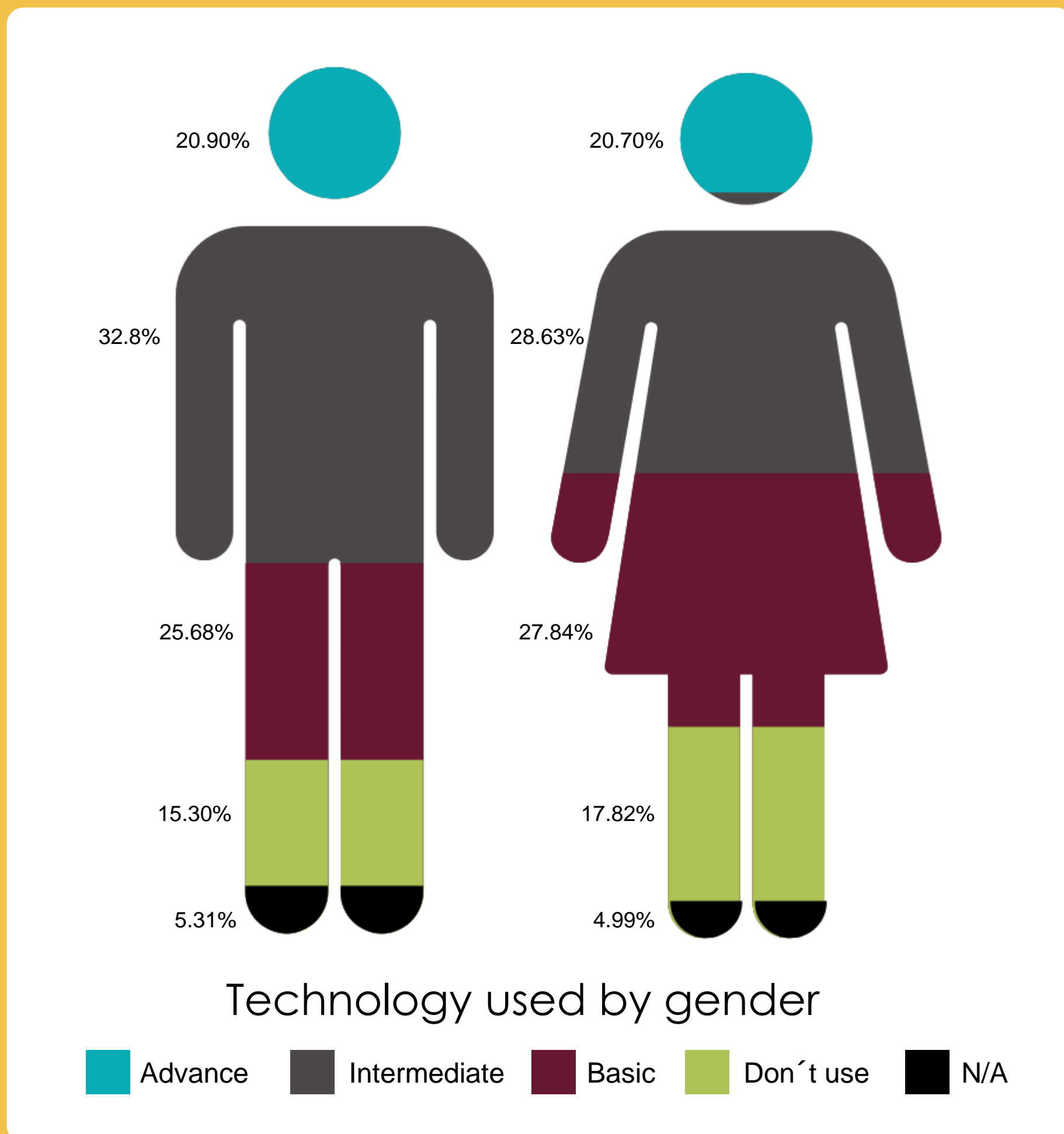# Gender gaps in technological skills related to university learning

Melissa Campos Solórzano, Ronny Cortéz Reyes

Including sex and gender as variables in scientific research

20.90%   20.70%

32.8%   28.63%

25.68%   27.84%

15.30%   17.82%

5.31%   4.99%

Technology used by gender

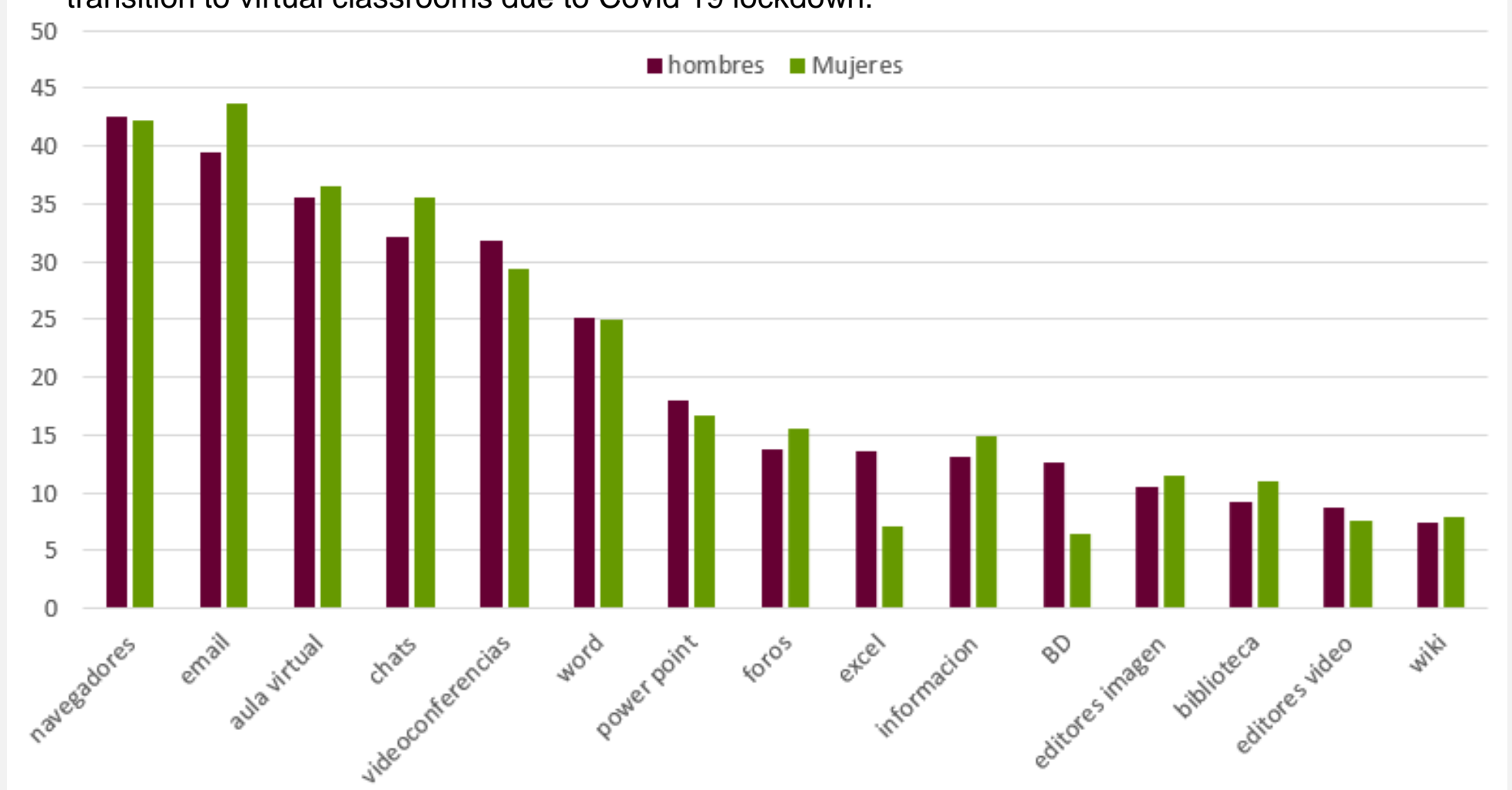Advance   Intermediate   Basic   Don´t use   N/A

During the period of global lockdown that began in the first quarter of 2020, a research team combining computer science and anthropology was formed to understand the reality of students who suddenly changed their way of receiving classes from face-to-face to virtual way.

The research was carried out for 9 months. The results showed that compared to women, the management of different technologies by men during virtual classes due to COVID-19 was higher. Women had more challenges and their mastery of technologies remained at lower levels.

This indicates that there is a difference in the management of the technologies if we take into consideration the sex of the population consulted.

It's common to think that young people are getting used to technology. Considering the impact of COVID-19 and the consequent change to virtual learning, research to evaluate the situation of university students was made. Basic aspect such as access to Internet connections, the devices available, their virtual competencies to be able to face this situation and adapt more easily. To achieve the research objectives, a mixed method with sequential explanatory design was used. A consultation form with multiple dimensions was created, and a sample of 1500 contributions was collected from students between their second and last year of university. With the responses obtained, data and text analyses were performed. As a result, the differences in the use of technology according to gender were identified, showing a gender gap in the digital competencies and skills of women. This opens the opportunity for future studies.

Figure 1. The gender gap in tecnology uses
application of technology skills by sex according to research conducted in 2020 during the transition to virtual classrooms due to Covid 19 lockdown.

hombres   Mujeres

navegadores, email, aula virtual, chats, videoconferencias, word, power point, foros, excel, informacion, BD, editores imagen, biblioteca, editores video, wiki
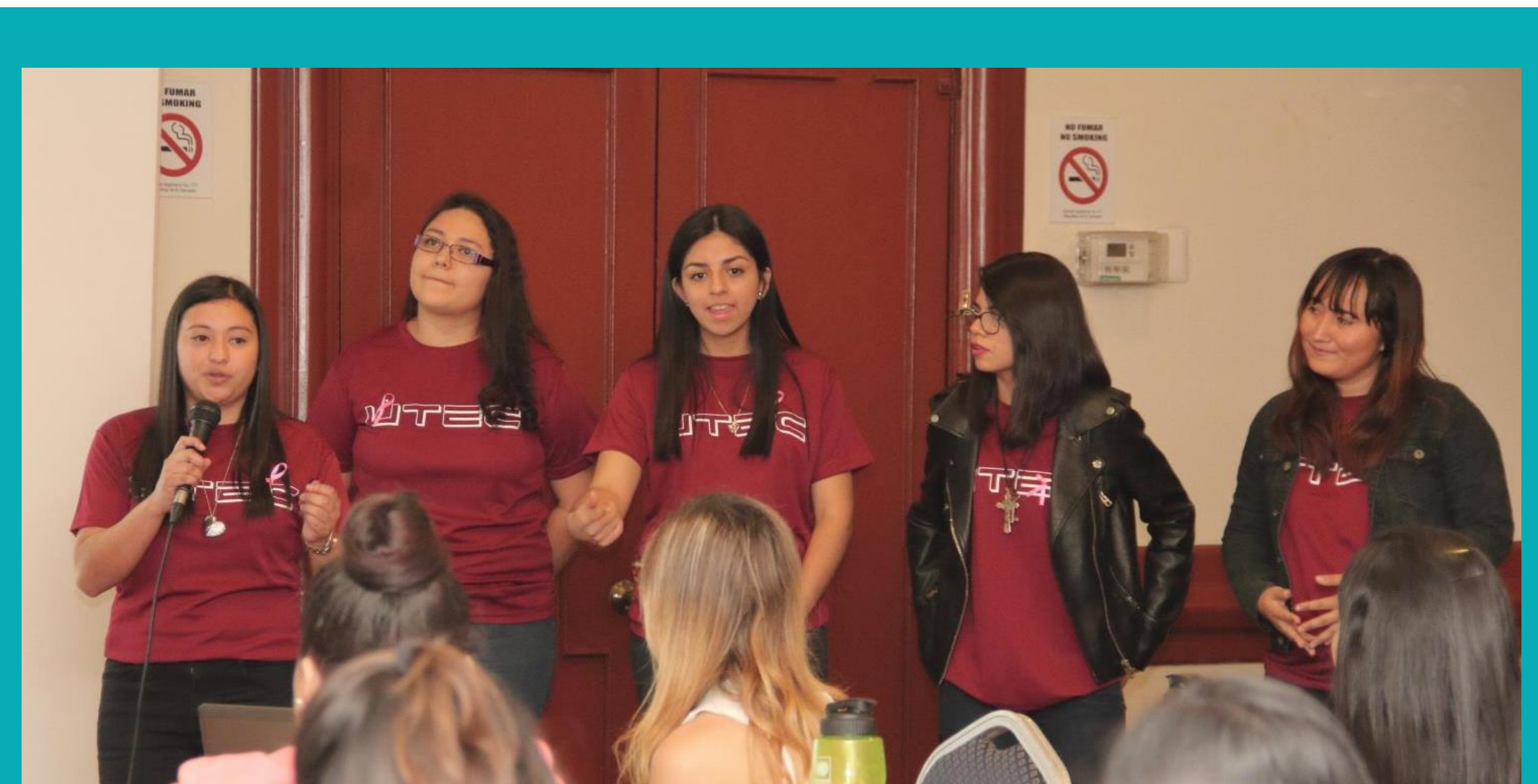
Main findings

Despite having an Internet connection, which is frequently a low-quality one, women tend to make a limited use of technology for communication purposes (email, chat, browsers).

Therefore, the level of knowledge of more tools needed in virtual environments is in between intermediate-basic or even, they do not use them at all. This represents a disadvantage in the IT field, which is essential in the current global situation.

What´s next?:

- The results obtained are inputs to make decisions regarding the limitations to receive virtual classes according to the particularities of the students.
- It is necessary to evaluate the evolution of adaptation after more than a year of virtual classes.
- It is strongly recommended creating and promoting training opportunities for women in the use of tools and technologies.
- There is a long way to go in a country with a discourse of gender equality, but where the digital gender gap is not virtual.
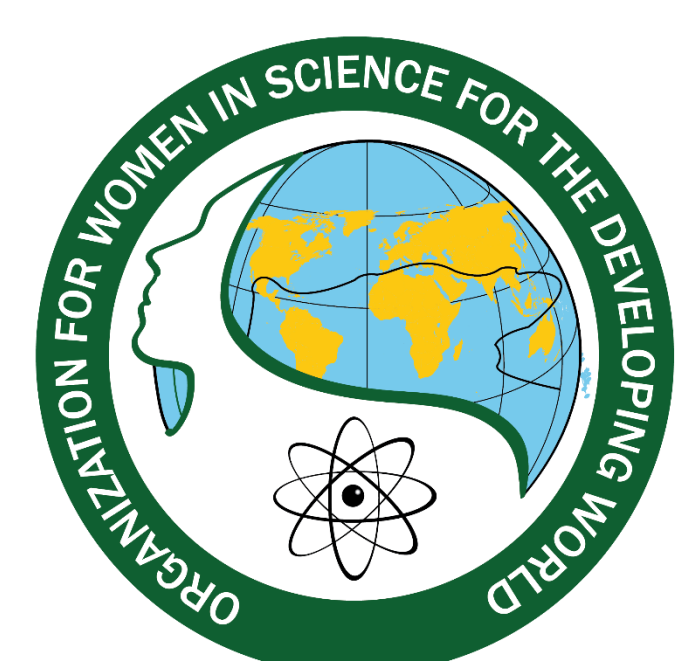

The image above shows the first group of student winners of a FinTech competition. Utec,2018.

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