

# GENDER SCAN 2021 survey

## Western Europe – Students report



### Methodology of the Gender Scan TM 2021 survey :

The Gender Scan TM 2021 survey was conducted online (in 117 countries) from March to August 2021 on a declarative basis with 30,001 male and female respondents worldwide.

2616 people answered in Western Europe, among which 968 men, 1622 women and 26 others, from 23 countries, which provides for a 1,8% margin of error.

The 23 countries from which the survey includes answers are the following : Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, the Netherlands, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland, the United Kingdom.

The total number of students in the STEM fields is of 2586, among which 968 men and 1613 women. The total number of students in the digital fields is of 777, among which 386 men and 391 women.

### The student definition is based on UNESCO's ISCED 2011 and 2013 definitions.

#### *It therefore includes the following ISCED's levels :*

students and graduates in higher education from ISCED levels 5 to 8 (i.e : post-baccalaureate short-cycle education, bachelors, masters and doctorate levels)

#### *STEM disciplines include the following specializations:*

- Mathematics
- Physics
- Life sciences, biology, chemistry
- Computer science, digital (courses under ISCED 2013 category 6, which includes programming, programming, network creation and administration, software and application development), software and application development).
- Engineers, processing and production industry
- Environment, sustainable development, ecology
- Building, civil engineering, construction
- Agriculture, agronomy, forestry, veterinarians

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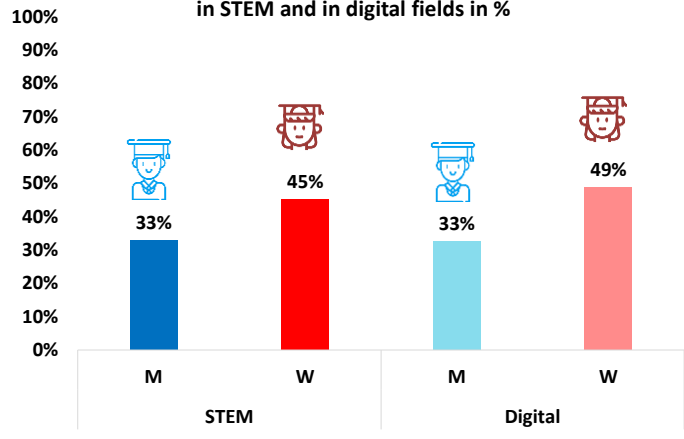
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# Discouraging factors

**Almost half of female students have been discouraged from choosing technical fields, as opposed to 1/3 of male ones**

**Have you ever been discouraged from choosing technical fields?**  
 Comparison of answers from men and women students  
 in STEM and in digital fields in %



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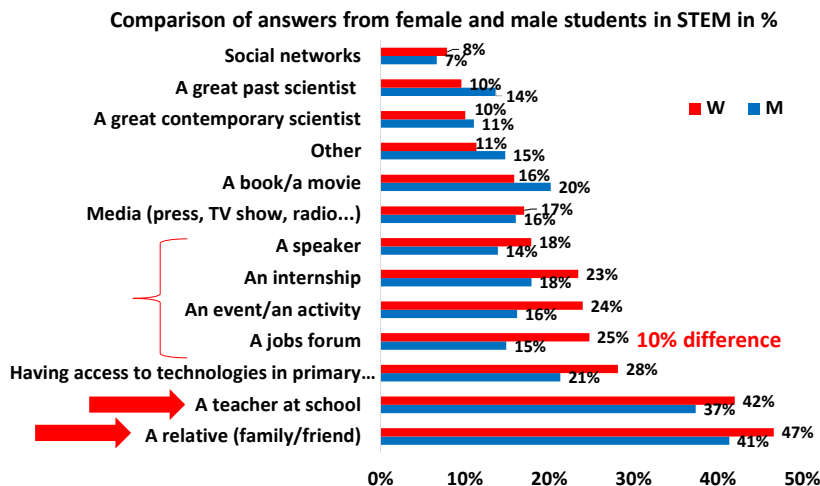
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+12% of women discouraged from going into STEM compared to men. (45% vs 33%)  
 +16% of women discouraged from going into digital fields compared to men (49% vs 33%).  
 Almost 1 out of 2 women discouraged from choosing technical fields in STEM and digital.

# Influencing factors - STEM

Top influencers are relatives and teachers. Access to technology, job fora and events influence a significantly higher % of women than men

## What influenced you the most in your choice of training?



The data shows that what motivates most female and male students to choose STEM is the human factor (firstly, relatives, family members or friends, and secondly, a teacher at school). The third most important factor is the access to technologies at school. This suggests that the school environment is decisive to influence youngsters and trigger in them interest in STEM. In numbers:

- 47% of women in STEM mentioned a relative (vs 41% of men) +6 % for women
- 42% of women in STEM cited teachers at school (vs 37% of men) +5% for women
- 28% of women in STEM cited access to technology at school (vs 21% of men) +7% for women

Other factors that significant proportions of women cite are:

- A jobs forum (W: 25% vs M: 15%) +10% for women
- An event/activity (W: 24% vs M: 16%) +8% for women
- An internship (W: 23% vs M: 18%) + 5% for women

**Data from the verbatim:** The most frequent answers to the question “**What influenced you the most in your choice of specialization of study?**” are (% based on 160 answers of women in STEM, 95 of men in STEM):

- Being passionate about the field (18% of female students in STEM vs 19% male students)

“I just loved it and I wanted to learn more.” Spain, Woman, 23, Physics

“It was mostly a “natural passion”, encouraged by those around me.” Belgium, Man, 21, Mathematics

- Interest/personal research (13% of female students in STEM vs 13% of male counterparts)

“Personal reflection and research.” Italy, Woman, 24, Engineering, transformation and production

“Self-directed learning of the subjects” France, Man, 19, Mathematics

- Family/friends (11% of female students, 3% of male counterparts)

“Family for introducing me to biodiversity, friends for talking to me about environmental issues in first grade.” France, Woman; 24, Life sciences, biology, chemistry/ Engineering, processing and production industry/ Agriculture, agronomy, forestry, veterinarians

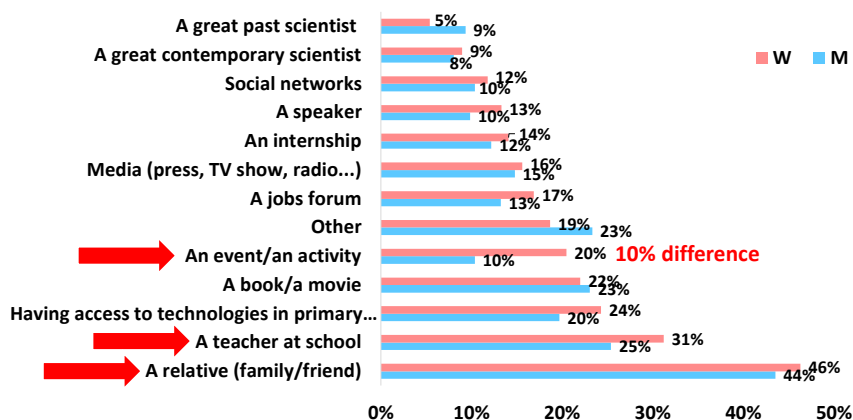
“My classmates.” Finland, woman, 21, Engineering, processing and production industry

# Influencing factors – Digital

Top influencers are relatives and teachers. Teachers, access to technology and events influence a higher proportion of women than men

## What influenced you the most in your choice of training?

Comparison of answers from female and male students in digital fields in %



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The data shows that what motivates the most female and male students to choose digital fields is the human factor (firstly, relatives, family members or friends, and secondly, a teacher at school). The third most important factor is the access to technologies at school. This suggests that the school environment is decisive to influence youngsters and trigger in them interest in ICT fields. In numbers:

- 46% of women in digital mentioned a relative (family or friend) (vs 44% of men) +2% for women
- 31% of women in digital cited teachers at school (vs 25% of men) +6% for women
- 24% of women in digital cited access to technology at school (vs 20% of men) +4% for women

Other factors that significant proportions of women cite are:

- An event/activity (W: 20% vs M: 10%) +10% for women
- A jobs forum (W: 17% vs M: 13%) +4% for women

**Data from the verbatim:** The most frequent answers to the question “**What influenced you the most in your choice of specialization of study?**” are: (% based on 84 answers of women in ICT, 99 of men):

- Being passionate about the field (24% of female students in digital fields vs 15% male students)

“I just love programming, mathematics, physics.” Portugal, Woman, 21, Computer sciences, digital/Engineering, transformation and production industry

“I am naturally passionate about it, I like to draw and let my creativity run free” Belgium, Woman, 19, Arts, humanities and Languages/ Computer sciences, digital

- Toys/video games (13% of female students in STEM vs 11% of male counterparts)

“Toys, riddles, games, field trips” Iceland, Woman, 25, Mathematics/ Computer Sciences, digital

“Social contacts in computer games.” Austria, Man, 31, Computer Sciences, digital

“Video games (Minecraft) where I learned to program in Java in order to make modification.” Belgium, Man, 20, student in Computer sciences, digital

- Interest/personal research (7% of female students, 17% of male counterparts)

“I looked for information on my own on various training sites” France, Woman, 22, Arts, humanities and Languages/Information, journalism, social sciences/ Computer sciences, digital

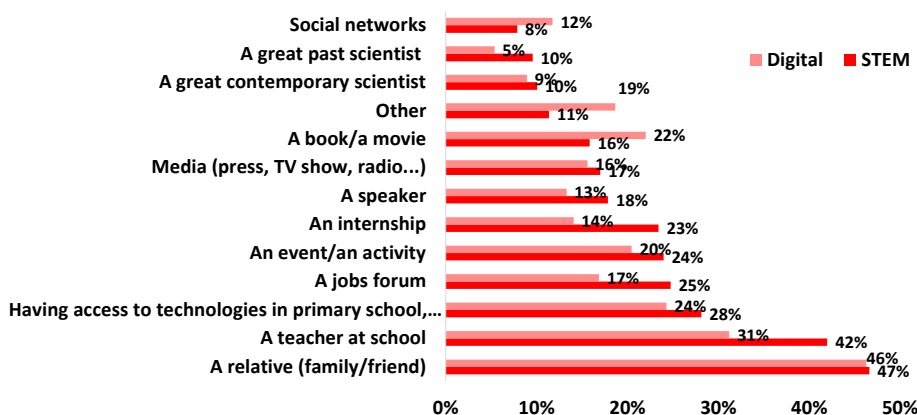
“It was rather by myself, trying to understand the world that I saw what I wanted to do.” Belgium, Man, 21, student in Computer sciences, digital

# Influencing factors – STEM vs Digital

Teachers, jobs fora and internships influence more STEM women than digital ones, while social networks, books and movies influence a higher % of digital students

## What influenced you the most in your choice of training?

Comparison of answers from female students in STEM and digital fields in %



The top 3 influencing factors (relative, teacher at school, technologies at school) are shared between STEM and digital fields students, which suggests the core levers to trigger interest in girls in STEM and tech subjects are the same. Some differences between them concern:

Factors that influence more STEM than digital students:

- A teacher at school (42% vs 31%, + 11%), An event, activity (20% vs 24%, +4%), An internship (23% vs 14%, +9%), A Jobs forum (25% vs 17%, + 8%)

**Data from the verbatim:** topics that had significantly more answers to the question “**What influenced you the most in your choice of specialization of study?**” from STEM students than digital female students are (% based on 160 answers of women in STEM, 84 in digital):

- Interest/personal research (13% of women in STEM/ 7% of women in digital)
  - “I looked into what biomedical engineers did and thought that's what I wanted to do for a living.” Belgium, Woman, 21, Mathematics, Physics, Natural sciences, biology, chemistry
  - “My own research.” France, Woman, 21, Computer Sciences/ Digital
- University fair (10% of women in STEM/6% of women in digital)
  - “An informatics professor at a university fair” Austria, Woman, 21, Mathematics
  - “Open day of a university.” France, Woman, 22, Computer Sciences, Digital
- Courses/ activities: (9% of women in STEM/ 6% of women in digital fields)
  - “A robotics course I took part of (outside of school); general interest; fun in these subjects” Austria, Woman, 21, Mathematics/ Computer Sciences, digital
- Family/friends (11% of women in STEM/ 6% of women in digital fields)
  - “Parents and brother 10” United States, woman, 39, Engineering, transformation and production industry
  - “A friend told me about it” Belgium, woman, 20, Computer Science/Digital

Factors that influence more digital fields students than STEM ones:

- A book/ movie (22% vs 16%, +6%)
- Social networks (12% vs 8%, +4%)

Data from the verbatim: topics that had significantly more answers to the question **“What influenced you the most in your choice of specialization of study?”** from digital female students than STEM ones are: (% based on 160 answers of women in STEM, 84 in digital):

- Being passionate about the field (22% of women in digital fields vs 18% of women in STEM)

“my artistic passion came alone when I was a child” Belgium, Woman, 23, Arts, humanities and Languages/Computer sciences, digital

“ I wanted to work in science because I liked it” France, Woman, 23, Engineering, transformation and production industry

- Curiosity (8% of women in digital fields vs 6% of women in STEM)

“My natural curiosity for programming and mathematics “Spain, Woman, 16, Mathematics/Physics/Computer sciences, digital

“Curiosity toward geometry, architectural heritages and Sociology.” Belgium, Woman, 26, Construction industry, civil engineering

- A professional/role model (7% for women in digital, 1% for women in STEM)

“A professional who went to fix my sister's computer and I admired how he handled the machine. I wish one day I could work in this area.” United Kingdom, Woman, 40, Computer sciences, digital

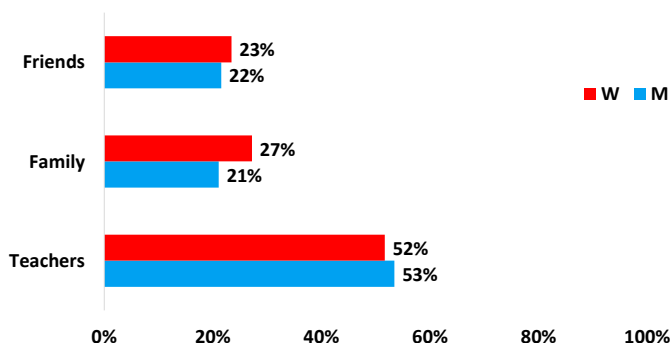
“Feminist role models” Austria, Woman, 30, Social sciences, journalism and information/Computer sciences, digital

## Discouraging factors - STEM

More than half of students were discouraged from entering STEM studies by their teachers. Family members discouraged a higher % of women than men

### Who discouraged you from pursuing scientific and technical fields?

Comparison of answers from male and female students in STEM in %



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Teachers are cited as the main source of discouragement by female and male today's STEM students. This applies to around half of them. Family and friends follow as factors of discouragement of women studying in STEM, more than 1 in 5 women in STEM is discouraged by friends or family circle. In numbers:

- Teachers: W: 52% vs M: 53%
- Family circle: W: 27% vs M: 21%, + 6% gender gap.
- Friends: W: 23% vs M: 22%.

**Data from the verbatim:** The most quoted arguments evoked by students when answering to the question : "Can you indicate the arguments which were evoked to discourage you from pursuing these professions and these courses? " were: (% based on 482 answers of women in STEM, 164 men):

- You're not good enough, it is too difficult for you (41% of women studying in STEM, 45% of men)  
 "Some people around me, especially male high school classmates and teachers, gave me the idea that if I got good grades it was because I was responsible and put time into it, but I wasn't bright enough to do a pure science degree." Netherlands, Woman, 23, Student in Physics  
 "There was no one in particular who discouraged me. What made me have great doubts was the fact that physics and maths are too often associated with fields that are inaccessible, open only to true geniuses. At least, that's how I felt." Belgium, Woman, 21, Student in Physics
- It is not a field for women (27% of women studying in STEM, 0% of men)  
 "Conservative people saying that a technical university or a construction site is no place for a woman." Austria, Woman, 25, Arts, humanities and Languages/ Engineering, transformation and production industry  
 "It's little remarks here and there like: But what an idea to do that as a woman! Isn't it too hard for a woman?" Germany, Woman, 22, Engineering, transformation and production industry
- You don't have the right profile, it is not for you (7% of women students, 12% of men)  
 "Not the right area for me" Portugal, Woman, 18, Natural sciences, biology, chemistry/Engineering, transformation and production industry  
 "Former boss at a chemical company advised against further studying chemistry, because I was not passionate about their field of chemistry and its applications." France, Man, 29, Natural sciences, biology, chemistry

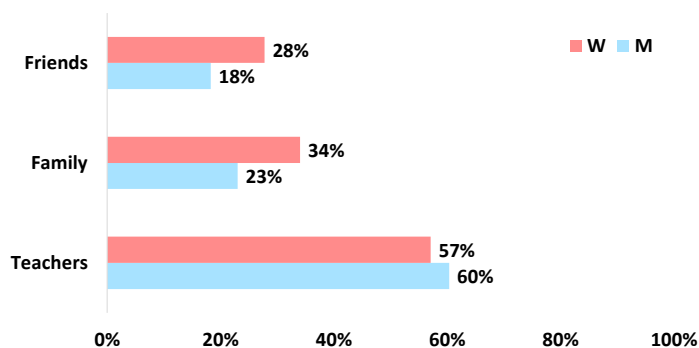


## Discouraging factors - Digital

Nearly 6 out of 10 students were discouraged from entering digital studies by their teachers. Friends and family discouraged a significantly higher % of women than men

### Who discouraged you from pursuing scientific and technical fields?

Comparison of answers from male and female students in digital fields in %



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Teachers are the leading discouraging factor for men and women studying digital technology, representing a discouraging factor for 6 out of 10 men and 5 out of 10 women. If a higher proportion of men declares having been discouraged by teachers, friends and family are indicated as having discouraged much more women.

- Teachers: W: 57% vs M: 60%, + 4% for men.
- Family circle: W: 34% vs M: 23%, + 11% gender gap)
- Friends: W: 28% vs M: 18%, + 10% gender gap.

**Data from the verbatim:** The most quoted answers to : "Can you indicate the arguments which were evoked to discourage you from pursuing these professions and these courses? " are (% based on 176 answers of women in ICT, 111 men): :

- It is not a field for women (32% of women, 0% of men)

"It's not a place for women" Belgium, Woman, 21, student in Computer sciences/digital

"It's a man's job" "What an idea to choose studies where there are so few women" Belgium, Woman, 24, Computer sciences, digital

- You're not good enough, It is too difficult for you (30% of women, 49% of men)

"You have bad grades in high school, how can you imagine going to university? You don't like maths, studies are not for you" Belgium, Man, 20, student in Computer sciences, digital

"That it wasn't for me and that I was bad at math anyway. That it's too "smart" a job for me" Belgium, Women, 23, student in Computer sciences, digital

"Some people around me, especially male high school classmates and teachers, gave me the idea that if I got good grades it was because I was responsible and put in the time, but I wasn't bright enough to do a pure science degree." Netherlands, Woman, 23, Physics

- This is not useful, you won't find a job (9% of women, 11% of men)

« It's not a real job / it doesn't pay much / There are few job opportunities » Belgium, Woman, 22, Computer sciences, digital

"They said there were no opportunities in my country, so why go for it?" Portugal Man, 22, Computer sciences, digital/Engineering, transformation and production industry

- You don't have the profile, it is not for you: 6% of women, 16% of men

"you have to have a square mind, I have too much creativity" Belgium, Woman, 22, student in Computer sciences

"That I'm not cut out for maths and science. Two maths teachers and a science teacher told me this repeatedly." Belgium, Man, 18, student in Computer sciences, digital/Engineering, transformation and production industry

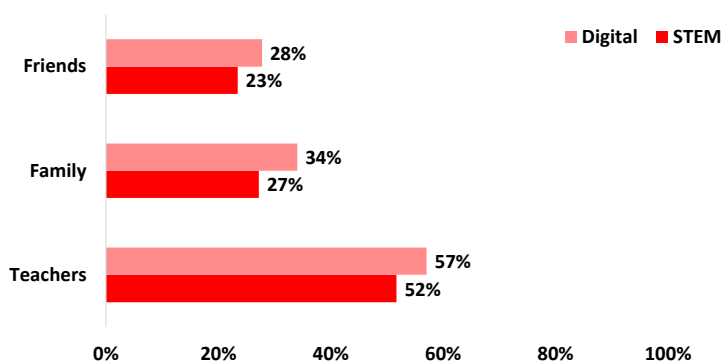
## Discouraging factors – STEM vs Digital



5% more of girls are discouraged from going into digital fields than into STEM by their teachers and friends, 7% more by their family

### Who discouraged you from pursuing scientific and technical fields?

Comparison of answers from female students in STEM and digital fields in %



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Trends are similar between female students in traditional STEM fields and tech, but a higher proportion of women studying digital fields declare to have been discouraged by teachers, family and friends.

- Teachers: digital: 57% vs STEM: 52%, + 5%.
- Family circle: digital: 34% vs STEM: 27%, + 7%.
- Friends: digital: 28% vs STEM: 23%, + 5%.

**Data from the verbatim:** Topics that had more answers to the question “Can you indicate the arguments which were evoked to discourage you from pursuing these professions and these courses?” from STEM students than digital female students are (% based on 482 answers of women in STEM, 111 in digital): :

- You're not good enough, It is too difficult for you (41% of women in STEM, 30% of women in digital)  
 « Family stating, it is too hard and that I am not good at maths (although I always had top grades at school without having to study for it).” Austria, Woman, 27, student in Physics/Computer sciences, digital/Engineering, transformation and production industry

**Data from the verbatim:** The arguments with more answers to the question “Can you indicate the arguments which were evoked to discourage you from pursuing these professions and these courses?” from digital female students than STEM ones are:

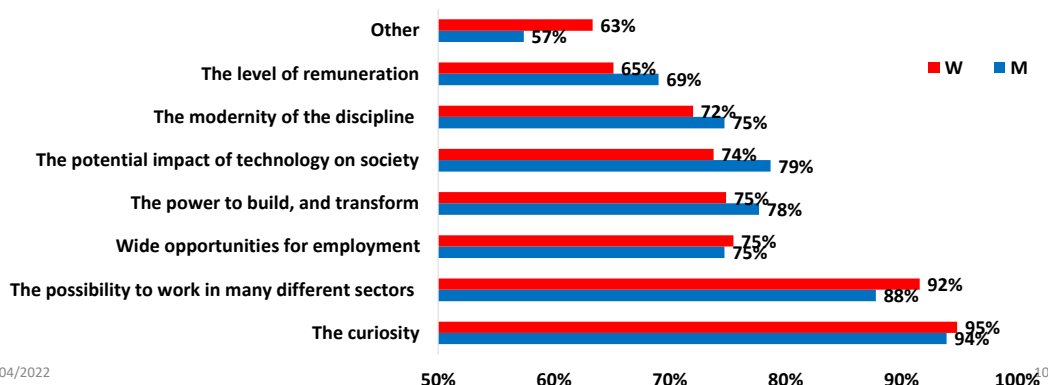
- It is not a field for women( 32% of women in digital, 27% of women in STEM)  
 "It's a man's job" "What an idea to choose studies where there are so few women" Belgium, Woman, 24, student in Computer sciences/digital  
 "I was told that it wouldn't be a place for me'. That it could be too dangerous, and I should rather become a teacher, that teaches that subject, than a active worker in that field.” Austria, Woman, 19, student in Physics/Engineering, transformation and production industry
- This is not useful, you won't find a job (9% of women in digital, 3% of women in STEM)  
 “No future, no job, no skills, not a real job” Belgium, Woman, 21, Computer sciences, digital  
 "What work would you have with this?" "Nobody needs that.” Austria, Woman, 24, Mathematics  
 "What kind of work would you have with this? Nobody needs that.” Austria, Woman, 24, Mathematics

# Motivation factors - STEM

The level of remuneration and the potential impact of technology on society are valued by more men; the possibility to work in different sectors by more women

## What motivated you to pursue these studies in terms of your personal aspirations?

Comparison in % of answers from male and female students in STEM who responded Yes, a little bit and Yes, absolutely



Strong similarity in the motivations of women and men students in STEM. The level of remuneration (W: 65% vs M: 69%, + 4%) and the potential impact of technology on society (W: 74% vs M: 79%, +5%) are valued by a higher % of men than women. Top 3 criteria:

- Curiosity: W: 95% vs M: 94%, + 1% difference for women
- The possibility to work in many different sectors : W: 92% vs M: 88%, + 4% difference for women
- Wide opportunities for employment: W: 75% vs M: 75%

**Data from the verbatim:** The most cited aspects in response to the question “Can you specify what triggered your current choice of professional orientation?” were (% based on 883 answers of women in STEM, 413 men): :

- Passion (22% of Women, 23% of men)

“Since I was a little girl, I've always liked science, done experiments, played the scientist, invented objects, it was a game. There was no triggering event. My parents let me do what I wanted and supported me in my studies.” Belgium, Woman, 28, Engineering, transformation and production industry/ Environment, sustainable development, ecology/ Agriculture, agronomy, forestry,  
 “I always loved maths and I thought physics would be the most interesting way to use.” Ireland, Woman, 26, student in Physics

- The impact this job can have of society (14% of Women, 13% of men)

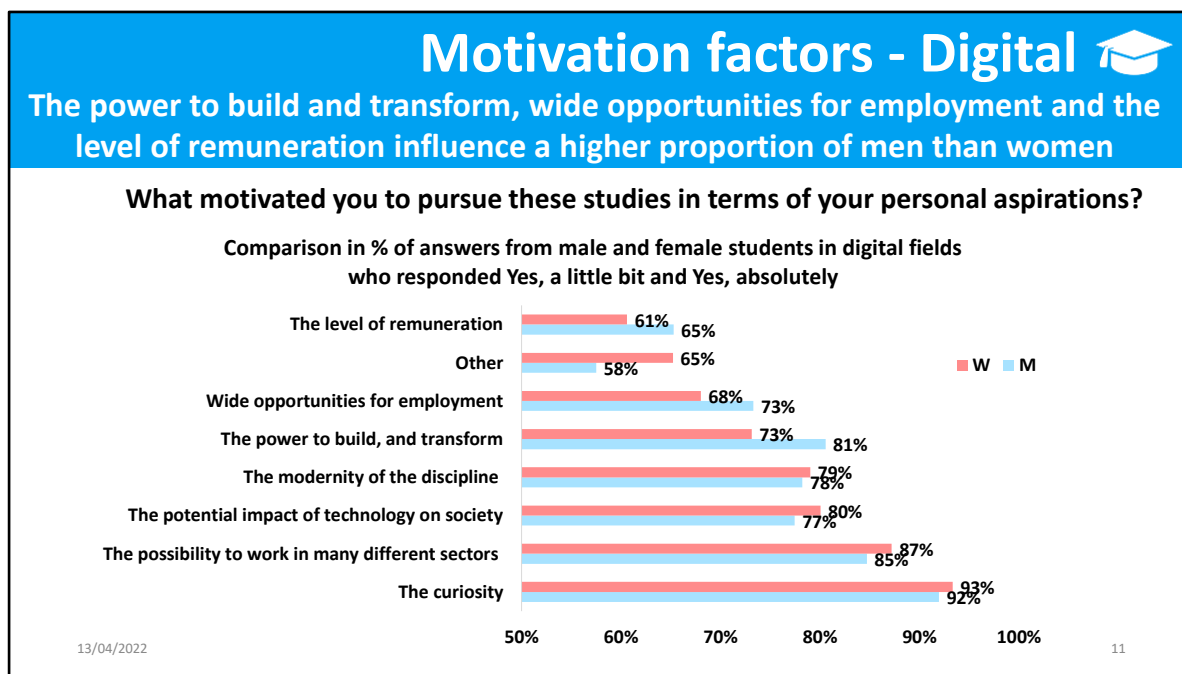
“Insatiable curiosity to understand and comprehend what surrounds me, to feel that what I do can influence and improve people's quality of life and to do my bit for society in order to leave my "footprint" positively and feel that I have used my time for something productive.” Spain, Woman, 16, Mathematics/Physics/Natural sciences, biology, chemistry

“Reconciliation between a field I am passionate about and the imperative of the state of the planet” Germany, Man, 21, Natural sciences, biology, chemistry/Environment, sustainable development, ecology/Agriculture, agronomy, forestry, veterinary

- Family friends (11% of women, 13% of men)

“A talk with a professor at a university fair. He was encouraging and very enthusiastic about the area. Also my sister was very encouraging and talked a lot about the benefits of an informatics specialization.” Austria, Woman, 21, Mathematics

“My father got the same education as me, and from a young age I was exposed to technology and engineering. He has a company in the area so I always had every opportunity to try out different equipment and technologies.” Portugal, Man, 25, Engineering, transformation and production industry



Significant gender differences in favor of men are present in

- the power to build and transform (M: 81% vs W: 73%, + 8%)
- Wide opportunities for employment (M: 73% vs W: 68%, +5%)
- the level of remuneration, (W: 61% vs M: 65%, + 4%).

Slight gender differences in favor of women :

- Curiosity: W: 93% vs M: 92%,
- The possibility to work in many different sectors : W: 87% vs M: 85%,
- The potential impact of technology in society: W: 80% vs M: 77%, +3%

**Data from the verbatim:** The most cited aspects in response to the question “Can you specify what triggered your current choice of professional orientation?” were: (% based on 291 answers of women in ICT, 254 men):

- Passion (25% of Women, 24% of men)

“I love to draw, it's my hobby, I would like it as my job”. Belgium, Woman, 21, Computer sciences

“I always liked technology and science, in any case I would have chosen programming, network security or computer engineer. There was no real triggering event other than the fact that I wanted to stay with my friends in my field of study” Belgium, Man, 19, Computer sciences, digital

“I like maths, I like computers, that's all.” Luxembourg, Woman, 23, Computer sciences, digital

- Family/Friends (11% of Women, 10% of men)

“Boyfriend introduced me to programming and IT and showed me that it is not as difficult as I imagined it would be.” Denmark, Woman, 26, Computer sciences, digital

“I started with advice from older friends in the IT area. High school colleagues were also planning to go for IT and engineering courses. I did some research and decided to go too” Portugal, Man, 29, Natural sciences, biology, chemistry/Computer sciences, digital

“I'm studying 2D Animation-Illustration at the HEAJ and I've been looking into it because my cousin studied there and seeing him do his work always made me dream so I went to study there a few years later,” Belgium, Woman, 20, Arts, humanities and Languages/ Computer sciences, digital

- The impact this job can have on society (8% of women, 6% of men)

“Lack of women in science, even though it is so important that also women's need are taken into account when designing the future. Also the belief that science can do so much good for the world and solve many questions/issues. It is a unique way of changing and shaping our daily lives.” Austria, Woman, 22, Natural sciences, biology, chemistry/Computer sciences, digital

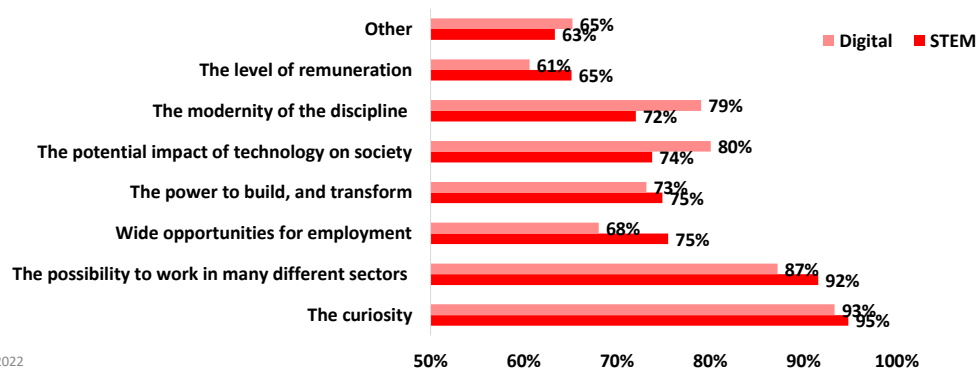
“A computer science project that allowed me to discover what it could be like in practice and the ideal of being able to participate in the evolution of society towards a better world thanks to artificial intelligence and all the technological development that comes with it” Belgium, Man, 19, Computer sciences, digital

# Motivation factors – STEM vs Digital

The modernity of the discipline and the impact of technology motivate a higher % of women in digital; wide opportunities for employment motivate a higher % of women in STEM

## What motivated you to pursue these studies in terms of your personal aspirations?

Comparison in % of answers from women students in STEM or digital fields who responded Yes, a little bit and Yes, absolutely



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The topics that motivate proportionately more STEM than digital students are:

- Wide opportunities for employment – STEM: 75%, digital: 68%, +7%
- The power to build and transform - STEM: 75%, digital: 73%, +2%

**Data from the verbatim:** Topics that had more answers to “Can you specify what triggered your current choice of professional orientation?” from STEM than digital female students are: (% based on 883 answers of women in STEM, 291 women in digital):

- The impact this job can have on society (14% of women in STEM, 8% of women in digital)

“What made me decide to study engineering was when I realized that technology could have a positive impact on society, reading about the development of medical technology.” Belgium, Woman, 21, Natural sciences, biology, Engineering, transformation and production industry

“In the middle of an ongoing developing field of work and knowledge, trying to implement the most progressive forms of technological possibilities to reach egalitarian conditions of life for all.” Austria, Woman, 30, Social sciences, journalism and information/Computer sciences, digital

- A university fair/open day (10% of women in STEM, 5% of women in digital)

“There was a week where students could visit any university in the city to find out what is interesting to it, I visited a lecture at the technical university and knew I'd belong here.” Austria, Woman, 20, Environment, sustainable development, ecology/ Construction industry, civil engineering/ Retail services, transportation services, security services STEM

“Open day of my university. I found out that electronic engineering degree existed, it was exactly what I was looking for” Italy, Woman, 30, Engineering, transformation and production

The factors that motivate more digital than STEM students are:

- The potential impact of technology in society - digital: 80% vs STEM: 74%, +6%
- The modernity of the discipline - digital: 79% vs STEM: 72%, +7%

**Data from the verbatim:** Topics that had more answers in digital than STEM are:

- Passion (24% of women in digital, 22% of women in STEM)

“I didn't think too much about it, it was more of a given for me. I am passionate about the world around us and the studies I chose were the ones that were closest to what I love.” Belgium, Man, 19, Environment, sustainable development, ecology/ Agriculture, agronomy, forestry,

“It was always part of me. There wasn't really a choice to be made. I knew for a long time that I wanted to work in digital.” Belgium, Woman, 23, Computer sciences, digital

- The wish to create (4% of Women in digital, 0% of Women in STEM)

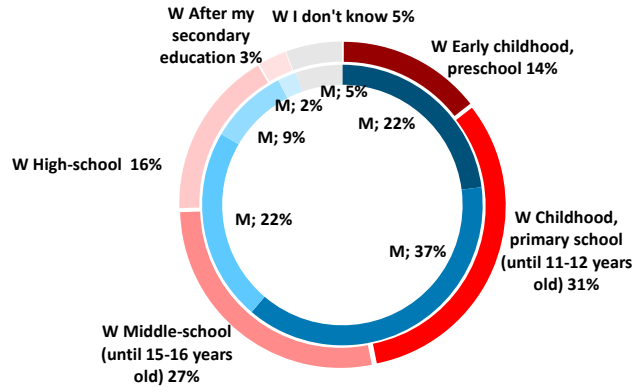
“To make my own programmes, to create from scratch.” Spain, Woman, 19, Computer sciences

# Interest in science & tech: when - STEM

Early stages of education are crucial: 87% of girls and 81% of boys first got interested in science and technology before high school

Since when have you been interested in science and technology?

Comparison in % of answers from female and male students  
in STEM



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Similar trends regarding the moment women and men in STEM first got interested in science and technology, though proportionately more men get interested earlier than women:

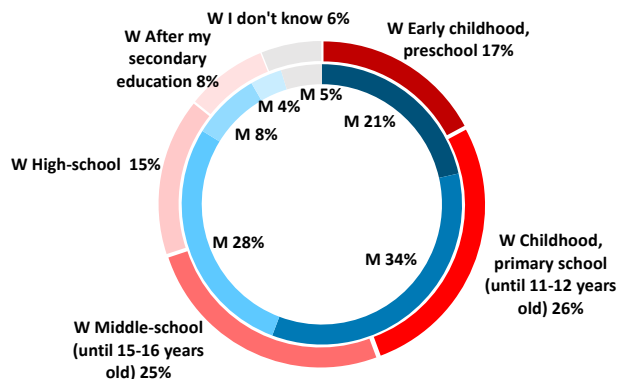
- Early childhood plays a non-negligible role : 14% of women, 22% of men, 7% difference for men.
- Primary school is the most cited moment by women (31%) and men (37%), 6% difference for men.
- Middle school comes next, mentioned by 27% of women and 22% of men, 5% difference for women.
- High school weighs for a higher % of women (16%) than men (9%), 7% difference for women.

# Interest in science & tech: when - Digital

Early stages of education are crucial: 68% of girls and 83% of boys first got interested in science and technology before high school

## Since when have you been interested in science and technology?

Comparison in % of answers from female and male students in digital fields

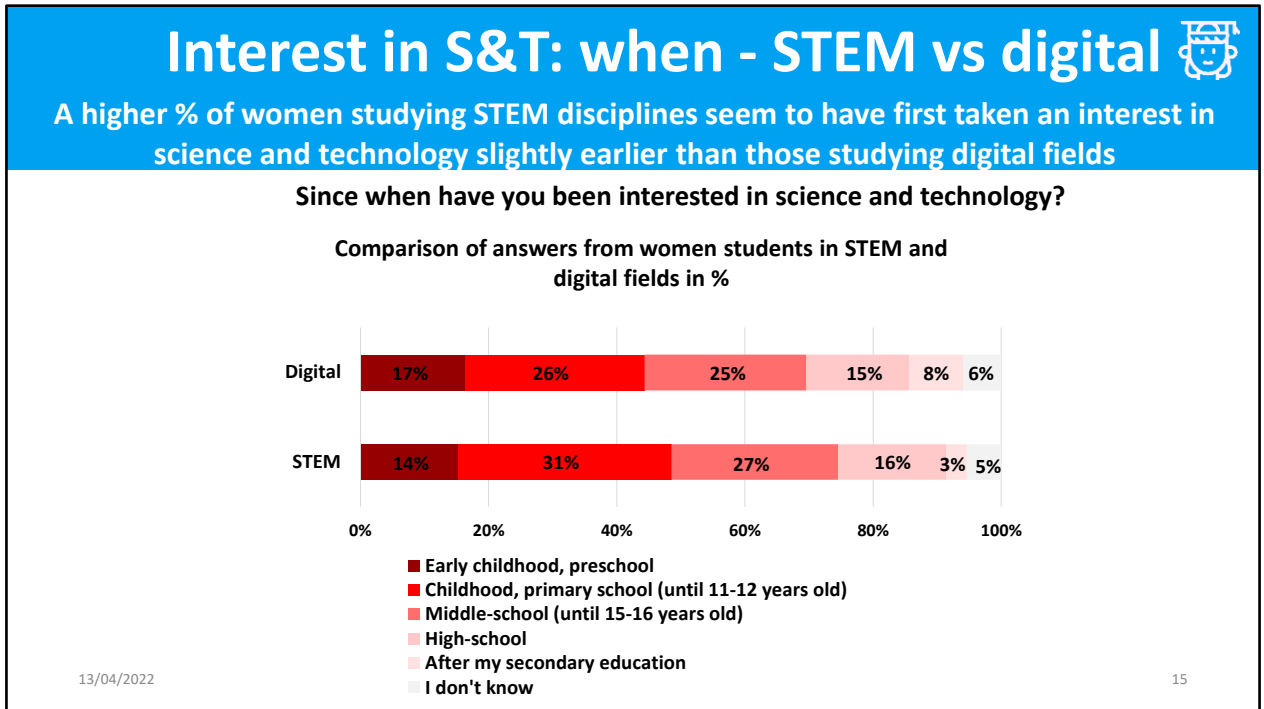


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Similar trends regarding the moment women and men studying in digital fields first got interest in science and technology, although proportionately more men get interested earlier than women:

- Early childhood plays a non-negligible role: 17% of women, 21% of men, 4% difference for men.
- Primary school is the most cited moment by women (26%) and men (34%), 8% difference for men.
- Middle school comes next, mentioned by 25% of women and 28% of men, 3% difference for men.
- High school weighs for more women (15%) than for men (8%), 7% difference for women.
- After secondary school also weighs for more women (8%) than for men (4%), 4% difference for women



Few differences between female students in STEM and digital.

To be noted: 32% of female students in STEM say they have been interested in science and technology since primary school, compared to 27% in digital studies. (5% difference)  
 Conversely 8% of students in digital studies, as against 3% in STEM, say the period after secondary education was when they took an interest in science and technology. (also 10% difference)

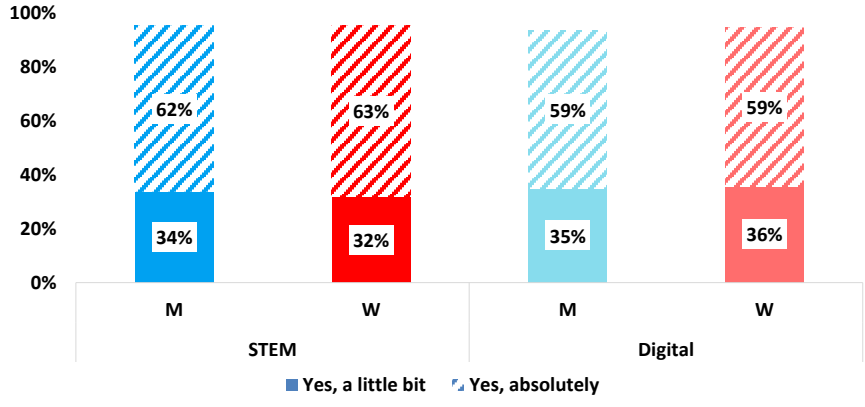


# Satisfaction – STEM vs Digital

No significant gender differences in STEM and digital studies: around 6 in 10 students are highly satisfied, and 3 out of 10 are satisfied

Are you satisfied with your choice of specialization of study?

Comparison of answers from men and women students in STEM and in digital fields in %



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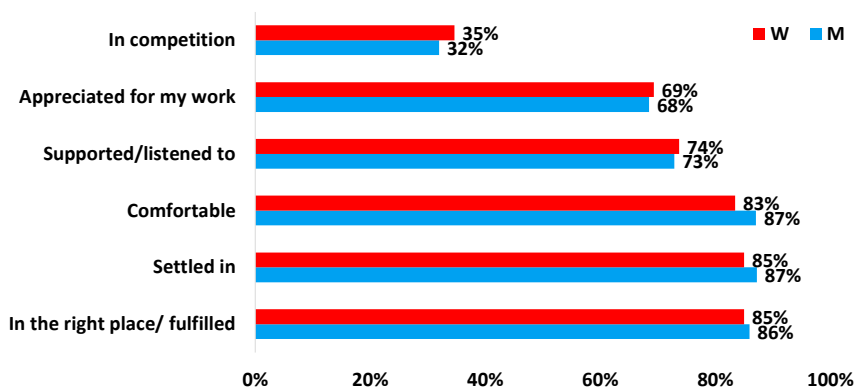
Overall very similar levels of satisfaction across STEM and digital disciplines and genders. Women and men in STEM declare to be absolutely satisfied in only slightly higher proportions than women and men in digital studies.

## Satisfaction - STEM

The majority of students feel comfortable, settled in and fulfilled in STEM studies, and men feel so in a slightly higher proportion than women

In your training, you generally feel:

Comparison in % of female and male students in STEM who responded yes and yes, absolutely



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A very positive perception of studies from female students, generally as positive as those of male students, which corroborates the previous point: women who have decided to embark on these fields are particularly determined and enthusiastic about their situation.

To be noted:

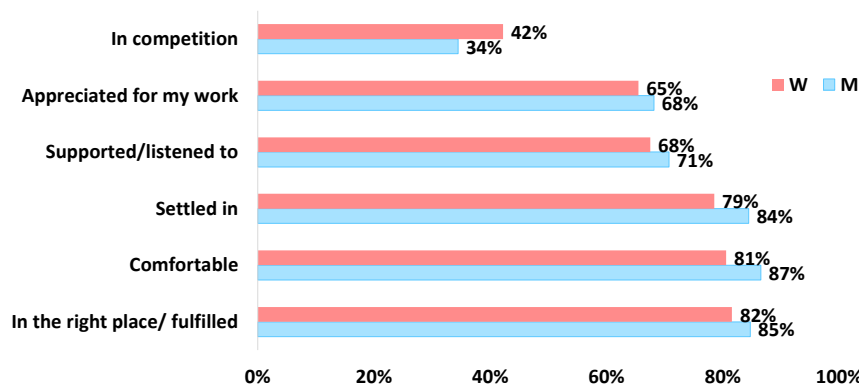
- 3% more of women than men students in STEM feel in competition with their peers (35% vs 32%) .
- 4% less of women than men students in STEM feel comfortable in their studies (87% vs 83%)

## Satisfaction - Digital

More men than women feel comfortable, settled in and fulfilled in digital studies, but 8% more women than men feel in competition

In your training, you generally feel:

Comparison in % of female and male students in digital fields who responded yes and yes, absolutely



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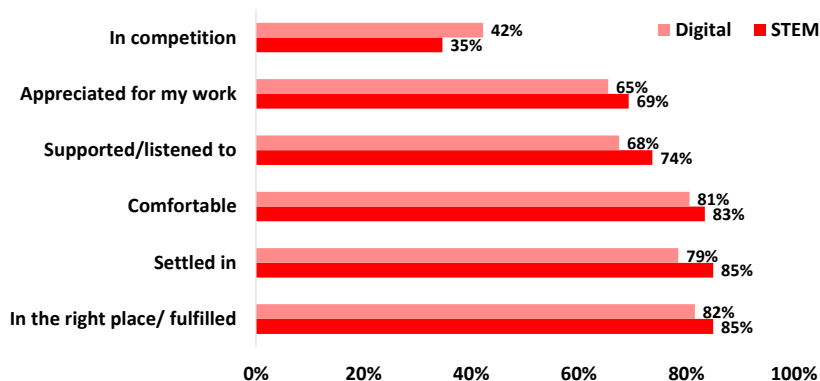
A very positive perception of studies from female students, almost as positive as those of male students, which corroborates the previous point: women who have decided to embark on these fields are particularly determined and enthusiastic about their situation. However, some gender gaps persist. To be noted:

- 8% more of women than men students in digital fields feel in competition with their peers (42% vs 34%, +6% for women).
- 5% less of women than men students in digital fields feel settled in (79% vs 84%) in their studies
- 6% less of women than men students in digital fields feel comfortable (81% vs 87%) in their studies
- 3% less of women than men students in digital fields feel in their right place (82% vs 85%) in their studies

# Satisfaction – STEM vs Digital

A higher % of women feel well in STEM than in digital studies

**In your training, you generally feel:**  
(% of women by specialization who responded yes and yes, absolutely)



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Top 3 similar criteria - In the right place/fulfilled, comfortable, settled in.

However, some gaps remain reflecting a lower level of integration of women in digital :

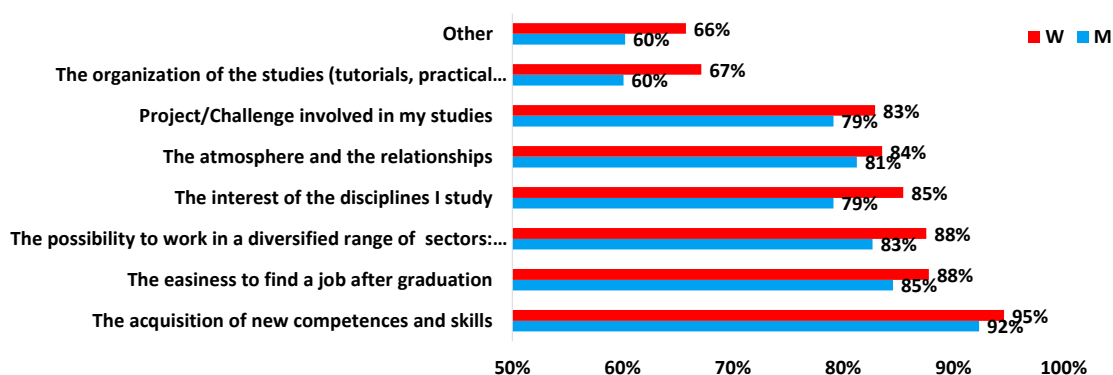
- 7% more of women in digital feel in competition with their peers compared to women in STEM. (42% vs 35%).
- 6% less of women in digital feel settled in compared to women in STEM. (79% vs 85%).
- 6% less of women in digital feel supported and listened to compared to women in STEM. (68% vs 74%).
- 4% less of women in digital feel appreciated for their work compared to women in STEM. (69% vs 65%).

## Satisfaction factors - STEM

Women are more numerous to be satisfied with STEM studies, especially concerning the organization of the studies and the interest of the disciplines

### What satisfies you the most in your studies?

Comparison in % of students in STEM who responded yes and yes, absolutely



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To be noted: women are slightly more numerous to feel satisfied by their studies on all criteria, the highest difference pertains to the organization of the studies and to the interest of the disciplines studied (7% and 6% more of women than men satisfied).

#### Top 3 satisfaction factors

- The acquisition of new competences and skills: W: 95%, M: 92%.
- The possibility to work in a diversified range of sectors: W: 88%, M: 83%. +5% of women than men.
- The easiness to find a job after graduation: W: 88%, M: 85%.

Other factors that matter for a significant proportion of women in comparison to men are:

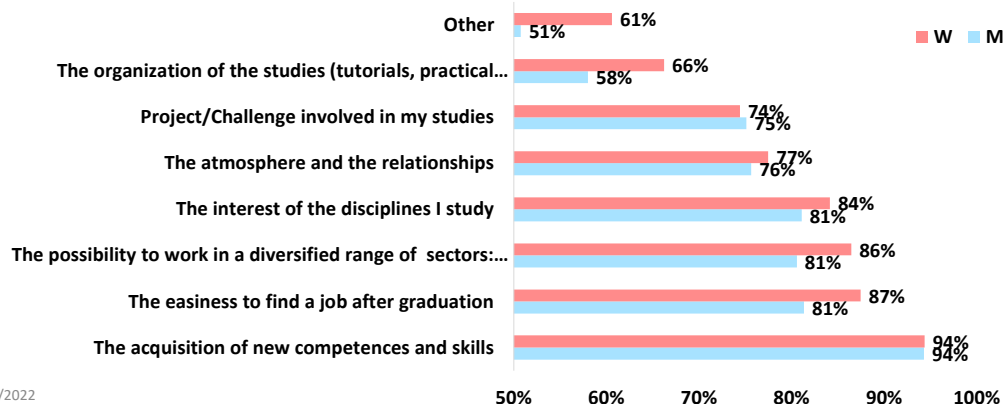
- The interest of the disciplines I study (W: 85% vs M: 79%, +6% for women)
- The project/challenge involved in the studies (W: 83% vs M: 79%, +4% for women)
- The organization of the studies (W: 67% vs M: 60%, +7% for women)

# Satisfaction factors - Digital

Women are more numerous to be satisfied with digital studies than men

## What satisfies you the most in your studies?

Comparison in % of students in digital fields who responded yes and yes, absolutely



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Women are more numerous to feel satisfied by their studies on all criteria, the highest difference pertains to the organization of the studies (8% more of women than men satisfied).

Top 3 satisfaction factors:

- The acquisition of new competences and skills: W: 94%, M: 94%.
- The easiness to find a job after graduation: W: 87%, M: 81%. +6% of women than men.
- The possibility to work in a diversified range of sectors: W: 86%, M: 81%. +5% of women than men.

Other factors that matter for a significant proportion of women in comparison to men are:

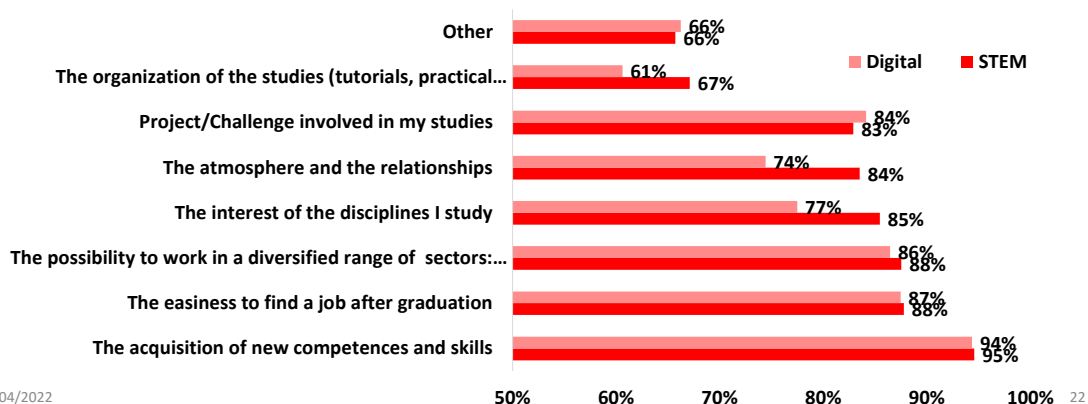
- The interest of the disciplines I study (W: 84% vs M: 81%, +3% for women)
- The organization of the studies (W: 66% vs M: 58%, +8% for women)

## Satisfaction – STEM vs Digital

Fewer digital students than STEM ones say they are satisfied with the atmosphere, the organization of studies and the interest of the disciplines they study

### What satisfies you the most in your studies?

Comparison in % of women students in STEM or digital fields who responded yes or yes, absolutely)



Top 3 satisfaction factors are shared between women in STEM and in digital studies:

- The acquisition of new competences and skills: Digital: 94%, STEM: 95%.
- The possibility to work in a diversified range of sectors: Digital: 86%, STEM: 88%.
- The easiness to find a job after graduation: Digital: 84%, STEM: 88%.

More women in STEM are satisfied with:

- The atmosphere and the relations (84% vs 74%, +10%)
- The interest of the disciplines I study (85% vs 77%, +8%)
- The organization of the studies (67% vs 61%, +6%)

Women in digital studies are slightly more numerous to be satisfied with:

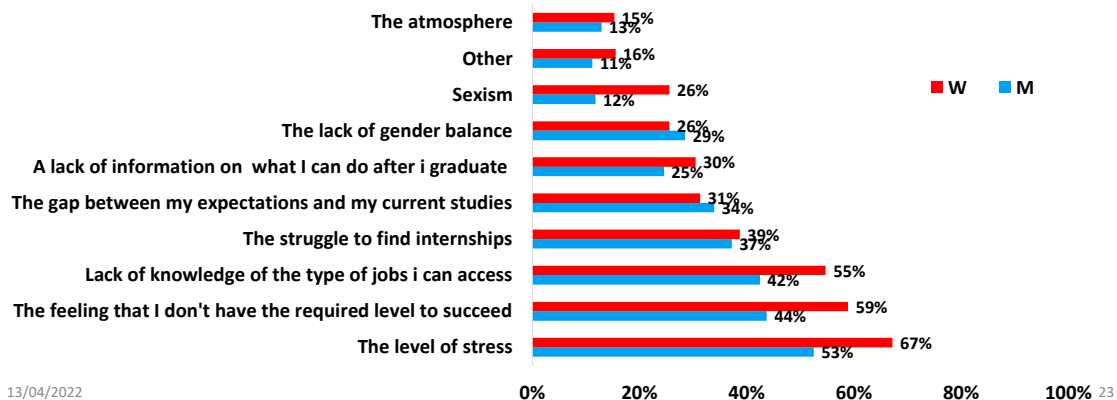
- Project/challenge in studies (84% vs 83%)

# Dissatisfaction factors - STEM

A higher % of women in STEM are dissatisfied, especially with the level of stress, the feeling of not having the level to succeed and the lack of knowledge of possible jobs

## What are the most important problems you face today in your studies?

Comparison in % of male and female students in STEM who responded yes or yes absolutely



- Stress level: 67% of women - 53% of men = 14% gap. More female STEM students are stressed than male students.
- The feeling of not having the level to succeed: 59% of women - 44% of men = 15% gap. More women feel they don't have the level needed to succeed more than men do in STEM.
- Lack of knowledge of future possible jobs: 55% of women - 42% of men = 13% gap. Less women feel informed about their future jobs than men

To be noted: 26% of Women in STEM in are dissatisfied about sexism in their education.

**Data from the verbatim:** The most cited aspects in response to the question **'What improvement would you like to see in the training you are taking?'** were: (% based on 912 answers of women in STEM, 170 men):

- The gap between your expectations and reality (26% of women, 18% of men)

"we see a lot of things left and right but never in depth it's especially the case for computer training, we see a lot of different things but I really don't have the impression that it's useful " Belgium, Woman, 22, Construction industry, civil engineering

"A more unified program. Courses are taught as independent from each other when in fact they are all related and needed to gain a deeper understanding of the subject studied" Belgium, Man, 25, Engineering, transformation and production industry

- The lack of connection between the courses and the work reality, lack of opportunities to practice (12% of women, 25% of men)

"working on real projects and not working on castles in the air" Austria, Woman, 27, Natural sciences, biology, chemistry

"To have a more practical and less theoretical university education. to be informed about what the labor market expects from us." Belgium, Man, 23 Agriculture, agronomy, forestry, veterinary

"Training where the theoretical aspect would serve a technical purpose, which is often not the case." Belgium, Man, 23, Mathematics/Physics/Engineering, transformation and production industry/Construction industry, civil engineering

- Lack of information on further study/future career possibilities (13% of women, 9% of men)

"Nothing in the training itself, just to have more information on the masters available after the bachelor's degree as well as information on the possible jobs" woman, 21, mathematics student

"Training on the future job that really awaits the graduate. Position, salary, expectations, atmosphere,..." Belgium, Man, 24, Construction industry, civil engineering

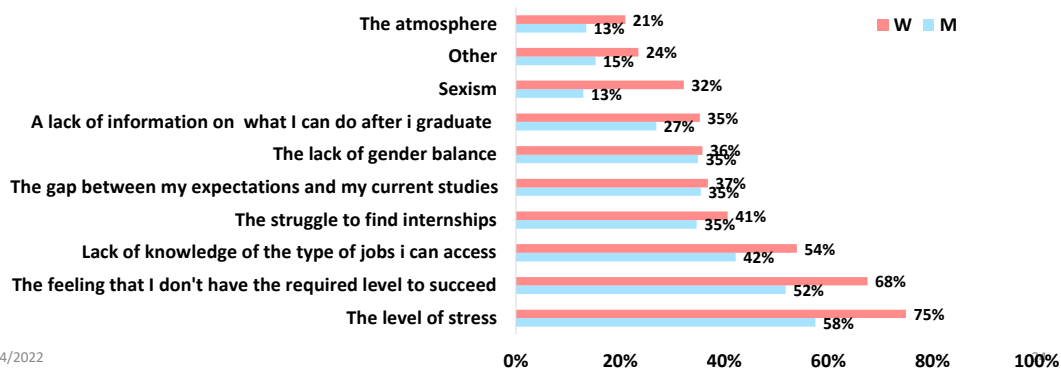


# Dissatisfaction factors - Digital

A higher % of women studying digital fields are dissatisfied than men, especially with the level of stress and the feeling of not having the level to succeed

What are the most important problems you face today in your studies?

Comparison in % of female and male students in digital fields who responded yes or yes absolutely



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- Stress level: 75% of women - 58% of men = 17% gap.
  - The feeling of not having the level to succeed: 68% of women - 52% of men = 16% gap.
  - Lack of knowledge of your future jobs: 54% of women - 42% of men = 12% gap.
- To be noted: 32% of Women in digital fields are dissatisfied about sexism in their education.

**Data from the verbatim:** The most cited aspects in response to the question ‘What improvement would you like to see in the training you are taking?’ were: (% based on 317 answers of women in digital, 164 men):

- The gap between your expectations and reality (28% of women, 17% of men)

“The first year of the bachelor's degree in computer graphics techniques is far too general, there are many useless or badly distributed courses, it's a waste of time, the options should be split from the first year to avoid having so many courses that don't interest us.” Belgium, Women, 19, Computer sciences, digital

“More information on different ways to do things and not saying that one way is "the way" to do things, as new methods are found all the time and having students open to change is important.” Iceland, Women, 21, Computer sciences, digital

“Going deeper into everything. I feel like I have only studied the tip of the iceberg.” Iceland, Women, 21, Mathematics/Natural sciences, biology, chemistry/Computer sciences, digital

“Keeping up with the times more; realize that 50% of what we're thought isn't really that relevant anymore and 90% of what is isn't even taught.” Portugal, Men, 20, Computer sciences, digital

- The lack of connection between the courses and the work reality, lack of opportunities to practice (12% of women, 26% of men)

“More real-life examples and more practicality.” Iceland, Woman, 20, Mathematics/Computer sciences, digital/Engineering, transformation and production industry

“Mentoring and feedback on how to make things better (e.g. coding) and more practical examples and also practical project work.” Austria, Man, 31, Computer sciences, digital

- Lack of information on further study/future career possibilities (14% of women, 9% of men)

“Events for information on possible future jobs according to what is being studied.” Spain, Woman, 17, Mathematics/Physics

computer sciences, digital/Engineering, transformation and production industry

“to be more informed about additional jobs and training. Otherwise, the training is quite complete.” Belgium, Woman, 19, Computer sciences, digital

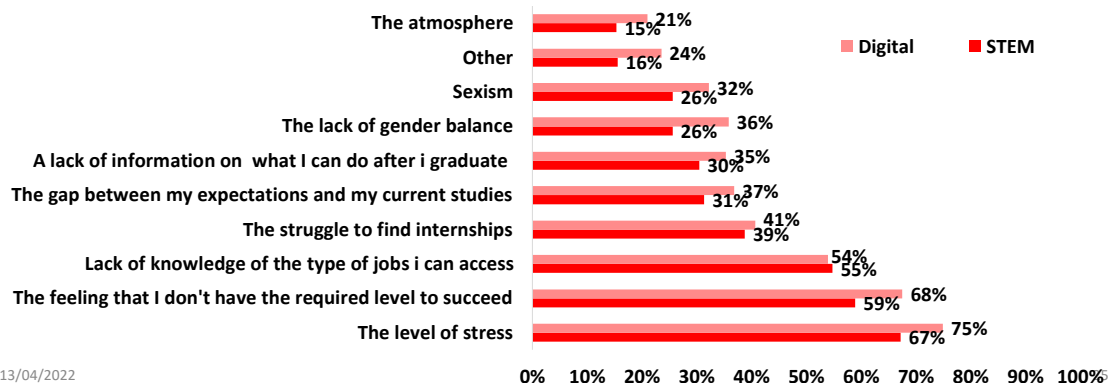
“To have more information about possible further studies and to know what my job will be later on.” Belgium, Man, 19, Computer sciences, digital

# Dissatisfaction factors – STEM vs Digital

More women in digital than in STEM are dissatisfied with the level of stress, the feeling of not having the level to succeed and the lack of gender balance

What are the most important problems you face today in your studies?

Comparison in % of female students in STEM and digital fields who responded yes or yes absolutely



Note: More women are dissatisfied in digital studies on most criteria. Top 3 factors:

- Stress level: 75% women in digital - 67% women in STEM = 8% difference.
- The feeling of not having the necessary level: 68% women in digital - 59% women in STEM = 9% difference. 6 out of 10 women in STEM and 7 out of 10 in digital studies feel they don't have the level they need to succeed.
- Lack of knowledge of future professions: 52% women in digital - 53% women in STEM

Another significant difference: Lack of gender balance: 36% women in digital - 26% women in STEM = 10% difference.

**Data from the verbatim:** The topics that had more answers from female STEM students than digital ones in answer to the question “**What improvement would you like to see in the training you are taking?**” were: (% based on 912 answers of women in STEM, 317 in digital):

- The lack of connection between the courses and the work reality, lack of opportunities to practice (12% of women in STEM, 11% of women in digital)

“Better preparation for entering the workplace. In my opinion, the academic world (as a student) and the professional world should not be so dissonant. A better integration between the two would make the transition from graduation to work more natural and fluid, where one knows what to expect and what is expected of him/her.” Spain, Woman, 21, Mathematics/Physics

“I would like to see more initiatives to clarify the various opportunities for future employment” Portugal, Woman, 18, Physics/Engineering, transformation, production industry

- The lack of information on further study/future career possibilities (14% of women in STEM, 11% of women in digital)

« More information about the job after the studies (lifestyle, status, etc.) » Belgium, Woman, 24, Computer sciences, digital

“More information about the work you can get afterwards. For example, bringing in several people working in different fields in the FIRST year so that we can have an idea of what kind of work we might have. Personally, I have only attended 4 presentations since the beginning, and I find this insufficient.” Belgium, Woman, 21, Engineering, transformation industry

The topics that had more answers from female digital students than STEM ones were:

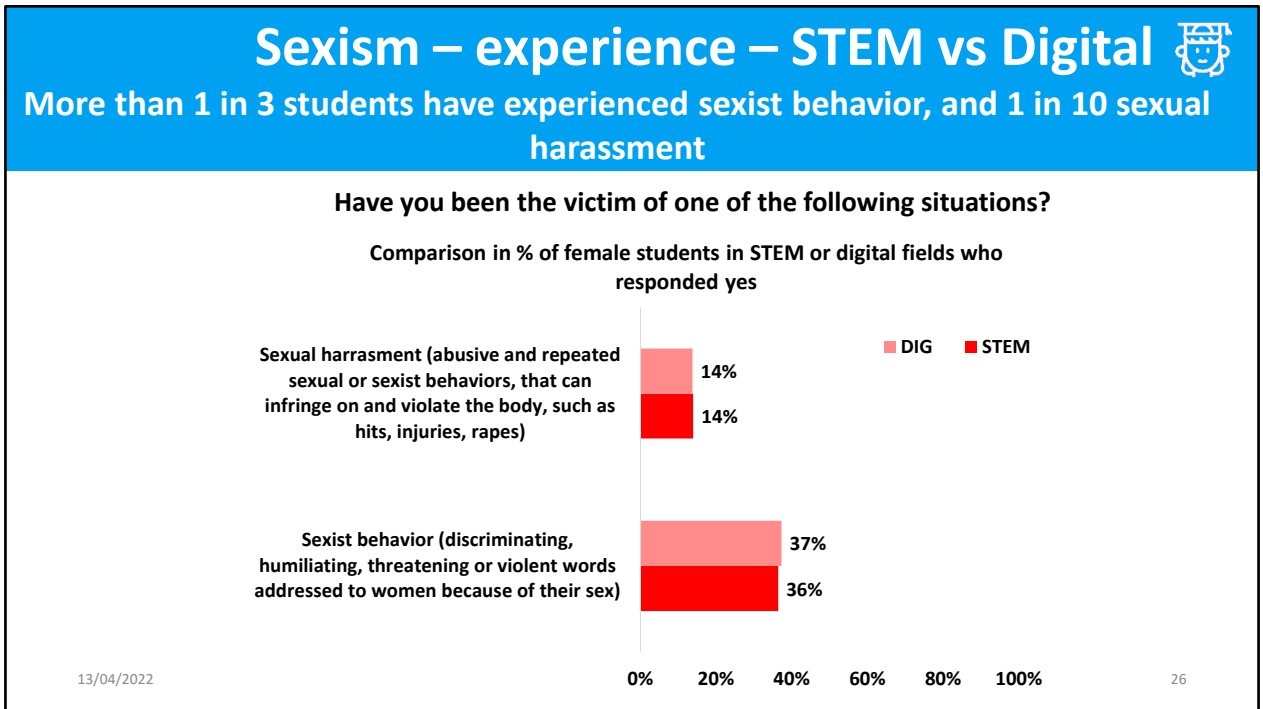
- The level of stress (10% of women in digital, 7% of women in STEM)

“Stress level far too high, far too many courses per year, credits allocated to courses NOT representative of the work required.” Belgium, Woman, 20, Natural sciences, biology, chemistry

- Lack of diversity/gender balance (9% of women in digital, 6% of women in STEM)

“Mentorships for Women, inclusion and diversity in teachers, more quest lecturers/models” Denmark, Woman, 26; Business, economy, finance, accounting and law/Computer sciences, digital

“More gender balance and teachers that are not white males” Iceland, Woman, 22, Mathematics/Computer sciences, digital/Engineering, transformation and production industry



- Sexist behaviors: 37% Women in digital - 36% Women in STEM.
- Sexual harassment: 14% Women in digital - 14% Women in STEM.

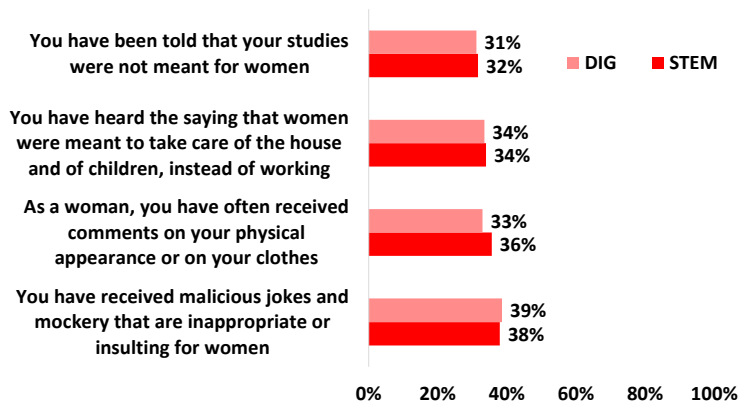
Women in STEM are slightly more numerous to have experienced sexual harassment than those in digital studies.

# Sexism – experience – STEM vs Digital

## 1 in 3 students has heard sexist comments of different types

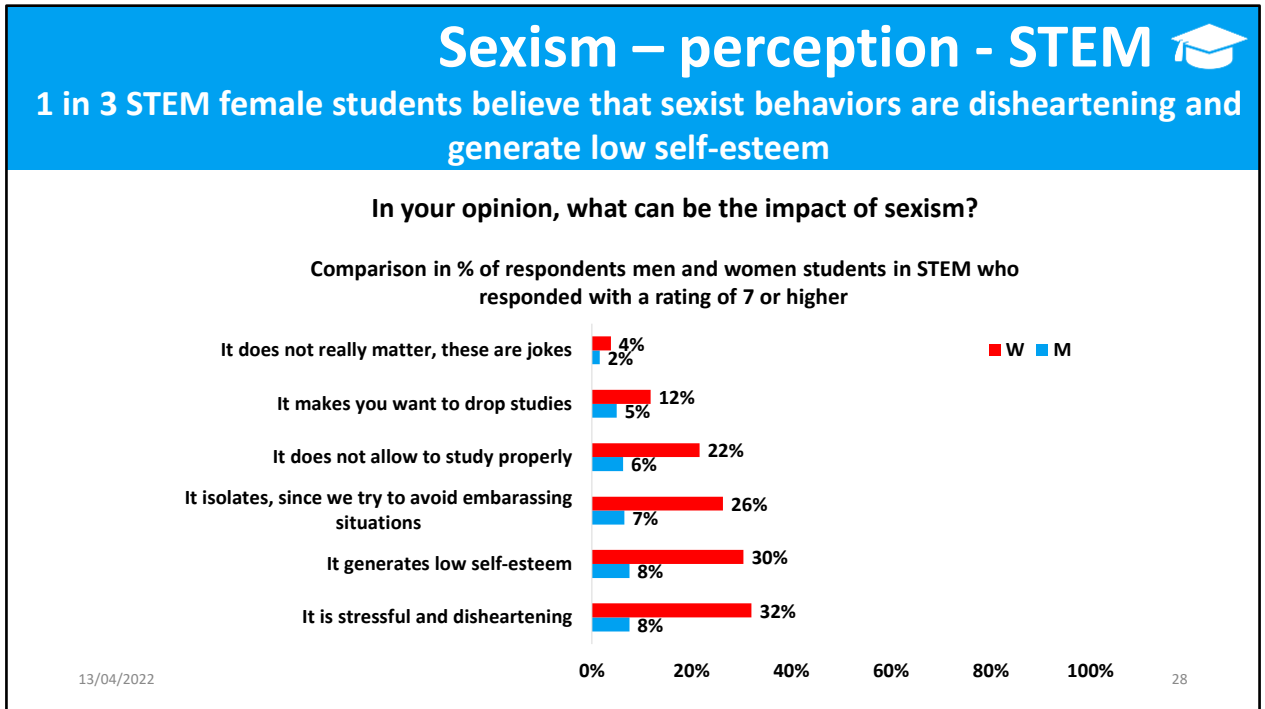
During your studies, have you experienced one of the following situations?

Comparison in % of respondents women students in STEM  
or digital fields who responded yes



Women in STEM are very slightly more numerous to have experienced sexist behaviors.

- Mockery or malicious jokes: 33% Women in digital - 36% Women in STEM.
- Remarks on physical appearance or clothing: 34% Women in digital - 40% Women in STEM = 6% difference.
- Heard that women are made to take care of children and not to work: 34% Women in digital - 34% Women in STEM.
- Heard that these studies were not for women: 31% Women in digital - 32% Women in STEM.

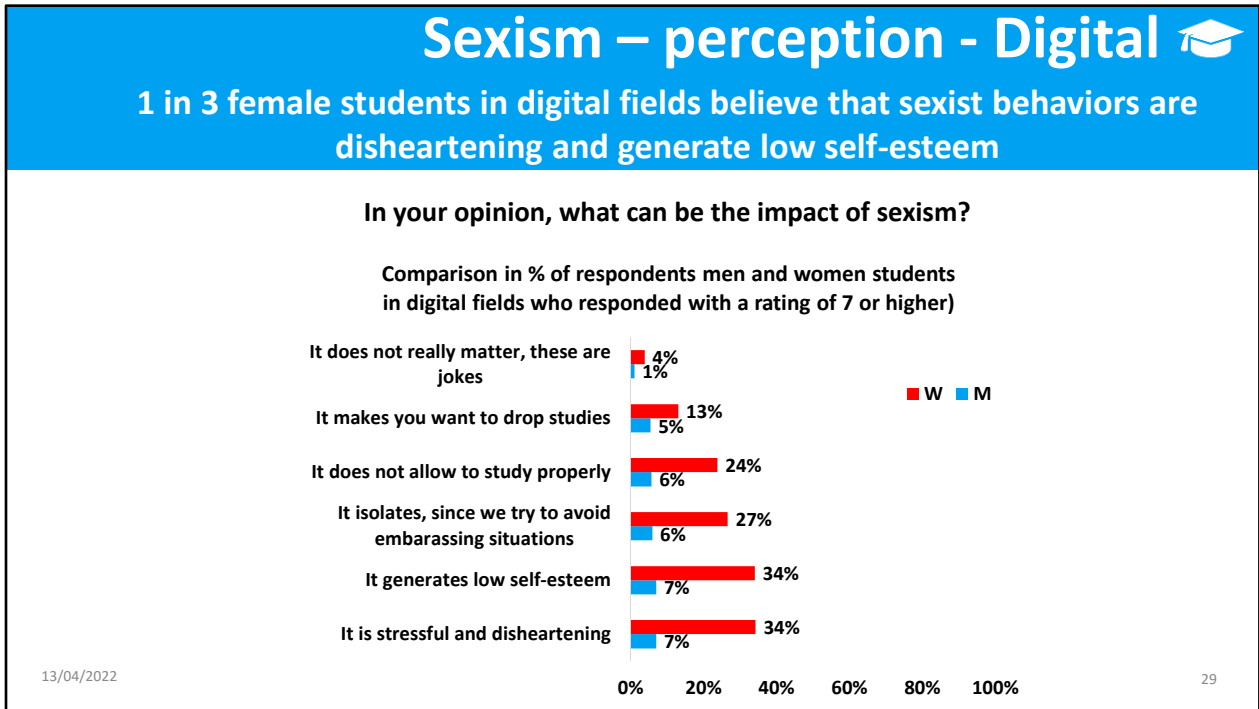


Significant differences between the evaluations of the impact of sexism according to men and women in STEM, suggesting that there is room for improvement concerning sensitization and communication campaigns. Top 3 evaluations:

Disheartening and stressful: 32% of women - 8% of men = 24% gap

Loss of self-esteem: 30% of women - 8% of men = 24% gap.

Isolates from others: 26% of women - 7% of men = 19% gap

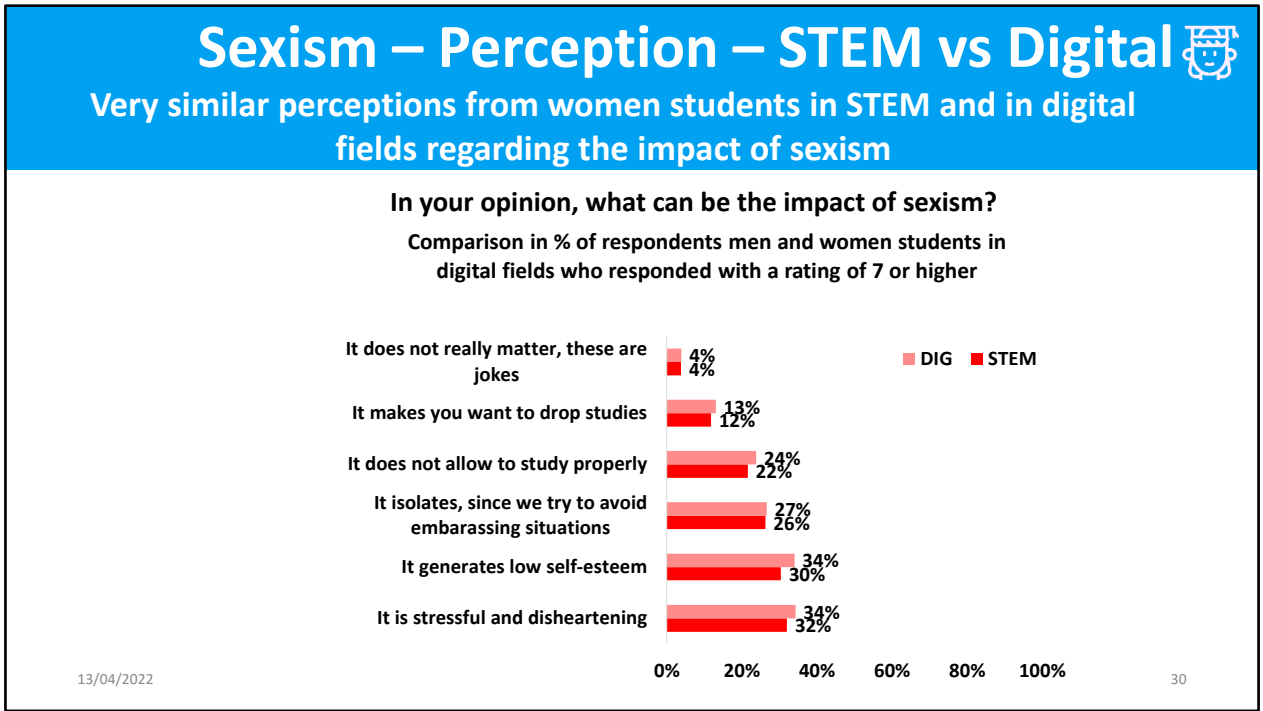


Significant differences between the evaluations of the impact of sexism according to men and women in digital fields, suggesting that there is room for improvement concerning sensitization and communication campaigns. Top 3 evaluations:

Disheartening and stressful: 34% of women - 7% of men = 27% gap

Loss of self-esteem: 34% of women - 7% of men = 27% gap.

Isolates from others: 27% of women - 6% of men = 21% gap



No remarkable differences in % of the perceptions from students in STEM and digital fields regarding the impact of sexism.

The highest difference concerns the perception that it generates low self-esteem (34% of women in digital, 30% of women in STEM)

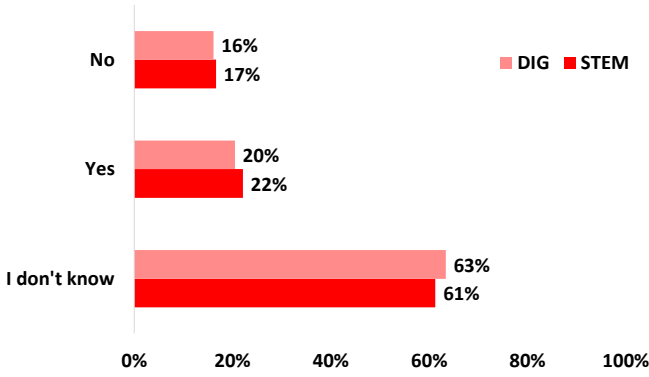


# Sexism – alert procedures – STEM vs Digital

Only 1 in 5 students is informed of the existence of an alert mechanism against sexist behavior or harassment

Is there an alert procedure for this kind of situations in your school ?

Comparison in % of women students in STEM and digital fields



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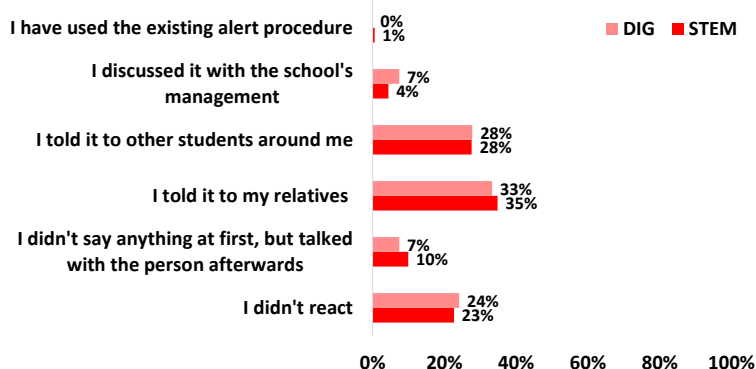
The majority of students (6 out of 10) in both fields of study do not know if their school or university has an alert mechanism against sexism.

# Sexism – reaction – STEM vs Digital

1 in 10 students seeks support from their school or university, 1 in 3 goes to their peers for support and 1 in 4 does not react at all

## What was your reaction? (to Sexist Behavior)

Comparison in % of women students in STEM or digital fields



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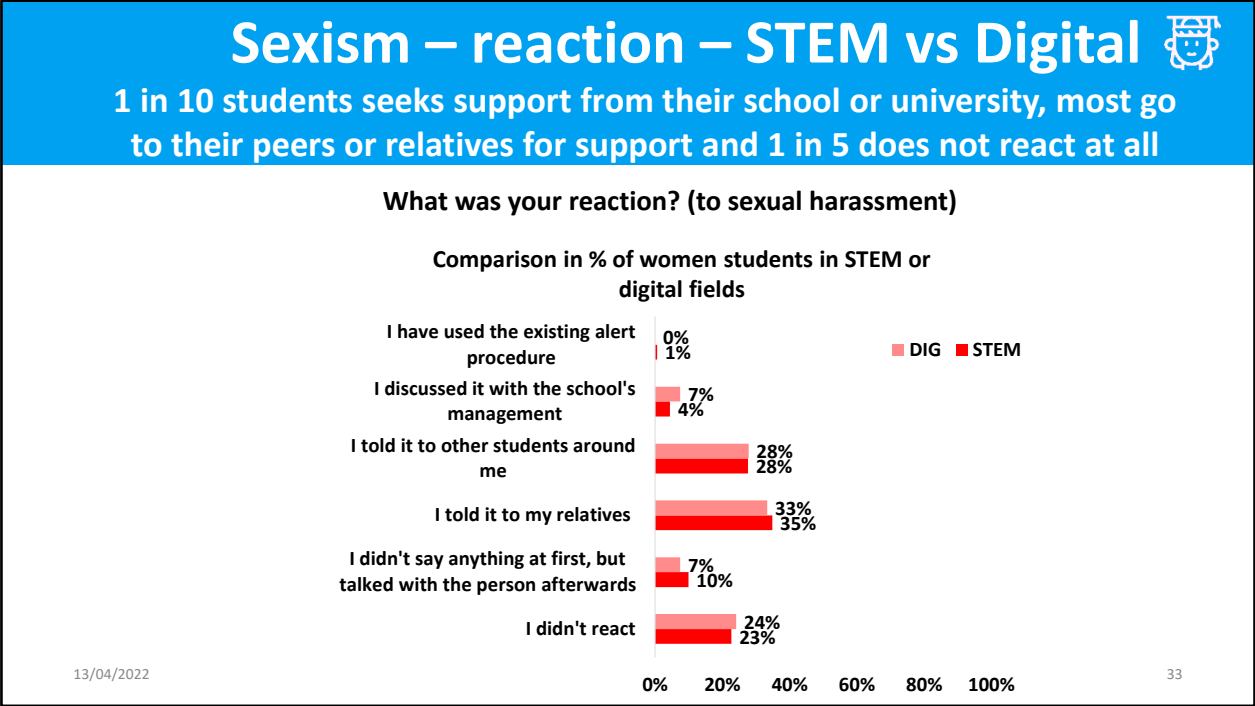
32

No remarkable differences in % of the reactions from students in STEM and digital fields facing sexism.

### Data from the verbatim:

The most cited responses to the question « **why didn't you use the alert procedure?** » were: (% based on 72 answers of women in STEM, 26 in digital):

- Perceived low importance of the incident (28% of women in STEM, 42% of women in digital)  
"Because the sexist behavior I experienced is a kind of benevolent patriarchy that doesn't realize it exists. I have not experienced anything mean or humiliating." Belgium, Woman, 30, Mathematics/Physics
- Preference to deal with it alone or through informal support (25% of women in STEM, 12% of women in digital)  
"I talked about it directly with the person, the situation was manageable without going through an intermediary" Belgium, Woman, 23, Environment, sustainable development, ecology  
"I preferred to deal directly with the people involved and my teachers" France, Woman, 22, Computer science, Digital
- Fear of reprimand (11% of women in STEM, 8% of women in digital)  
"Shame, fear of repercussions..." France, Woman, 18, Engineering, transformation and production industry  
"Not to upset the hierarchy, not to make a fuss." France, Woman, 20, Mathematics, Physics, Engineers, processing and production industry
- Perceived low impact of the procedure (13% of women in STEM, 12% of women in digital)  
"There are never any consequences for members of the teaching staff who act wrongly." Portugal, Woman, 27, Physics  
"It doesn't work. they always hide among the people with more power." Belgium, Woman, 32, Physics



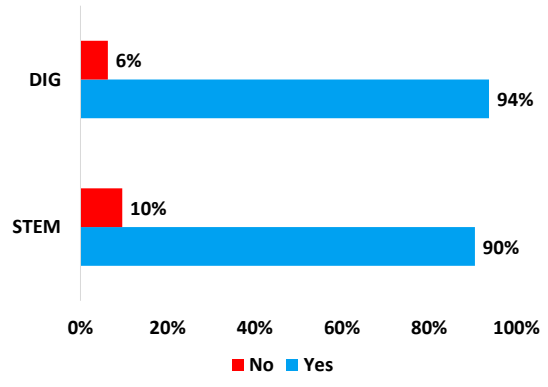
No remarkable differences in % of the reactions from students in STEM and digital fields facing sexual harassment.

# Sexism – alert procedures – STEM vs Digital

9/10 students would like support procedures to be available in their training

Would you like such a procedure to exist ?

Comparison in % of women students in STEM and digital fields



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34

# Methodology note

	Men	Women	Other	Total
<b>Western Europe</b>	<b>968</b>	<b>1622</b>	<b>26</b>	<b>2616</b>
<b>Western Europe STEM</b>	<b>968</b>	<b>1613</b>	<b>-</b>	<b>2586</b>
<b>Western Europe Digital</b>	<b>386</b>	<b>391</b>	<b>-</b>	<b>777</b>

\* Some students are in both categories due to a doble degree.