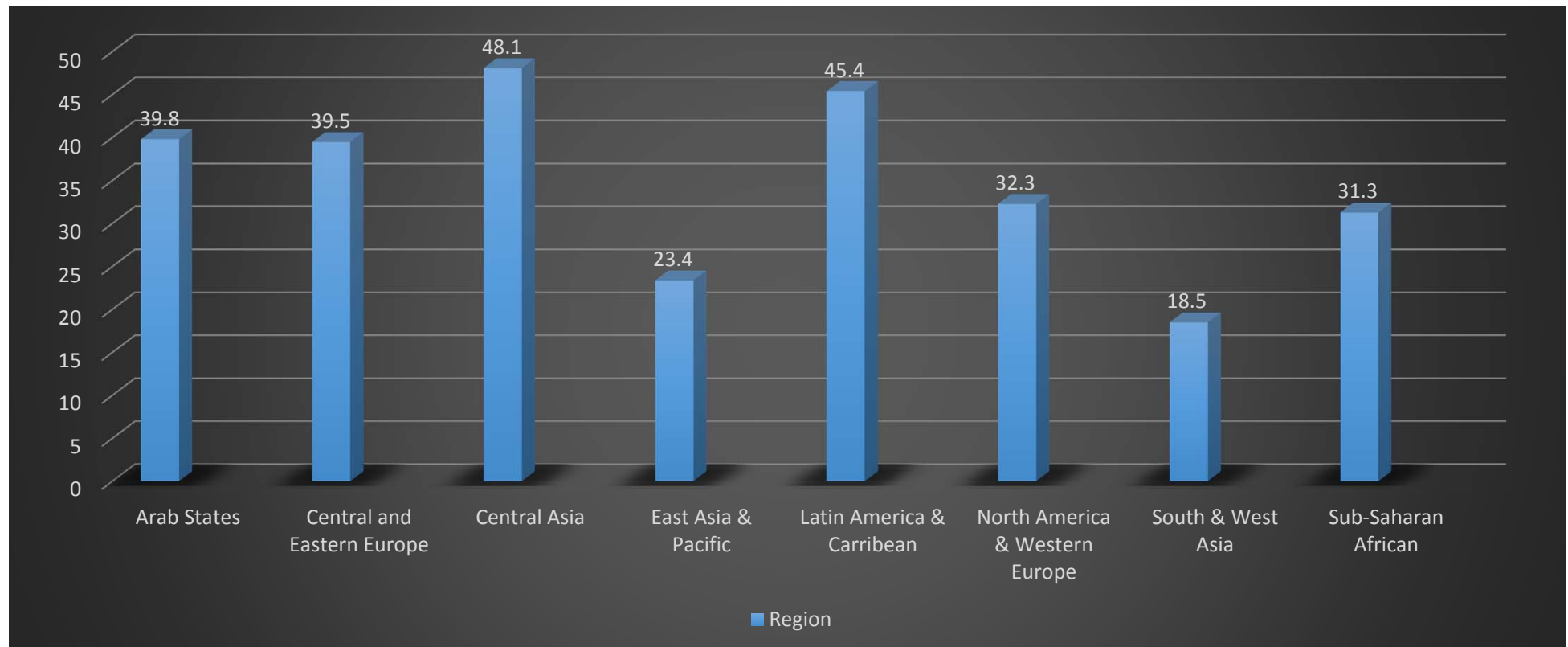
FEMALE % IN ACADEMIA & RESEARCH

THE SHARE OF WOMAN IN TOTAL NUMBER OF RESEARCHERS AROUND THE WORLD



Source : UNESCO Institute for Statistic , June 2018

The Regional Averages for the Share of Female Researchers



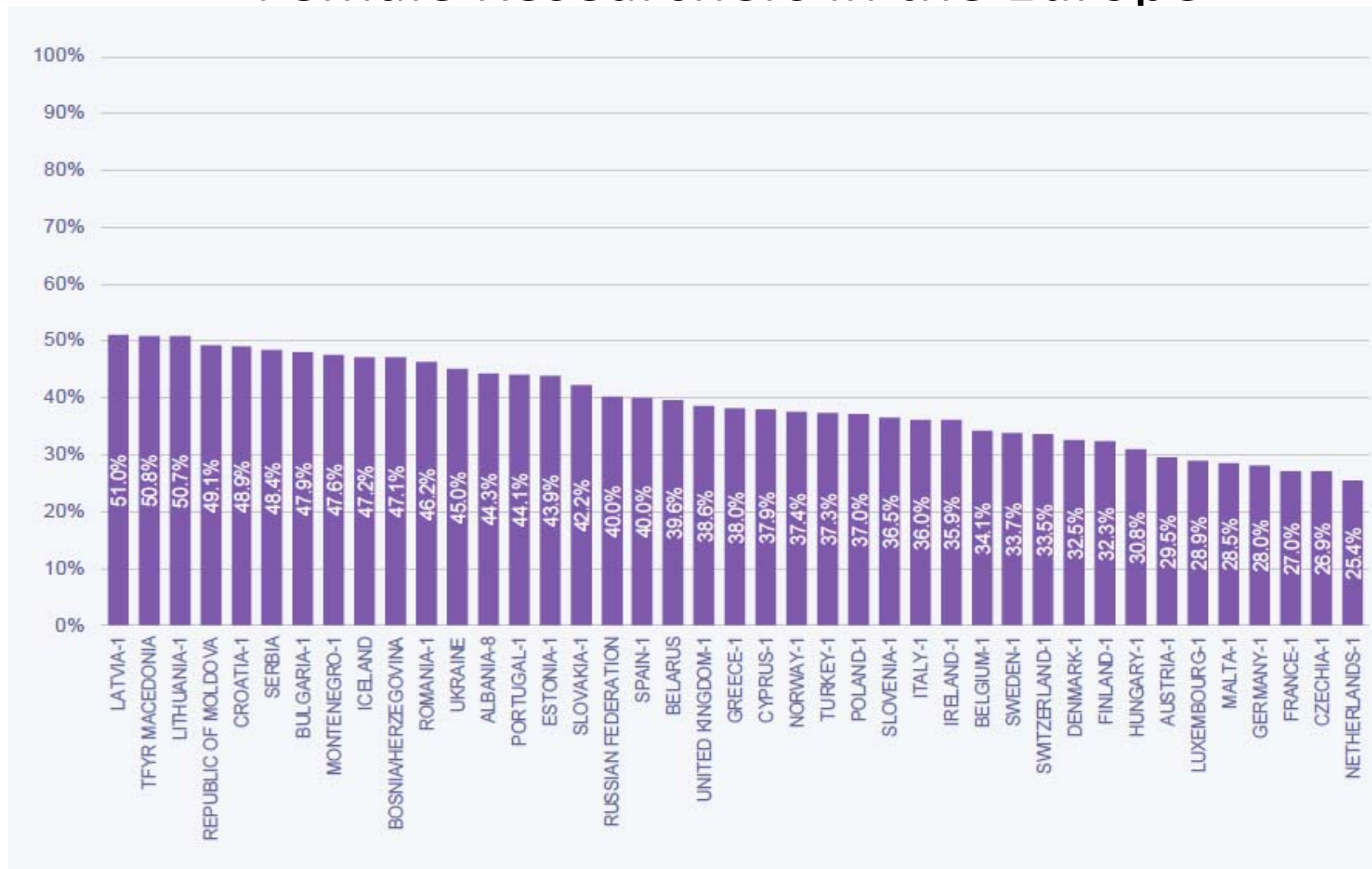
Source : UNESCO Institute for Statistic , June 2018

Female Researchers in the Americas



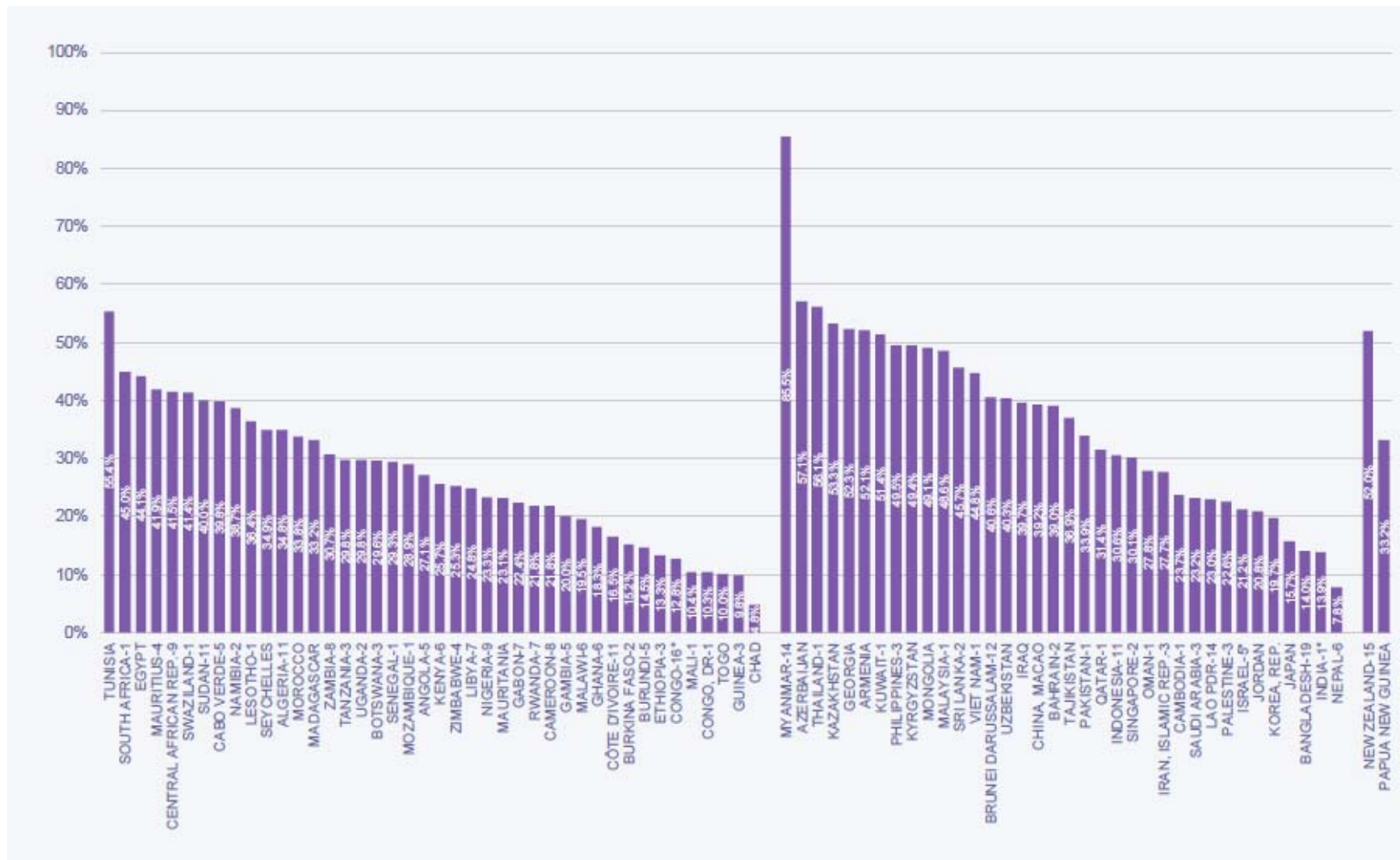
Source : UNESCO Institute for Statistic , June 2018

Female Researchers in the Europe



Source : UNESCO Institute for Statistic , June 2018

Female Researchers in the Africa, Asia & the Pacific



Source : UNESCO Institute for Statistic , June 2018

Challenges for Women in Research & Academia

MEMBERSHIP

6 Honorary Fellows **28** Senior Fellows **352** Fellows **41** Associates

 MALE: 82% (288)  FEMALE: 18% (64)

Information Technology & Computer Sciences

20  



75

Biological, Agricultural & Environmental Sciences

Engineering Sciences

64  



45

Mathematics, Physics & Earth Sciences

Medical & Health Sciences

64  



37

Science & Technology Development Industry

Chemical Sciences

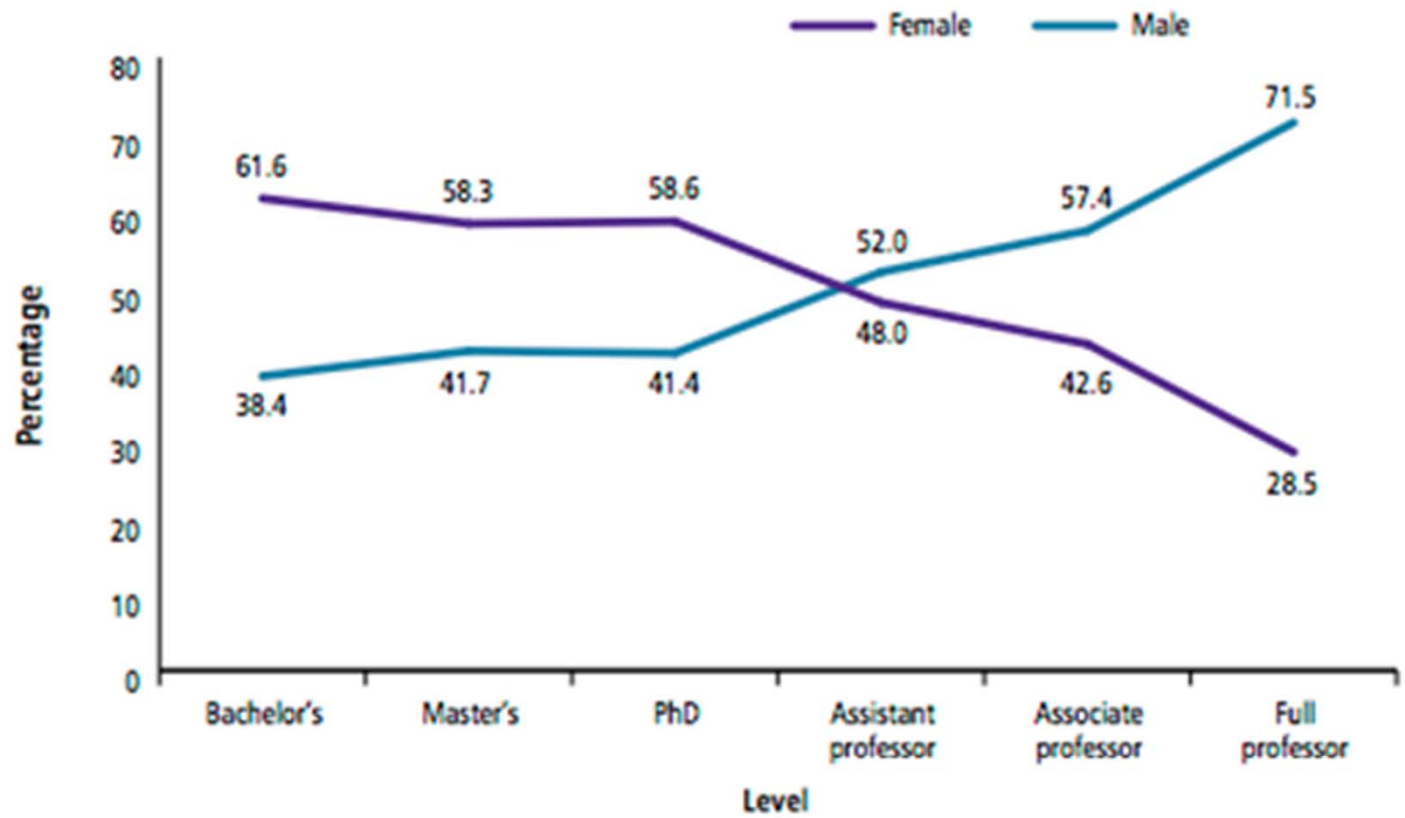
40  



07

Social Sciences & Humanities

Staff: 74 | Experts: $\frac{157}{\text{TRSM}}$ / $\frac{171}{\text{YSN}}$



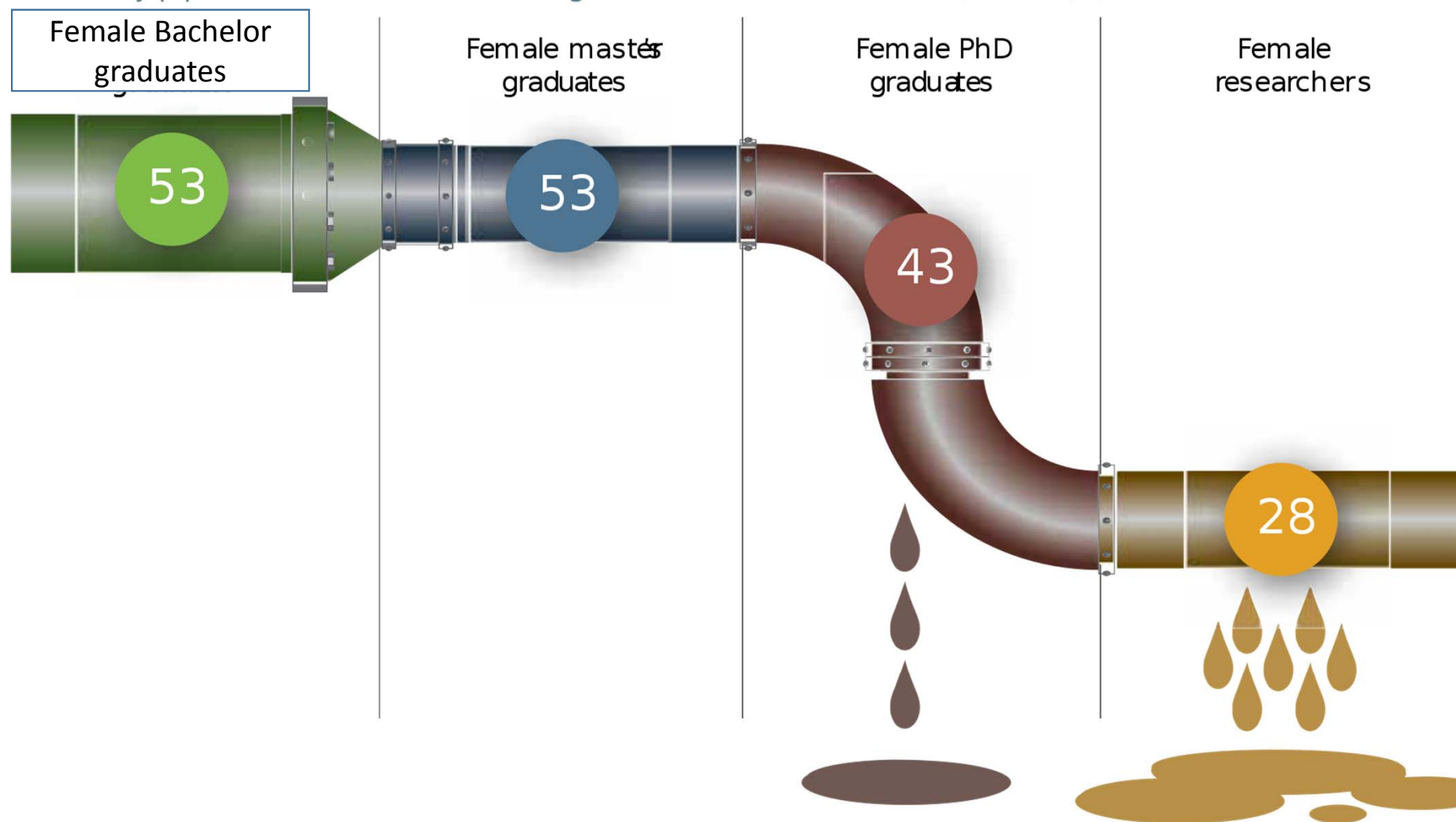
(Data Source: Statistics Canada, n.d.d., n.d.b.)

Figure 3.2

Percentage of Women and Men at Different Academic Levels in HSE

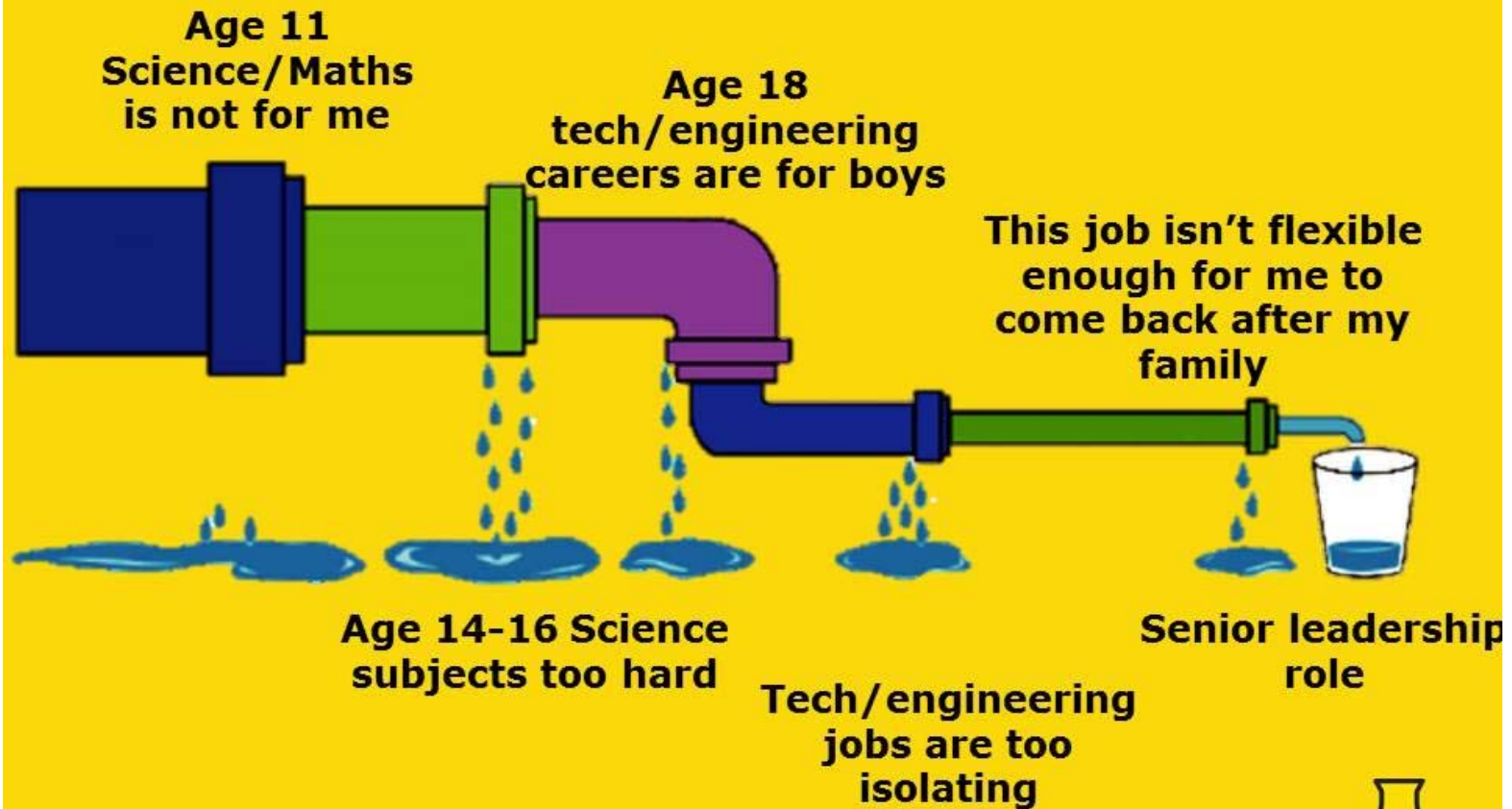
This figure displays the percentage of women and men in humanities, social sciences, and education in 2008–2009 at various stages of the academic career in Canadian universities.

The leaky pipeline: share of women in higher education and research, 2013 (%)



Source: UNESCO Institute for Statistics estimates based on data from its database, July 2015

Where are the leaks for women in STEM?



- ✓ Women's career interruptions
- ✓ Women not applying for promotion at the same rate as men
- ✓ Research priorities tending to favour those disciplines where men are more likely to dominate

(Carrington & Pratt, 2003, p. 8).

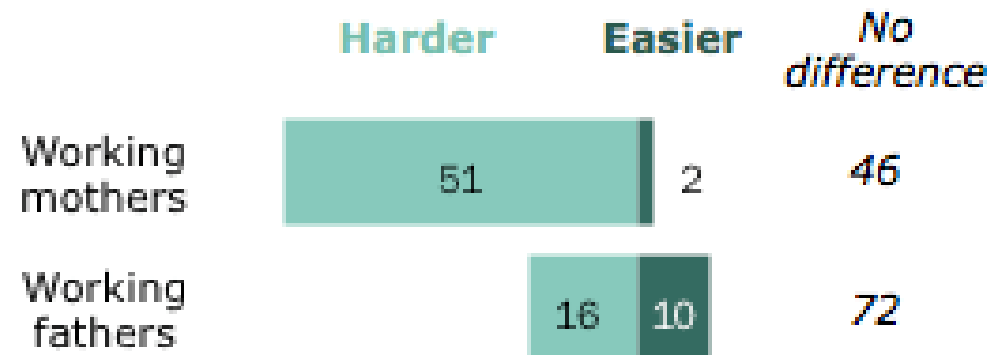
“Women continue to bear a heavier burden when it comes to balancing work and family, despite progress in recent decades to bring about gender equality in the workplace”

SUPER MOM



Working Mothers and Career Advancement

% with children under age 18 who say being a working mother/father makes it ... to advance in job or career



Notes: Based on adults who are working or have ever worked and have children younger than 18 (n=528). Voluntary responses of "Depends" and "Don't know/Refused" not shown.

Source: Pew Research Center survey Oct. 7-27, 2013, N=2,002

PEW RESEARCH CENTER

Empowering the women in academia and research

- **Gender inclusive policies**

- universities and research institutions must promote diversity and break the barriers of traditional gender roles.
- funding grants to different activities that promote gender equality such as: training women for the participation in peer review processes; training women for editing and publishing research papers; and increasing the awareness of women for the strategies for becoming research group leaders.
- Fair Assessment to women

- **Equity driven policies that support women and family**

- On-site day care
- Carer-leave, paternity leave
- Allowance for career breaks
- Special grant - child care support for conference participants

- **Awareness**



Deputy Minister, Minister
and Secretary General
for Ministry of Science
Technology environment
and Climate Change

Thank you!!!