

Perspektywy

REPORT



Shesnnovation
ACADEMY 

WOMEN'S LEADERSHIP 2021

TECHNOLOGY, BUSINESS, SCIENCE

www.womenintech.perspektywy.org

Citi Foundation



Fundacja Kronenberga

 **citi** handlowy



Perspektywy

Citi Foundation



Fundacja Kronenberga

citi handlowy

Report by Perspektywy Education Foundation and Citi Foundation
prepared by the Research Team:

- Agata Młodawska
- Prof. Iwona Chmura-Rutkowska
- Dr. Bianka Siwińska (Head of Research)
- Joanna Lisiecka
- Elżbieta Wyras
- Anna Dorota Kamińska

Editors: Sandra Wiktorko i Magda Tytuła

Graphical project: Sylwia Niedaszkowska

Perspektywy Education Foundation, June 2021

Report Women's Leadership 2021

Technology, Business, Science

is a part of the project "Shesnnovation Academy"



Table of contents

4	..... Introduction
6	..... About the study
9	..... Main conclusions

The leader here and now

14	..... Who is a woman leader?
16	..... Dynamics of leaders' professional career
20	..... Leader – Student
22	..... Leader – Mother
24	..... Women's situation on the labour market – evaluation
26	..... Discrimination and aggressive behaviours
30	..... Influence of self-stereotypes
32	..... Sources of support

Leader's attributes

34	.....	Role models in environment
36	.....	Attributes of a leader
42	.....	Competences
48	.....	Gaining knowledge and leadership skills
56	.....	Promoting women's leadership and experience of mentoring
60	.....	Activities supporting other women
64	.....	Future goals
66	.....	Leaders and the climate crisis
70	.....	The humanity's greatest challenges
72	.....	Recommendations
80	.....	Expert comments



PHOTO: Ennbow

Dr. Bianka Siwińska
CEO of Perspektywy
Women in Tech



New Leadership

In 2021 we feel it as strongly as never before: the world is standing at crossroads. We need a vision for the future and a completely new narrative. We need a new type of leadership – wide-perspective oriented, sustainable existence in the world, compassion, and responsibility. More and more often, women are such leaders. This is clearly visible in the fight with the results of the pandemic, it can be seen during social and political protests. For the first time in history women are really utilising their full potential, changing the world, and standing up for themselves. But not just themselves – also for equality, justice, freedom, and democracy. In Argentina, India, Poland, Belarus and everywhere their voices can be heard. And we at Perspektywy Women in Tech make sure that it can also be heard in technology and science. Because it is technology, combined with wise humanistic reflection, that gives a chance for solution to some of the most burning modern problems. The condition is increasing women's participation in this area. From a little girl who has a chance to experience technological inspiration along with her brother to the future leader who will take on the responsibility for key technological choices, e.g., battling the climate crisis.

In order to support women's leadership, especially related to STEM (Science, Technology, Engineering, Mathematics) and entrepreneurship, we decided to research it first – take a look at how it is shaped, what conditions it, what builds it up and what are the obstacles to its development. We managed to do that as part of our joint project with the Citi Foundation, supported by the Kronenberg Foundation – the “Shesnnovation Academy” program. Thanks to this cooperation we have created the first Polish Report on Women's Leadership, which we now proudly and gladly present. ||



Natalia Bożek
Vice-President
of the Board,
Citi Handlowy, CFO



We are a part of this history

The “Women's Leadership 2021” report has been made as part of the “Shesnnovation Academy” project. This project is special to me, most of all because we support young women on their way to realising projects that may bring about a real, technological change. It is also an opportunity to meet plenty fantastic women who have the courage to go after their dreams and face the many challenges on the way.

Citi Handlowy and Citi, via the activities of the Citi Foundation and Citi Handlowy Foundation, have been supporting women in their pursuit of own businesses for years. Supporting women in achieving their professional goals is ingrained deep into Citi's DNA. Our reports also show that

more professional independence among women will be advantageous for all of us: reducing gender inequalities can lead to a GDP increase in developing economies of about 6% over the next 20 years. However, for this to happen, the chances of women and men in the labour market and in terms of childcare should be equal. This requires not only permanent systemic changes, but above all, a change in thinking and cultural stereotypes. Therefore, we are truly proud to support such organisations as the Perspektywy Foundation, changing the market of technological services with the Shesnnovation project, opening it to the thought and work of women.

Being a mentor in Shesnnovation was a fascinating adventure. Meeting someone with such fresh outlook and creative approach changed my view of many things. My mentee's energy and determination allowed me to believe that the change we have been working on is just around the corner. Women are entering the industries that have been hitherto reserved for men in increasing numbers and, what is more important, change them for the better. They develop projects that have social responsibility, care for environment and the planet built into them from the very beginning.

Our joint research with the Perspektywy Foundation says that today's leaders have very good self-confidence. And this is good news, although, on the other hand, when we look at the same young leaders, a majority of those aged 26 to 31 still have to deal with “non-serious treatment.” 91 per cent of young female leaders mentioned this problem. Such initiatives as Shesnnovation, and especially the mentoring we conduct as part of this program, address this problem very well. On one hand it strengthens the young leaders, on the other, it creates a network of leaders who have a chance to fight for a change in perception of young women starting their careers.

I am very glad we can become a part of this history! ||

Total participation in both
stages of the study:

700

respondents in the
diagnostic survey

50

respondents in the 8
focused group interview

About the study

The main subjects of the study presented here was the leadership of women. The goal of the study is an attempt at an analysis of female leadership in the millennial generation – the most active in the labour market – in the area of women's leadership. We define this generation as persons born in the period from 1975 to 2000 and divide them into two groups – early and late millennials.

MAIN PROBLEMS INCLUDED IN THE STUDY

- Women leaders' attributes
- problems the leaders might face in their to-date professional career/studies;
- the support they receive;
- the attributes, skills and knowledge they have;
- the ways they develop their leadership attributes, skills and knowledge;
- self-development with special focus on mentoring programs
- engagement in pro-women activities;
- goals for the future
- approach to the civilisation challenges, including the climate crisis

STUDY PROCEDURE

The study was conducted in two stages.

STAGE I – FOCUS GROUP INTERVIEWS

In order to identify key research problems, the main part of the study was carried out using the diagnostic survey method, preceded by research using the method of focus group interviews. In early January, 8 focus interviews were conducted, with a total of 50 women participating (5 to 7 persons in each group).

Two age categories were distinguished among the interviewees: younger millennial leaders (20 to 30 years old) and older millennial leaders (30 to 40 years old). The respondents were recruited from among young entrepreneurs setting up their startups, leaders occupying high positions in companies, as well as persons involved in the promotion of women in business and scientists.

The main topics of conversations during the interviews were: forms and areas of acquiring competences and skills related to leadership and management, key leadership qualities, the most important professional challenges, forms and areas of support in the current career, experiencing such phenomena as the “impostor syndrome” or excessive perfectionism, achievements in professional career, plans for the future.

STAGE II – DIAGNOSTIC SURVEY

The method used in the main study was a diagnostic survey, performed as a questionnaire posted on the Internet – CAWI.

The study was conducted in the first quarter of 2021 on a group of 700 female respondents: 400 “leaders” (persons who identified themselves in this way) and 300 “non-leaders.”

Study sample description

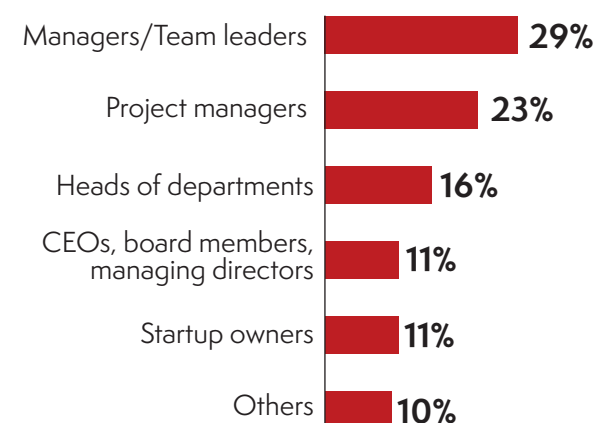
Respondents from the female “leaders” category represented both the younger and older generation of the millennials (born between 1975 and 2000) – which allowed us to perform comparisons and capture generational differences.

Following categories dominated among the “leaders” who participated in the study:

- entrepreneurs and startupper,
- leaders with high position in companies,
- scientists with managerial responsibility at universities and research institutes,
- young persons displaying leadership qualities at university (active in student and doctoral organisations). ||

Wykres 1

JOB POSITIONS OF THE RESPONDENTS



MAIN CONCLUSIONS

WOMEN'S LEADERSHIP 2021

What are the female leaders of 2021?

■ **MOST OF ALL, SELF-CONFIDENT (LEADER'S ATTRIBUTES).** The main quality distinguishing the leaders is self-confidence. Their self-assessment in this area is much higher than in the case of non-leaders. The leaders' self-confidence appears to be their key to building a successful career and to a strong presence in the professional world.

■ **THANKS TO THIS ATTRIBUTE** the leaders experience the „impostor syndrome,” overt perfectionism, or fear of public speaking much less often than other professional women. Better self-esteem is often connected to attributing to oneself more often such qualities as: decisiveness, proactivity, competitiveness, charisma and passion, energy, inspiring and motivating, risk-taking, efficiency.

■ **DYNAMICALLY AND FEARLESSLY** moving around the labour market – vertically and horizontally (LEADER IN THE LABOUR MARKET). The leaders' careers are dynamic – which appears quite obvious. But what is interesting is that they are not afraid of radical turns on their career paths, e.g., changing industries. In their case it is not an obstacle to building a vertical career and reaching further steps of the professional hierarchy and professional goals. Usually they are also very happy with their professional situation.

■ **AWARE OF THEIR SKILLS (COMPETENCIES).** Leaders evaluate their communication, negotiation, and mediation skills, as well as those related to project management, much higher than non-leaders. Three-quarters of female leaders want to work on their team management skills. Leaders are also more interested in expanding their legal and financial knowledge than their female colleagues – because with the growth of areas of responsibility, they often begin to feel deficiencies in these difficult and key areas of management. As the leader gets older and more experienced, her assessment of her own skills in risk management and setting and goals-achievement grows.

■ **SELF-EDUCATION AS A SOURCE OF KNOWLEDGE** and competences of leaders (COMPETENCES). Formal education is not the source of leadership competences of the future leaders. The university is generally not seen as a place to acquire knowledge in this field throughout education. On the other hand, activity in student or doctoral organisations is considered by the respondents to be a school of leadership (especially in terms of the valued team management skills) and a forge of future leaders (the vast majority of student activists see themselves in the role of a leader in the future). Leaders more often acquire leader-

ship-related knowledge through participation in training, work with a coach or mentor and, above all, in the work environment, through observation and independent efforts in self-development. Leaders acquire the vast majority of knowledge in the area of leadership through self-education and practice. 73% of the leaders get their knowledge of leadership from reading – books and specialist articles

■ **CLOSE TO PEOPLE, BUT NOT VERY ASSERTIVE (LEADERS' ATTRIBUTES).** The respondents usually consider leaders' qualities (and their own) to be those related to working with people „inspiring/motivating” and „seeing potential in others.” Most leaders believe they are characterised by empathy, authenticity, as well as charisma and passion. On the other hand, the attributes leaders wish to develop in themselves are those considered to characterise masculine style of leadership, such as assertiveness, risk-taking and goal-orientation.

■ **EMPATHY IS THE KEY** resource of female leadership (LEADER'S ATTRIBUTES). Leaders consider empathy to be a leader's attribute more often than others and they would like to develop it in themselves. The leaders who are more experienced in leadership mention it as a key attribute more often than others. The older respondents consider decisiveness and efficiency to be among their characteristics more often, while younger leaders point to competitiveness and energy.

■ **ACTIVE AND PRO-WOMEN (ACTIVITIES SUPPORTING OTHER WOMEN).** Leaders are twice as likely as non-leaders to engage in activities supporting other women. It is important to the vast majority of them that their career and activities inspire other women to fight gender-related stereotypes. For almost one

leader in three one of the goals for the future is improving the situation of women. The older the leader, the more likely she is to engage as a mentor and be willing to join pro-women organisations. Older leaders are also more likely to choose legal lobbying as a way to improve women's situation in the job market. They also participate more often in events promoting the leadership of women.

■ **EXPOSED TO CYBERBULLYING AND SEXUAL HARASSMENT (VIOLENCE AND HARASSMENT).** Women leaders are more often than other groups subject to certain types of violence: cyberbullying, mobbing and sexual harassment (they experience it almost twice as often as non-leaders). Older survey participants also more often experience mobbing while the youngest are group has to deal with cyberbullying (leaders experience it 3 times more often than other women). The risk of mobbing rises with age – over a half of the respondents over 40 experienced it (!). The leaders also must deal more often with unfair behaviours, such as, e.g., requirements higher than those for their male counterparts. Only 7% of the survey respondents did not experience discrimination/violence at work.

■ **NON-SERIOUS TREATMENT (DISCRIMINATION).** Leaders who just graduated from university (26 to 31 years of age) more often than other consider “non-serious treatment” a problem in their professional development (91%). Among the university-aged respondents this percentage was 81% in the older age categories it was 80% and 70%, respectively. The leaders also have to deal more often with unfair behaviours, such as, e.g., higher requirements than those for their male counterparts. Two thirds of the leaders had to deal with sexist comments or jokes.



■ **SUPPORT FOR MOTHERS** is the key to success? (WHERE DO LEADERS COME FROM?). Mothers-leaders use the support of their parents (mothers/mothers in law) in their parenting duties much more often than other groups, which may be a proof that such support is one of the conditions of a successful leader's career in the current circumstances. Despite the declared support of their partners in household duties, almost a half of the mothers-leaders perform most or all the chores in their households.

■ **ROLE MODELS,** inspiration from the environment and mentoring are the key elements in forming a leader (WHERE DO LEADERS COME FROM?). In forming leadership qualities, a presence of persons with leader's attributes, especially women, in the environment of the respondents, is very important. Leaders said that they had a role model in their environment – a female leader they took as an example – half as often, as non-leaders. Leaders also received support in their work environment more often. This is the key for development of women's leadership potential. Another very important platform for supporting their potential is mentoring. The study showed that persons who define themselves as leaders worked with mentors half more often and in their mentoring they twice more often worked on their leadership qualities.

■ **AMBITIOUS INNOVATORS (GOALS FOR THE FUTURE).** As for their goals for the nearest future, the leaders focus mostly on introducing innovations in their industries. Most of them also want to advance in the company structure. The fact of working in a male-dominated environment increase the chance of setting a goal of advancement in the company structure by 113%.

■ **SENSITIVE TO CLIMATE CATASTROPHE (MODERN CHALLENGES).** Leaders are sensitive to the threat of the climate crisis. 85% of them introduce changes to their daily habits in order to counteract the climate catastrophe. More than a third of female leaders believe that climate change will cause a catastrophe in an undefined future, 19% believe it will happen within 21 to 30 years, 18% – 11 to 20 years, 8% – 6 to 10 years, and 3% – in the next 5 years. Only 11% believe that the catastrophe will not happen because the economy and lifestyle will change.

The young generation of leaders are very strongly interested in the climate issues. This is clearly visible in the case of interest in conducting scientific research aimed at combating the climate crisis and introducing innovations intended to combat global warming.

■ **THE MOST SERIOUS WORLD PROBLEMS** in the eyes of leaders (MODERN CHALLENGES). Among the greatest challenges facing humanity in the nearest future, nearly three-quarters of the leaders pointed to environmental pollution and climate change. More than forty per cent chose lack of water and food, almost as many (40%) unemployment, poverty, and economic problems, 37% – lack of education, 34% – the Covid pandemic or other possible pandemics, 29% – the possible global conflict, 27% – corruption and lack of government transparency, 24% – religious conflicts, 14% – poor/rich polarisation, 13% – terrorism, and 8% – uncontrolled migration.

■ **NON-POLITICIANS (WHO IS A LEADER?).** Most of the respondents connect a leader with an entrepreneur, local activist, or a scientist, rarely an international-level politician. This may point to a distance kept by the survey respondents, active mostly in the STEM area and business, to the world of politics. ||

LEADER HERE AND NOW

Who is a woman leader?

How do leaders define a leader or what role name do they themselves identify with? For 25% a leader is a “local community activist,” for 22% – a “scientist introducing technological innovations,” the same percentage chose an “owner of a dynamically developing company.” Fewer (11%) pointed to a “socially-engaged influencer” or “business leader/manager introducing new solutions” (10%).¹ A leader was the least frequently associated with an “international level politician” (2%).

Chart 2
LEADERS’ SELF-DEFINITION



¹ The category is based on the response “Other.”

The term “Leader” is associated with local activism, science, and entrepreneurship

Dynamics of leaders' professional career

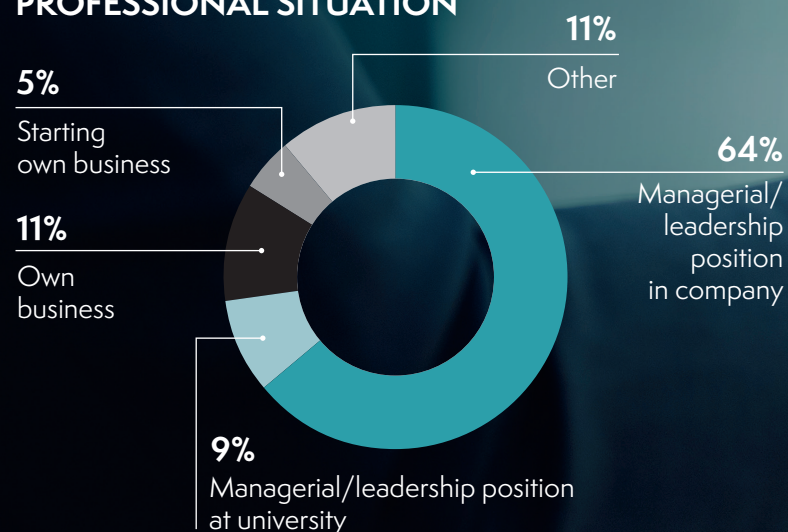
Almost two thirds of the respondents (64%) work or worked in managerial positions in a company or organisation, and 9% at a university. Few more (11%) run or ran their own business, while 5% are currently setting one up. Eleven percent of the respondents have a different professional situation, not included in the above categories, see Chart 3.

Leaders are in general satisfied with their professional situation

”

Chart 3

THE RESPONDENTS' PROFESSIONAL SITUATION





Most (58%) work in large enterprises that employ over 250 people, and 24% – in middle-sized ones (employing 10 to 250 people). The remaining 18% are employed in small enterprises (with fewer than 10 employees), of which 10% are self-employed.

In terms of managerial/leadership jobs, the most numerous group are team leaders/team managers (29%), and the second biggest – project managers (23%), followed by department/unit heads (16%). Few respondents held top positions in company hierarchy, such as managing director (5%), president of the management board/CEO (4%) or management board member (2%). Eleven per cent are self-employed as sole traders or run their own startups, and the remaining 10% have other job titles not included in the categories above.

Half of the respondents work on a daily basis with both women and men in equal proportions, 12% work mainly with women, and 38% with men. Those who undertook engineering studies predominate in the latter group (58%).

The survey participants are generally satisfied with their current professional situation: half evaluated it at “4” on the scale of 1 to 5, and 20% at “5.” Nineteen per cent selected the neutral evaluation (“3”), and only 6% expressed their dissatisfaction (of which only two persons selected “1”).

Professional careers of the respondents were in general dynamic – almost half (46%) were promoted once or twice; 31% were promoted 3 to 5 times, and 10% more than 5 times. They also

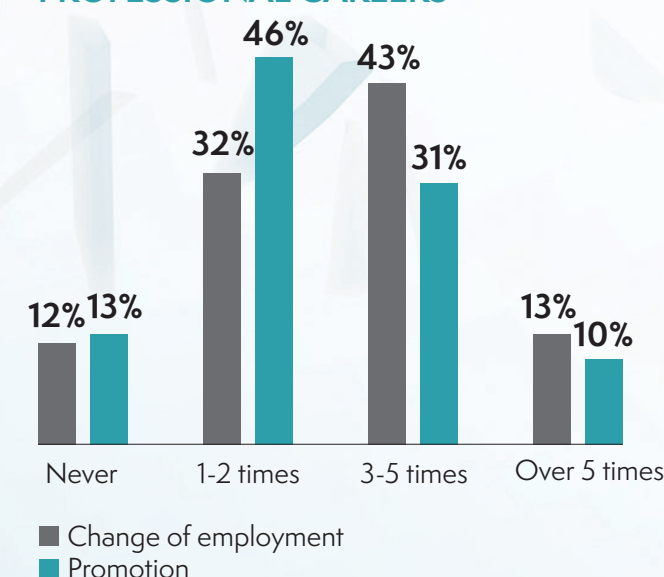
Leaders are promoted more often and they are not afraid of changes, e.g. sector change, which more than half of them experienced

”

frequently changed their place of work: 32% did so once or twice; 43% 3 to 5 times, and 13% more than 5 times. Only 13% were never promoted, and 12% have always worked in the same place (see Chart 4). Additionally, more than half of the respondents (54%) admitted that at least once in their careers they had requalified and started work in a new sector, and 14% are considering this option.

The frequency of promotions and job changes depend, obviously, on age. Moreover, an additional analysis showed² that leaders on average are promoted more often than other employees. ||

Chart 4
DYNAMICS OF RESPONDENTS' PROFESSIONAL CAREERS



² An ordered logit model was used.

Leader – Student

The vast majority of majority of undergraduate, graduate and post-graduate students in the entire sample (87.8%) studied technology or science. Almost half (48%) declared to be heads or leaders of student organisations, 21% were active in their department structures, and 11% in those of their higher education institutions. Another 10% were active locally, 4% at the national level, and 2% internationally.

More than half of the leaders active in student organisations manage 10 or fewer persons (53%), less than one third (32%) answered “11 to 50 people” and the remaining 15% “50 or more people.”

As the benefits of membership in organisations the respondents most frequently mention “team management skills”³ (82%) and “soft skills development” (81%) as well as “establishing contacts” (77%). Two thirds of the respondents selected the answer “project management skills”, and just over half (53%) “professional experience.” “Personal branding” was selected less frequently (46%), and the least frequent answer was “development of scientific interests” (27%). Activity in an organisation is thus a school of leadership skills, which are not taught at higher education institutions, see Chart 5

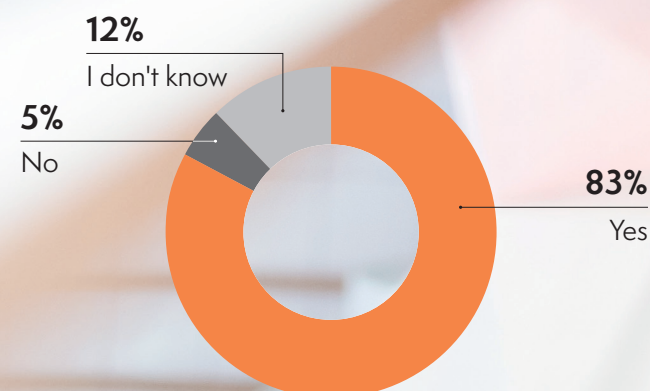
The importance of this type of experience is attested to by the fact that thanks to it 83% of the respondents would like to continue to be leaders in their future careers, 12% are undecided, and only 5% answered in the negative, see Chart 6. It is worth adding that 28% of the students surveyed already work in companies in managerial or leadership jobs. ||

³ Multiple answers to this question were possible, the responses do not add up to 100%.

Chart 5
**BENEFITS OF ACTIVITY
IN STUDENT ORGANISATIONS**



Chart 6
**WOULD YOU LIKE TO BE A LEADER
IN YOUR FUTURE PROFESSIONAL
OR SOCIAL CAREER THANKS TO THE
EXPERIENCE GAINED IN A STUDENT
ORGANISATION?**



Leader – Mother

Reconciling motherhood with being a leader and having a dynamic professional career may be a challenge, that is why we decided to ask how people who have children reconciled motherhood with work. The vast majority indicated great involvement of their husbands or partners (71%), two thirds (66%) used a kindergarten or nursery, more than half used the help of their parents and in-laws (55%), and 34% hired a babysitter. What distinguishes leaders with children from mothers in general in the sample is a more frequent use of the help of their parents and in-

laws (55% vs. 35%). This may mean that thanks to the support of their mothers and mothers-in-law leaders have the chance to spread their wings professionally.

Only few (15%) had to cope on their own. Nevertheless, 14% leaders who have children say that they do all housework, 28% do most housework, and 41 divide them equally with their partners. This means that 42% of leaders-mothers do all or most housework. Only 12% declare that they are responsible for a smaller part of housework, and 2% do not do any housework at all. ||

IS THE LABOUR MARKET FRIENDLY TO MOTHERS?

THE LEADERS surveyed evaluate the Polish labour market as unfriendly to people planning motherhood: 16% considered it as very unfriendly and 30% as unfriendly. Thirty-seven per cent did not have an opinion on that, while positive opinions that the market is friendly or very friendly were infrequent (16% and 1%, respectively).

Chart 7
MOTHERHOOD AND THE DIVISION OF RESPONSIBILITIES AT HOME ON THE 1 TO 5 SCALE (1 "ALL", 5 "NONE")

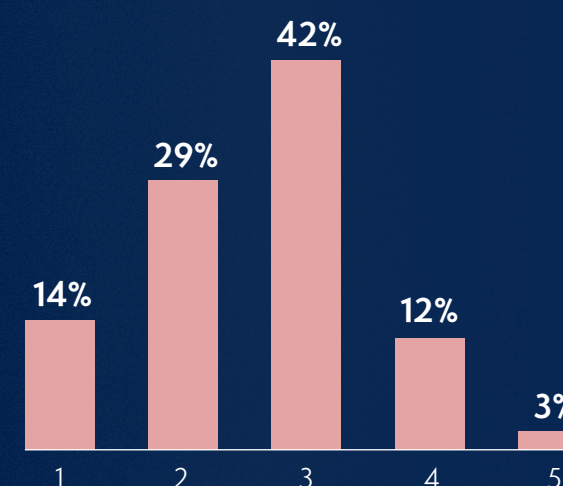
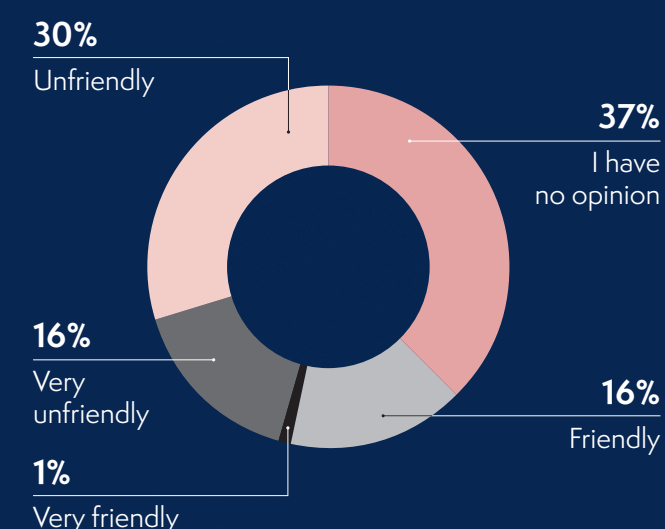


Chart 8
HOW FRIENDLY TO MOTHERS IS THE POLISH LABOUR MARKET



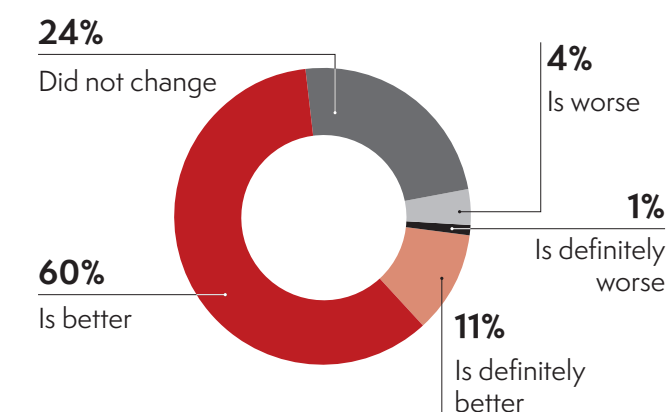
leaders-mothers do
all or most housework

43%

Situation of women on the labour market

How, in the respondents' opinion, has the situation of women in the labour market in Poland changed in the last 5 years? Although the respondents who have children spoke rather unfavourably of the national labour market, here the answers were mostly positive: 60% believed that there had been an improvement, and 10% that the situation had definitely improved; 24% did not see any changes. Very few participants of the survey negatively evaluated the changes occurring in the Polish labour market in the last 5 years; only 5% said that the situation had deteriorated or had decidedly deteriorated, see Chart 9.

Chart 9
SITUATION OF WOMEN IN THE LABOUR MARKET IN POLAND IN THE ASSESSMENT OF THE RESPONDENTS



Discrimination and aggressive behaviours

It was important to study the leaders' personal experience with discrimination of women. We were interested not so much in the financial disadvantages for women as in the more elusive dimension related to interpersonal relations, such as aggressive behaviours or differences in the treatment of women.

Most leaders (80%) admitted that there had been situations in which they were not treated seriously, and two thirds had experienced sexist comments or jokes (67%). Less than half (48%) had to face greater challenges than their colleagues. Statistics concerning violence at work are very worrying: 41% of the respondents experienced mobbing and almost the same proportion (40%) experienced sexual harassment. Difficulties in access to promotion were mentioned less frequently (28%). Just under one fifth (17%) of those who have children had problems with returning to their previous jobs after maternity or childcare leave. The smallest percentage of the respondents had been affected by cyberbullying (9%).

*Leaders are
more exposed
to cyberbullying
and sexual
harassment than
the other group*

”

80%

leaders admitted
that there had been
situations in which
they were not treated
seriously

67%

leaders had
experienced sexist
comments or jokes



7%

of the respondents had not experienced discrimination/violence at work

Leaders are more exposed to discrimination

■ Leaders experienced cyberbullying more frequently than the other groups (9% vs. 3%). It is worth emphasising that there are studies⁴ indicating that women activists experience online bullying more frequently than men. Furthermore, leaders experienced sexual harassment almost twice as often as the other respondents (40% vs. 23%) and greater requirements at work than those of their colleagues (48% and 33%, respectively).

⁴ <https://www.hfhr.pl/wp-content/uploads/2017/12/HFPC-Cyberprzemoc-wobec-kobiet-raport-www.pdf>.

■ Age mattered with regard to mobbing – it was experienced by 31% of the respondents aged under 25, 36% in the group aged 26 to 31, and 41% of the respondents aged 32 to 40. In the group aged over 40 the statistics are alarming – more than half of the respondents (58%) experienced behaviours of this kind.⁵ Moreover, there is a clear difference in the experience of cyberbullying at work/higher education institution between the youngest age group (15%) and the other age categories, where the percentage was 6-8%. What is worse, more than half of the respondents aged under 25 (51%) experienced sexual harassment, in the oldest age group it was 40%. An-

Leaders more often face unfair behaviours, e.g., greater demands at work than those expected of their colleagues

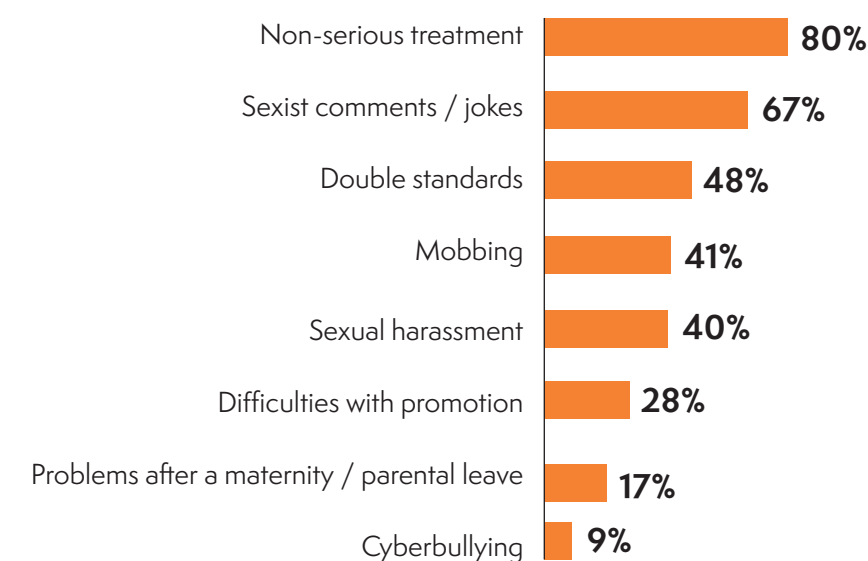
”

part of the report it is worth noting another worrying statistic: only 7% of the respondents did not experience any of the behaviours described above. ||

other age-related trend is the fact that leaders who had just graduated (aged 26 to 31) selected “non-serious treatment” more often than other respondents (91%). Among student-age respondents the percentage was 81%, and in the higher age categories 80% and 70%, respectively. These statistics show how very unfriendly the place of work can be to women, even – and, in the case of certain types of violence, particularly so – for leaders. At the end of this

Chart 10

DISCRIMINATION / AGGRESSIVE BEHAVIOURS



Leaders experience cyberbullying 3 times more often

⁵ The study also showed statistically significant relationship between age and discrimination on returning from maternity leave and difficulties in access to promotion. In those cases, however, other factors could play a role, e.g., younger women might have not had sufficiently long tenure at work yet to seek promotion.

Influence of self-stereotypes

Apart from discrimination and violence, women also have to face limitations resulting from their own beliefs or habits, including:

- The sense that their previous successes resulted from a lucky coincidence rather than were the effect of their own hard work (“impostor syndrome”);
- Excessive perfectionism, which may prevent them from taking on new challenges on the one hand and which may mean they need more time to complete specific work;
- Stress before public speaking combined with the aforementioned perfectionism mean that women speak in public less often than men and prepare for such public speaking more carefully.

These beliefs may result from the willingness to meet social expectations, which still require to a certain extent that women prove their worth in the areas in which until recently they were not present, that is e.g. in leadership roles.

The leaders surveyed were asked to evaluate on the scale of 1 to 5 the extent to which these limitations concern them, see Table I.

It follows from the table above that the most frequent challenge are greater requirements for women (average 3.71), followed by perfectionism (3.11) and stress before public speaking (2.91), although that was much lower among the leaders (27% selected the answer “I definitely agree” vs. 16% of the other respondents). The least problematic was the impostor syndrome (average 2.15), which the leaders experienced

Leaders feel the impostor syndrome less frequently

”

less frequently than the other respondents (average 2.44), see chart 11.

The respondents were also asked to compare the friendliness to women of various professional situations (work at a corporation and being self-employed) and types of companies. While on the former matter the respondents most frequently did not have an opinion or disagreed with the presented statement (average 2.94), with regard to company types, international corporations are evaluated better than local companies (average 3.76), see Table II. ||

Chart 11

EXPERIENCE OF IMPOSTOR SYNDROME – LEADERS VS. OTHER RESPONDENTS

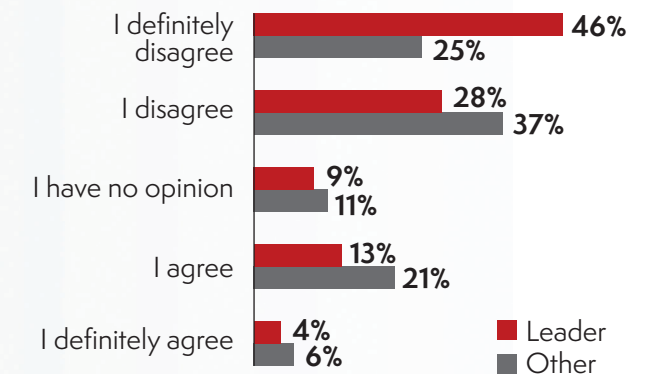


Table I.

BELIEFS LIMITING WOMEN'S DEVELOPMENT (%)

	I definitely disagree (1)	I disagree (2)	Difficult to say (3)	I agree (4)	I definitely agree (5)	Average
Impostor syndrome	46%	28%	9%	13%	4%	2,15
Perfectionism	12%	29%	11%	31%	17%	3,18
Proving one's own worth	5%	16%	12%	35%	32%	3,71
Stress before public speaking	22%	23%	14%	26%	15%	3,18

Table II.

WOMEN'S SITUATION IN VARIOUS WORK ENVIRONMENTS

	I definitely disagree (1)	I disagree (2)	Difficult to say (3)	I agree (4)	I definitely agree (5)	Average
Women who are self-employed are less exposed to discrimination than those employed in corporations	11%	20%	40%	21%	8%	2,94
International firms are more friendly to women than Polish ones	1%	6%	32%	36%	25%	3,76

Sources of support

Chart 12

SOURCES OF SUPPORT

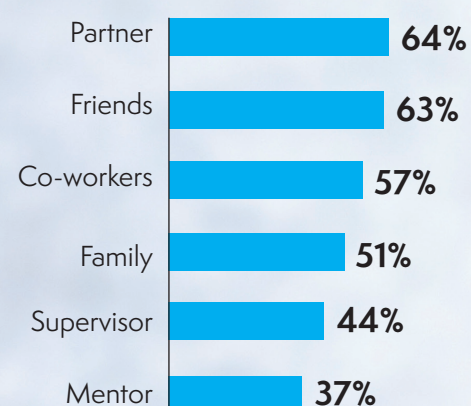
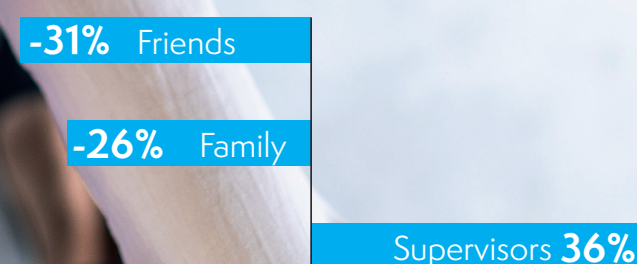


Chart 13

HOW DOES THE SUPPORT RECEIVED CHANGE WITH AGE?



Receiving support is extremely important in the process of becoming a leader and overcoming the barriers described above. Therefore, it is essential to ask from whom the respondents received support. Chart 12 shows that the most frequent source of support is the partner (64%), followed by friends (63%). Interestingly, co-workers are mentioned more frequently than family (57% and 51% respectively). At the bottom of the list come superiors (47%) and mentors (40%).

The study showed that there are statistical significant differences on this point between leaders and the other respondents. The former more frequently received support at work, both from their co-workers (56% vs. 44% among non-leaders) and from superiors (47% and 36%, respectively), as well as from mentors (41% and 30%). It may mean that a friendly work environment significantly contributes to the person becoming a leader.

In turn, young women more often received support in their personal environment: from family (the probability decreased by 26% in each successive age category) and from friends (decrease with age by 31%), while older women more often received support from their superiors (increase by 36%), see chart 13.

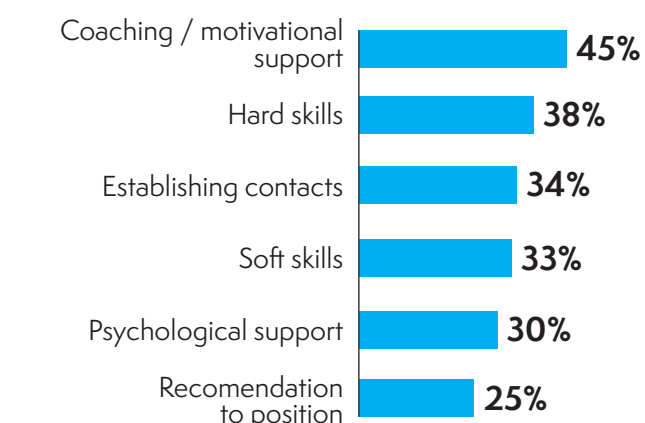
Another important issue is the type of support that the respondents needed the most. The most frequently selected answer was “coaching/motivational support” (45%)⁶, followed by “hard skills” (38%). One third (34%) selected

“establishing of contacts” and almost the same percentage pointed to “soft skills” (33%), and 30% “psychological support.” What the respondents needed the least often was “being informally recommended for a job” (25%), see Chart 14.

Interestingly, the respondents who do not have children selected “psychological support” significantly more often than mothers (the probability of selecting this answer was higher by as much as 69%), and leaders selected “soft skills” twice less frequently (33%, non-leaders 67%), which may prove that being a leader is related to developed emotional intelligence. Moreover, in each successive age category the probability of selecting coaching/motivational support was on average lower by 27%. This may indicate that the demand for that is currently greater than a decade or so ago. ||

Chart 14

SUPPORT NEEDED



⁶ Multiple answers to this question were possible, the responses do not add up to 100%.

LEADER'S ATTRIBUTES

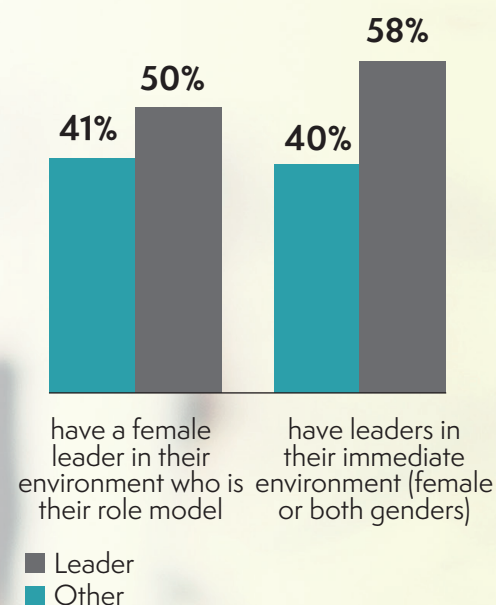
Role models in environment

Most respondents claimed to have in their environment individuals who could be called leaders. Only 7% answered in the negative; 32% of the others declared the leaders were mostly men, and 42% that the proportions of men and women were roughly the same. Only 16% of the respondents said that mostly women were leaders in their environment. Nevertheless, half of the respondents said that they had in their environment a female leader whom they treated as a role model.

It is essential that the respondents who called themselves leaders much more frequently said that they had leaders in their environment⁷ (58% vs. 40% among the non-leaders) or that they knew a female leader who was a role model for them (50% and 41%, respectively), see Chart 15. This shows how important the influence of people in the environment – presence of role models – is in becoming a leader. ||

Chart 15

BECOMING A LEADER – INFLUENCE OF LEADERS IN THE RESPONDENTS' ENVIRONMENT



Leaders much more frequently said that they had in their environment a female leader who was a source of inspiration for them

⁷ Total of the answers "both genders equally" and "women."

Attributes of a leader

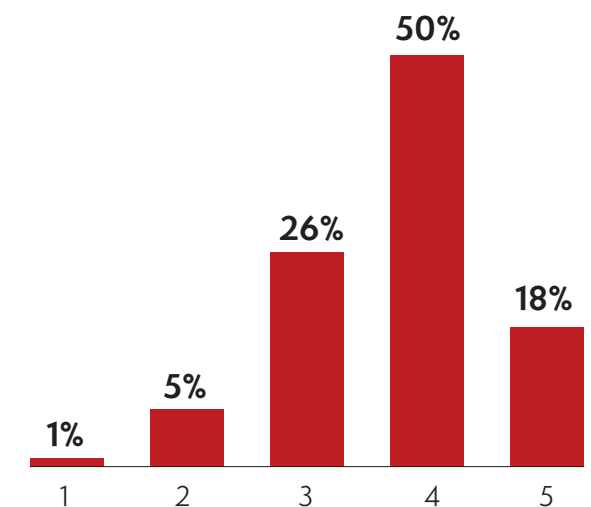
What characterises a leader? What attributes and competencies distinguish leaders? How do the respondents see themselves in this context? What qualities and competencies would they like to develop?

First of all, self-confidence can be considered as the most important attribute of being a leader. As shown in Chart 15, the respondents in general evaluate it as important, half chose 4, and 17% chose 5 on the 1 to 5 scale. Twenty-six per cent were undecided, and 6% chose 2 (5%) or 1(2%).

Table III presents answers to the questions about attributes of a leader. Out of nineteen qualities associated with women and men the three which were most frequently selected are partially related to work with people: inspiring/motivating (70%), charisma and passion (67%), and seeing potential in others (65%). The least frequently selected attributes were competitiveness (26%), presence (33%), as well as energy and empathy (42% each). The latter attribute was most often selected as the one describing the re-

spondents themselves (58%), similarly in the case of authenticity (55%) and charisma and passion (55%). The least frequently selected qualities were the ones considered as manly: “competitiveness” (26%), “risk-taking” (27%) and “presence” (27%). Consequently, assertiveness and risk-taking seem to be the qualities which the respondent most frequently would like to develop (56% and 38% respectively), similarly in the case of goal orientation (39%). The respondents were least interested in developing their “authenticity” (3%), “taking responsibility for others” (9%) and “trustworthiness” (11%). Thus, it is clear that the qualities least frequently characterising the respondents and the qualities which the respondents would like to develop are predominantly attributes considered as manly. Nevertheless, these are not the characteristics of a leader.

Chart 16
HOW DO YOU EVALUATE YOUR SELF-CONFIDENCE ON THE 1 TO 5 SCALE?



67%

of the leaders consider themselves to be self-confident. Their self-evaluation on this attribute is much higher than that of non-leaders

Leaders want to develop such qualities as assertiveness, risk-taking and goal orientation



Table III.
CHARACTERISTICS DESCRIBING LEADERS AND RESPONDENTS

	Describes you	Describes a leader	You would like to develop in yourself
Authenticity	55%	46%	3%
Assertiveness	34%	57%	56%
Taking responsibility for others	46%	47%	9%
Building trust	45%	60%	20%
Charisma and passion	54%	67%	22%
Team appreciation	47%	55%	17%
Seeing potential in others	52%	65%	21%
Empathy	58%	42%	15%
Energy	47%	42%	13%
Inspiration/motivation	48%	70%	30%
Goal orientation	37%	46%	39%
Presence	27%	33%	17%
Risk-taking	27%	44%	38%
Proactivity	44%	46%	14%
Efficiency	33%	48%	28%
Coherence and consequence	32%	48%	28%
Quick decision-making	43%	53%	31%
Trustworthiness	41%	50%	11%
Competitiveness	26%	26%	23%

An analysis of answers to this question shows certain differences between leaders and non-leaders:

■ In self-description, leaders most frequently mentioned such attributes as: decision-making (43% vs. 27% non-leaders), proactivity (44 vs. 34%), risk-taking (27 vs. 18%), inspiring/motivating (48% vs. 25%), energy (47% vs. 35%), seeing potential in others (51% vs. 36%), charisma and passion (54% vs. 28%) and assertiveness (31 vs. 18%); where the greatest differences concerned the attributes more often identified as one that describe a leader: charisma and passion as well as motivating and inspiring others. Therefore, it can be concluded that the re-

58%

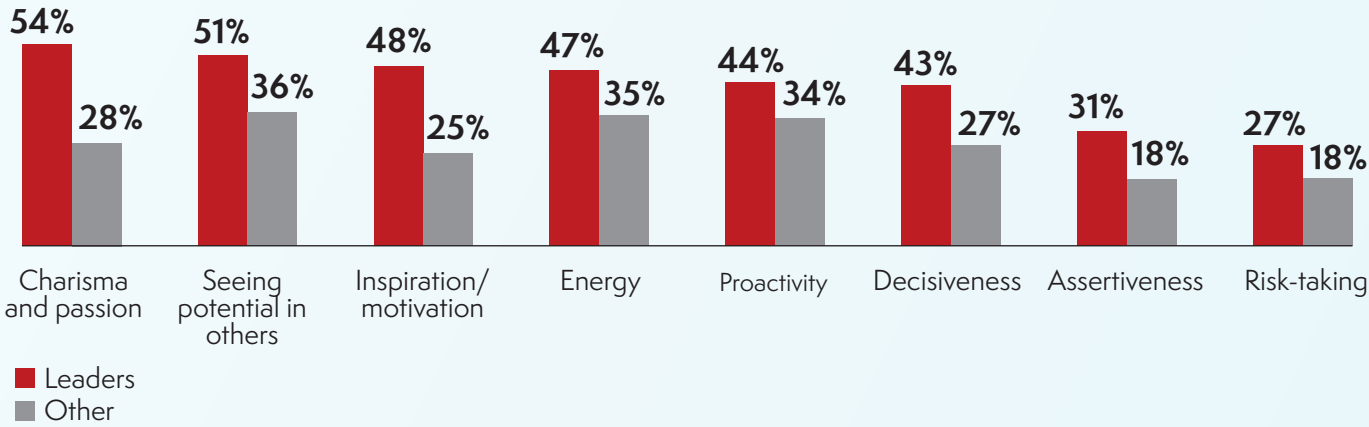
of the leaders think that they are characterised by empathy

spondents’ perceptions of leaders to a certain extent corresponds to the actual differences identified by the respondents between leaders and other participants of the survey.

■ The self-perception differences also translate into the qualities which the respondents would like to develop. Leaders less often selected assertiveness (56% vs. 73%), charisma and passion (22% and 37%, respectively), energy (13% vs. 20%), proactivity (14% vs. 21%), and decision-making (31% vs. 49%).

■ Differences between leaders and non-leaders were particularly visible in the context of empathy. The former mentioned it in self-description less often (58% vs. 69%), but more often thought

Chart 17
CHARACTERISTICS OF A LEADER IN THE RESPONDENTS:
LEADERS VS. OTHER RESPONDENTS



it was a quality of a leader (42%). Consequently, they were more intent on developing it (15% vs. 8%); likewise, they more often said they would like to work on “presence” (17% vs. 10%).

Another important factor behind the differences in the answers given was age:

■ With age, the respondents were less interested in developing such characteristics as trust-building (-28%)⁸, efficiency (-34%), decision-making (-37%), trustworthiness (-45%), proactivity (-36%). Thus, it can be concluded that these qualities are developed as the person’s professional career develops⁹.

8 The stated differences concern the changes in the probability of answering “yes” in each subsequent age category. The regression model also took into account the fact of having children.

9 Logistic regression models took into account such attributes as age and the fact of having children.

Self-image also changes; older participants of the survey are more likely than the younger ones to choose decision-making (41%) and efficiency (35%). The latter, in turn, more frequently choose competitiveness (41%) and energy (32%). Therefore, there is no unequivocal relation between age and self-description in terms of male or female characteristics, see chart 18.

There were also differences in the perception of leaders. With age the respondents were less inclined to believe that competitiveness (-38%), energy (-29%), responsibility for others (-28%) characterise leaders.

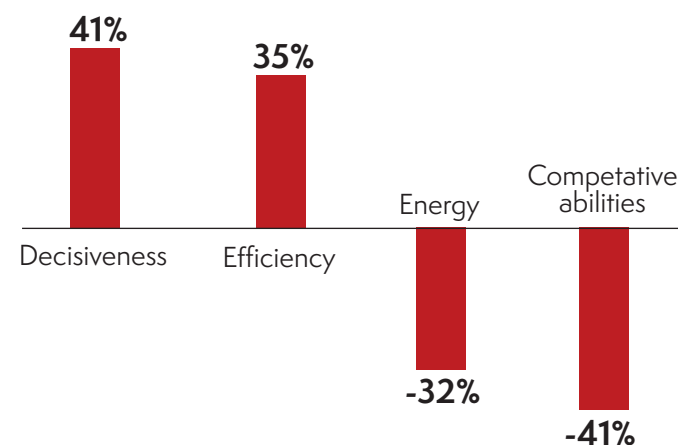
Yet another factor is the type of education. Leaders with engineering background more often want to develop their efficiency (105% higher probability of selection) and risk-taking (71%). In turn, they are less frequently interested in developing charisma and passion (-45%) and less frequently believe that efficiency was their quality (-43%).

Differences were also visible between mothers and childless respondents – the former less often wanted to be able to inspire/motivate (-60%¹⁰). Interestingly, mothers more frequently than childless respondents indicated energy as their characteristic (+74%).

Apart from differences in perceiving various characteristics by various respondent categories, it is also important how these characteristics are interrelated. Greater self-confidence is associated with more frequent self-description in terms of having such qualities as: assertiveness, decision-making, proactivity, competitiveness, charisma and passion, energy, inspiring and motivating, risk-taking, efficiency, see chart X.

However, there are two characteristics which correlate negatively with self-confidence. The less frequently the respondents describe them-

Chart 18
AGE AND LEADER'S CHARACTERISTICS

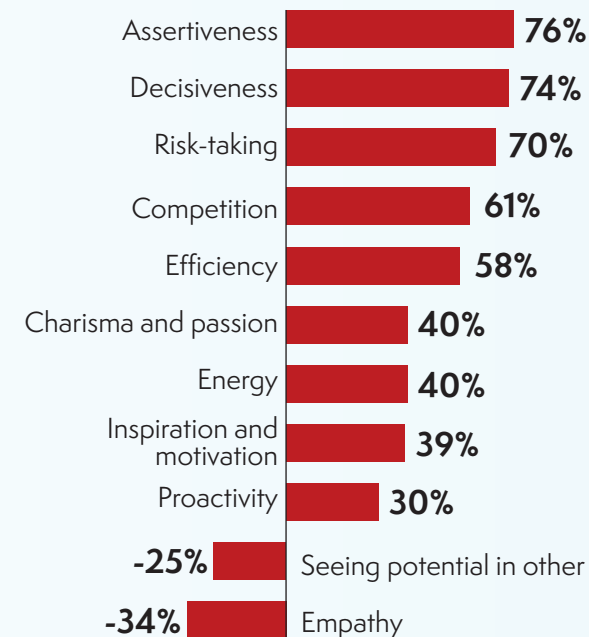


selves as having the qualities of empathy and seeing potential in others, the greater their self-confidence.

To recapitulate, greater self-confidence is associated above all with being more inclined to self-describe in terms of having characteristics considered as manly, such as assertiveness, decision-making, risk-taking, and with being less inclined to self-describe in terms of womanly characteristics such as empathy. If we consider that greater self-confidence is associated with higher self-evaluation, it means that the qualities associated with are higher valued in the society. In this case it would mean that assertiveness, decision-making and risk-taking are more valued than other characteristics despite not being the main attributes of a leader.

In discussing self-confidence it is worth noting the factors which may shape it. Above all, self-confidence is related to certain stereotypes we mentioned in the first part: the higher evaluation on the scale of the impostor syndrome, the lower self-confidence (an increase in the evaluation by 1 entails a decrease in self-confidence by 0.27). For perfectionism, the same effect was (-0.9), and for fear of public speaking (-0.13). These dependencies show that the above beliefs may be an obstacle to the development of leader's competencies and characteristics. ||

Chart 19
CHARACTERISTICS OF A LEADER AND SELF-CONFIDENCE – SUMMARY



Graph A
SELF-CONFIDENCE AND OTHER CHARACTERISTICS OF A LEADER

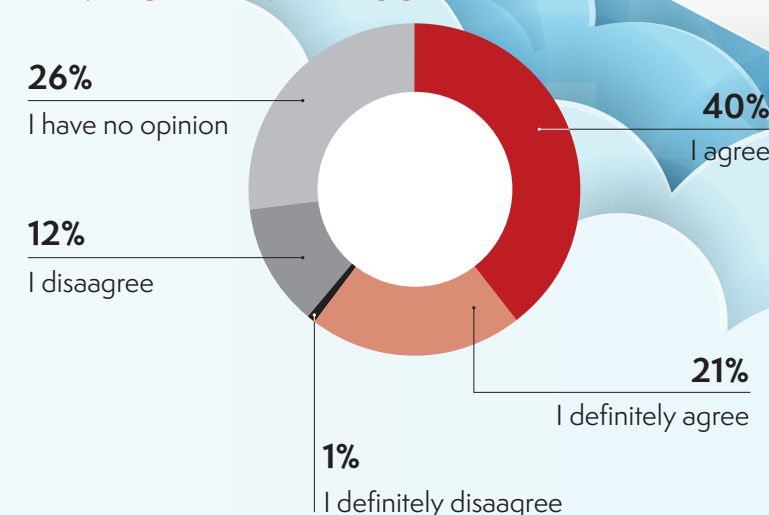
SELF ASSURANCE

Assertiveness (76%)
Decisiveness (74%)
Proactivity (30%)
Competitiveness (61%)
Charisma and passion (40%)
Energy (40%)
Inspiration and motivation (39%)
Risk-taking (70%)
Effectiveness (58%)

CAN LEADERSHIP QUALITIES BE DEVELOPED?

IN THE END it should be asked how much the qualities related to being a leader can be developed in a person. The respondents usually agreed (40%) or definitely agreed with this (21%). More or less a quarter (26%) had no opinion, very few disagreed (12%) or strongly disagreed (1%).

Chart 20
HOW MUCH YOU AGREE WITH THE OPINION THAT LEADERSHIP QUALITIES CAN BE DEVELOPED IN A PERSON



¹⁰ The difference concerns the probability of answering "yes."

Competences

This leads to another question: apart from attributes or predisposition, what qualities should a leader have? Which of these qualities do the respondents have? What qualities they wish to work on?

71%

of leaders want to work on their team management skills

Table IV presents a list of potential leadership skills and how often they were selected by the respondents. Among the competences possessed by a leader, those related to work with people were selected most often: communication skills (85%), team management (79%), and setting and achieving goals (76%). The least often associated with a leader were “legal knowledge” (18%), “practical marketing knowledge” (23%), and “financial knowledge” (24%). The set of the leadership-related skills selected most often coincided to some extent with the self-description of the respondents, in which “communication skills” (80%), “planning skills” (64%), and “setting and achieving goals” (61%) dominated. The respondents least frequently claimed such skills as “legal knowledge” (7%), “financial knowledge” (9%), and “team management skills” (13%). The latter was also among the skills the respondents wished to work on (71%), along with risk management (55%) and negotiation/mediation skills (53%). The respondents were least interested in improving their communication skills (12%), planning skills (16%), pro-

ject management skills and in gaining specialist knowledge in a particular field (21% each).

Just as in the case of attributes, there were differences among the groups of respondents:

- The leaders more often claimed such skills as self-presentation (38% in comparison to 20% others), communication skills (80 and 20%, respectively), negotiation and mediation skills (29% and 19%), influence (27 and 14%), project management (56 and 38%), risk management (23 and 8%), and team management (13 and 5%). Therefore, the characteristics distinguishing the leaders and other participants correspond to some extent with the above description of a leader, see Chart 21.
- Leaders also have different educational needs than the other respondents. While leaders were more often interested in gaining legal knowledge (34% in comparison to 23%) and financial knowledge (38% and 28%), the re-



Chart 21
COMPETENCES OF LEADERS
VS. THOSE OF NON-LEADERS



Table IV
SKILLS POSSESSED BY THE LEADERS AND OTHER RESPONDENTS

	You have	Leaders have	You want to have
Practical marketing knowledge	15%	23%	30%
Specialist knowledge in particular field	41%	52%	21%
Self-representation skills	38%	60%	39%
Communication skills	80%	85%	12%
Negotiation/mediation skills	29%	72%	53%
Planning skills	64%	55%	16%
Skills for setting and reaching goals	61%	76%	24%
Influencing skills	27%	59%	43%
Project management skills	56%	52%	21%
Risk management skills	23%	52%	55%
Team management skills	13%	79%	71%
Legal knowledge	7%	18%	34%
Finance-related knowledge	9%	24%	38%

maining respondents would like to improve such skills as: self-presentation (52% in comparison to 39% of leaders), communication skills (35 and 12%) and project management (34 and 21%).

- The probability that legal knowledge will appear among a leader's attributes decreases with age (-33%), while the ability to set and achieve goals increases (31%). Other declared skills also evolve: the likelihood of having specialist knowledge (-48%), financial management (-32%) decreases, while risk management (42%), setting and achieving goals (68%) increase, see Chart 22.
- In older age groups, the interest in improving certain competences is also falling, such as project management (-39%), finance-related knowledge (-32%), and legal knowledge (-28%),

- There were also some differences in the competences possessed by the respondents working mainly with men, who more often than others specialise in planning skills (increase in probability by 122%) and practical marketing knowledge (70%). Consequently, they are less interested in developing their planning skills (-53%).

- On the other hand, respondents who had engineering education would more often like to learn project management (increase in probability by 80%) and practical marketing knowledge (increase by 76%), which they less often have (-46%).

In conclusion, based on the differences between leaders and others, the following leadership qualities and competences can be distinguished from among the analysed attributes.



Chart 22
**AGE AND DEMAND
FOR LEADERSHIP COMPETENCES**

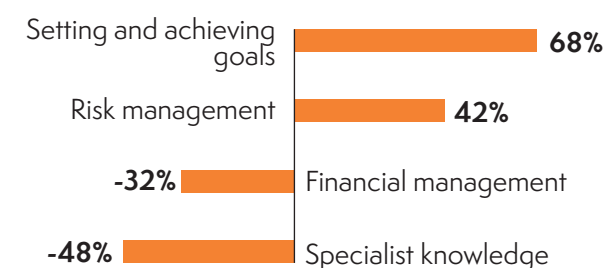
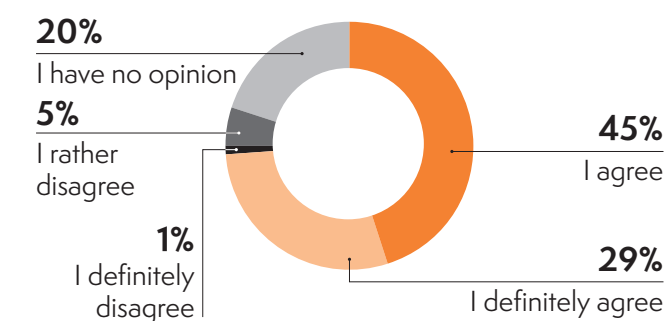


Chart 23
**DO YOU BELIEVE LEADERSHIP
QUALITIES CAN BE LEARNED?**



Graph B
**THE MOST IMPORTANT LEADERSHIP QUALITIES AND COMPETENCES ACCORDING
TO THE RESPONDENTS**

ATTRIBUTES OF A LEADER

Assertiveness
Charisma and passion
Decisiveness
Seeing potential in others
Energy
Inspiration / motivation
Risk-taking
Proactivity

COMPETENCES OF A LEADER

Self-representation
Communication skills
Negotiation and mediation
Influence
Project management
Risk management
Team management

The above list shows that some competences are age-related, while less interest in acquiring them may be related to the fact that the respondents learned them during their professional careers or to the changing requirements of the labour market. Differences between persons working in a male-dominated environment may result from different professional roles performed by the respondents (e.g. project management). Finally, disproportions in competences between persons who studied engineering and

74%

leaders believe
that leadership skills
can be learned

the rest may result from different programs at the university, not always taking into account competences related to management or marketing.

The question arises again, to what extent leadership competencies can be learned. Chart 22 demonstrates that the respondents feel optimistic on this issue: 45% answered "I agree," while 29% answered "I definitely agree." On the other hand, 20% had no opinion on this issue and only 6% disagreed or definitely disagreed. ||

Gaining knowledge and leadership skills

How do leaders gain leadership knowledge and skills? In the previous part we mentioned that one of the schools teaching leadership-related skills and knowledge are student organisations. However, the answers we received show that universities are not usually considered a good place to gain leadership skills. More than half of the respondents disagree (31%) or definitely disagree (26%) with the opinion that studies provide such a possibility; one fifth have no opinion (21%) and even fewer agree (16%). Very few (7%) selected the answer “I strongly agree”, see Chart 24.



54%

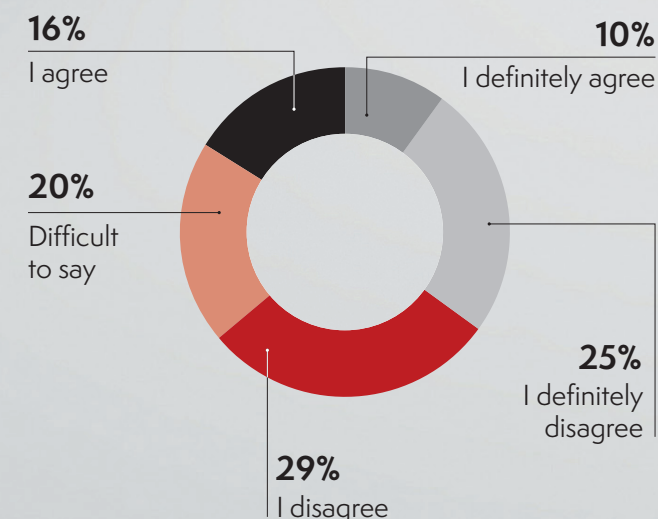
of leaders believe that formal education does not provide a chance to gain and develop leadership knowledge and skills

Younger leaders were more likely to point to the university as a source for leadership knowledge and skills, which means that the situation evolves positively in this area. Although negative evaluations still dominate

73%

of the leaders get their knowledge of leadership from reading – books and specialist articles

Chart 24
DID THE UNIVERSITY/SCHOOL GAVE/ GIVE YOU THE OPPORTUNITY TO DEVELOP LEADERSHIP SKILLS?



On a scale of 1 to 5, the average answer to this question was 2.55; the leaders evaluated their studies higher in this respect (2.55 compared to 2.32 by others). Also, the younger respondents perceived this more favourably. After taking into account the differences resulting from studying different specialities, the average difference between older and younger age categories amounted to -0.22. So, the age was more important than study area.

So, if not as part of the school or academic education – how did the respondents acquire leadership competences? As demonstrated in Chart 26, the respondents most often learn at work through observation (81%), by reading books or articles (73%), from audiovisual materials (62%) and looking for information on the Internet or social media (58%). On top of that, over

Chart 25
GAINING LEADERSHIP SKILLS



Table V
GAINING KNOWLEDGE IN PARTICULAR AREAS

Competencies	Studies	Training, workshops	Mentoring, coaching	Self-education (literature, podcasts, interviews)	Own experience, practice
Digital transformation	14%	23%	3%	38%	50%
Social communication	18%	33%	16%	44%	62%
Contact with media	6%	17%	4%	26%	44%
Negotiation and mediation	13%	32%	11%	26%	55%
Employee's potential assessment	10%	24%	12%	29%	67%
Personal branding	6%	12%	14%	35%	45%
Legal	16%	15%	3%	18%	31%
Corporate social responsibility	12%	17%	6%	36%	40%
Public speaking	19%	47%	15%	41%	68%
Crisis management	12%	18%	7%	21%	54%
Company reputation management	8%	10%	7%	21%	46%
Strategic management	17%	19%	10%	28%	44%
Human resources management – legal aspects	17%	17%	3%	17%	34%
Change management	14%	26%	11%	26%	60%

a half of them (58%) took part in training and/or courses, and 36% worked with a mentor and/or coach. Often the places where such competences could be learned were social organisations (42%) or student/doctoral organisations (36%). The university appeared least often in this context: 19% mentioned postgraduate or MBA studies, and 16% – university subjects related to management or a specialised faculty.

The data gathered demonstrate that leaders gained their leadership competences in a slightly different way than the rest of the respondents. Most of all, they more often worked with a coach or mentor (36% compared to 25%), at the university they studied subjects related to management or leadership (16 and 9%) or gained leadership skills at work, by observation (81 and 71%). The biggest difference was in training – 57% leaders learned this way and 38% other respondents, see Chart 26.

Another important factor was age – in subsequent age categories the likelihood of gaining leadership skills by activity in social organisations increased by 44%. The greatest differences concerned observation at work (increase in probability by 59%) and postgraduate studies (83%), which may be due to the fact that the younger study participants have not yet completed their studies or did not have sufficient work experience. On the other hand, the probability of acquiring this type of skills in student and doctoral organisations decreased with age (by 53%). Similar differences were observed between those with children and those without – in the case of the former, the probability of acquiring experience in social organisations decreased by 60%. Leaders-mothers also more often took up postgraduate studies (increase in probability by 111%), which may be related to the necessity of changes to professional career after having

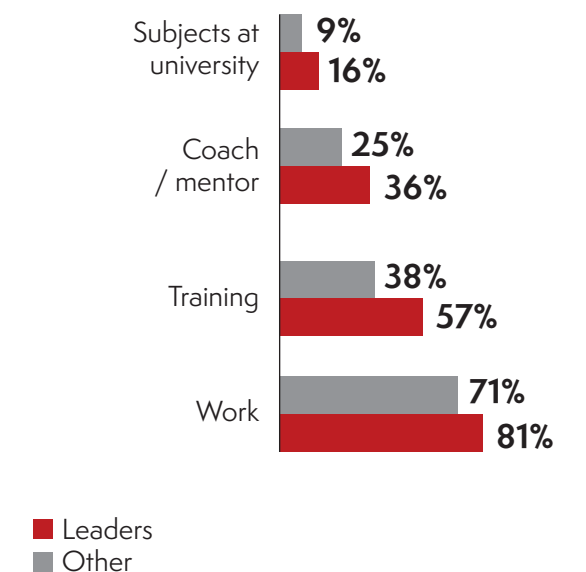
a child. In turn, this method of acquiring leadership competences was less popular among respondents who undertook engineering studies (less frequently by 47%). In this group, however, learning the relevant competences through activity in student or doctoral organisations was very common (increase by 128%).

Another issue was gaining knowledge in various leadership-related areas described in the previous part. Detailed information on this subject is presented in Table V.

In all the above areas, one's own experience and practice clearly outperform other methods of acquiring knowledge. Mentoring/coaching turned out to be the least popular, with the exception of personal branding and employee potential assessment, which were least often learned at university.

Just as in the previous cases, we note statistically significant differences between individual groups of respondents:

Chart 26
GAINING SKILLS: LEADERS VS OTHER RESPONDENTS



- Compared to the rest, the leaders learned less about digital transformation at university (22 and 14%, respectively), more often using mentoring and coaching for this purpose (3.16% compared to 0) and their own experience/practice (50% compared to 38).
- More often than others, they learned in training and workshops: social communication (33% compared to 24), contact with the media (17 and 8%), employee potential assessment (24 and 11%), public speaking (47 and 31%), crisis management (18 and 11%), legal aspects related to human resource management (17 and 8%) and change management (26 and 12%).
- In the case of leaders, their own practical experience turned out to be very helpful, enabling them to acquire knowledge related to contact with the media (44% compared to 28% of the others), negotiations and mediation (55% compared to 37%), employee potential assessment (67 and 51%), personal branding (45 and 30%), public speaking (68 and 57%), company reputation management (46 and 31%), strategic management (44 and 23%), legal aspects of human resources management (34 and 18%) and change management (60% and 32%).
- The aforementioned mentoring and coaching were also popular, helping the leaders more often to gain knowledge related to social communication (16% compared to 9), employee potential assessment (12 and 5%), personal branding (14 and 7%), strategic management (10 and 2%), and change management (11 and 5%).
- Less common source of knowledge was self-study, from which female leaders learned most of all about crisis management (21% and 12%) and human resources management (17 compared to 11%). The respondents who did not consider themselves to be leaders more often learned strategic management this way (18% compared to 31% of female leaders).



Graph C summarises the sources of learning that were more relevant to the leaders than to others

Graph C **SOURCES OF KNOWLEDGE GAINED BY LEADERS**

MENTORING / COACHING

digital transformation
social communication
personal branding
employee's potential
assessment
strategic management
change management

TRAINING

social communication
contact with media
negotiation and mediation
employee's potential
assessment
public speaking
strategic management
company reputation
management
human resources
management (legal
aspects)
change management

PRACTISE

contact with media
negotiation and mediation
employee's potential
assessment
personal branding
public speaking
company reputation
management
strategic management
human resources
management (legal
aspects)
change management

In conclusion, leaders are not made with the knowledge gained at university. Much more important than that is gaining experience, participation in training and taking advantage of mentoring or coaching.

Gaining knowledge also happened differently in individual age groups:

- The younger respondents were more likely to learn about the digital transformation (decrease in subsequent age groups by an average of 36%), corporate social responsibility (-36%), public speaking (decrease by 37%) at university – which indicates that in these areas there is more education offered now than before.
- The older respondents, in turn, thanks to (greater) practical experience, gained knowledge in the field of digital transformation (increase in the probability of a “yes” answer by 62% in subsequent age groups) and strategic management (+32%);
- With age, the acquisition of knowledge by participation in training in such issues as: negotiations and mediation (increase in the probability of a “yes” answer by 40%), assessment of the employee’s potential (+48%), crisis management (+64%), change management (+59%), increased.
- In older age groups women more often relied on self-education to gain knowledge from the areas of digital transformation (+49%), employee’s potential assessment (+47%), and change management (+52%)
- There were usually no differences in mentoring, except for company reputation management (increase in probability by 75%).

Despite what might seem, the differences related to practical experience influence less areas than training or self-education process. This demonstrates the importance of active participation of the leaders themselves in the leadership learning process.

Graph D. illustrates how the ways of gaining leadership-related knowledge change with age.



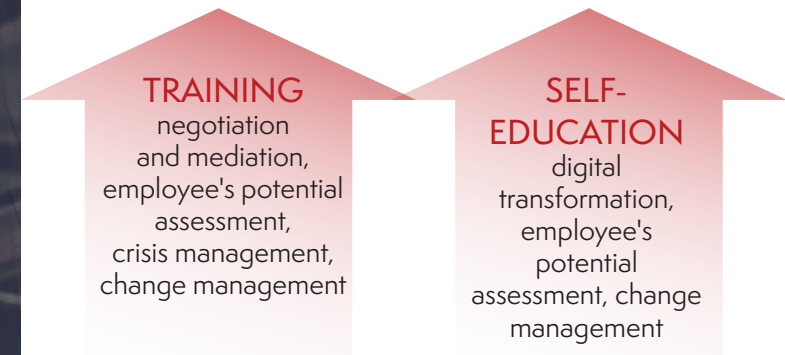
The differences between the participants who work mainly with men and the others concerned mainly the acquisition of knowledge through training and self-education. The respondents from feminised or mixed companies and organisations gained knowledge about public relations (contact with the media, probability higher by 53%), change management (+49%) more often at training. Also more often they taught themselves contact with media (+51%) and personal branding (+57%), also gained by own experience (+50%). Finally, there was higher probability that they learned change management at university (+69%). Therefore, leaders working with women or in mixed environments put more effort into developing those particular competences.

We also decided to check whether the women who studied engineering gained skills in a way different to the others. After taking into account the differences resulting from age and place of work, it turned out that the respondents who chose technical studies more rarely than others gain knowledge in the field of human resources management during their studies, i.e.:

- Legal aspects related to human resources management (the probability of a “yes” answer lower by 51%);
- Employee’s potential assessment (probability lower by 28%).

¹¹ Multiple answers to this question were possible, the responses do not add up to 100%.

Graph D
**CHANGES IN WAYS OF GAINING
KNOWLEDGE (DIFFERENCES
IN 3 AREAS OR MORE)**



The main source of development of leadership skills for leaders is observation of processes in the workplace

Understandably, they more often learn about digital transformation at university (+277%), less often gaining this knowledge from own experience (-40%) or in training (-49%).

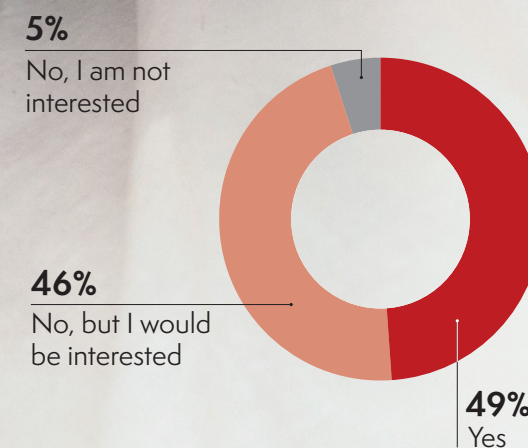
Returning to the topic of training, the above data indicate that it is an extremely important space for learning leadership-related knowledge and skills – 57% of the respondents drew their knowledge from them. In this context, it should be mentioned that 89% of the respondents participated in them from their own initiative¹¹, in 16% of the cases they were suggested by the employer, in 12% by a person from private environment, and in 9% by a work colleague. ||

Promoting women's leadership and experience of mentoring

95%

of the leaders participate in events promoting women's leadership or are interested in them

Chart 27
HAVE YOU OR ARE YOU PARTICIPATING IN EVENTS PROMOTING WOMEN'S LEADERSHIP?



Almost a half (49%) of the leaders participate in events promoting women's leadership and not many less (46%) are interested in them. Only 5% experienced lack of interest in participating, compare Chart 27.

Leaders are more likely to participate in this type of initiative (49% compared to 36% of the others), while non-leader respondents more often express interest in participating (54% compared to 46%). The respondents with children are less likely to participate in these events, the probability of participation in this group decreases by 75%, probably due to their lower time flexibility.

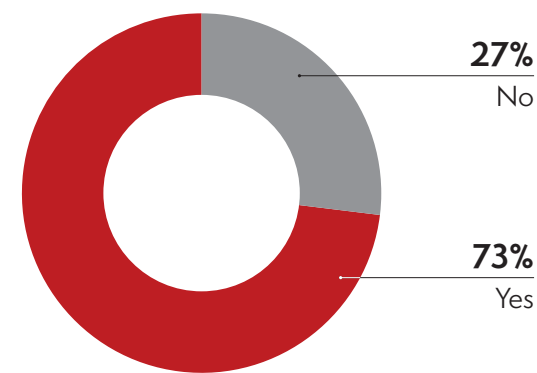
Does the mentoring experience influence the shaping of leaders? A vast majority (70%) of the respondents claim that in their professional lives they have met someone whom they could call a mentor, see Chart 27. This percentage was significantly higher for leaders (73%) than for the other respondents (54%). Also, chances for meeting such a person grew lower with age, on the average by 29% in each subsequent age category.

A mentor was usually a person from a mentoring program¹² (23%), slightly less often a work colleague (22%) or a supervisor (20%). Nine per cent of the respondents mentioned a university tutor in this context, while 8% pointed to a family member. With age, the probability of pointing to a tutor decreased, which may indicate a change in relations at universities.

As shown in Chart 28, mentors most often provide support by motivating to action (48%) and helping to build a career path (40%), developing leadership competences (41%), and by providing psychological support (35%). Less frequently mentioned aspects were “soft skills development” (33%), “networking” (27%), and “subject matters-related assistance” (31%). Only in very few cases the respondents received help in creating a business plan (9%).

Compared to the other respondents, leaders more often indicated the development of leadership competences (41% and 21%, respectively), soft skills development (33 and 18%), as well as a business plan creation (9 and 3%), see Chart 30.

Chart 28
MENTORING EXPERIENCE



In addition, different groups of respondents derived varied benefits from mentoring:

Leaders a lot more often use support in the form of mentoring

”

- Those who studied engineering were more likely to choose psychological support (+96%), similarly respondents with children (+106%)
- Those who worked in organisations together with men mentioned establishing contacts less often (-51%)
- The probability of indicating the motivation to act (-35%) and building a career path (-27%) decreased with age.

Finally, it is worth noting that the overwhelming majority of respondents assess their work with a mentor positively. On the scale of 1 to 5 over a half of the respondents (53%) selected the answer “5,” while 36% selected “4.” Only 11% selected “3” or less. ||

Chart 29
FORM OF MENTORING SUPPORT

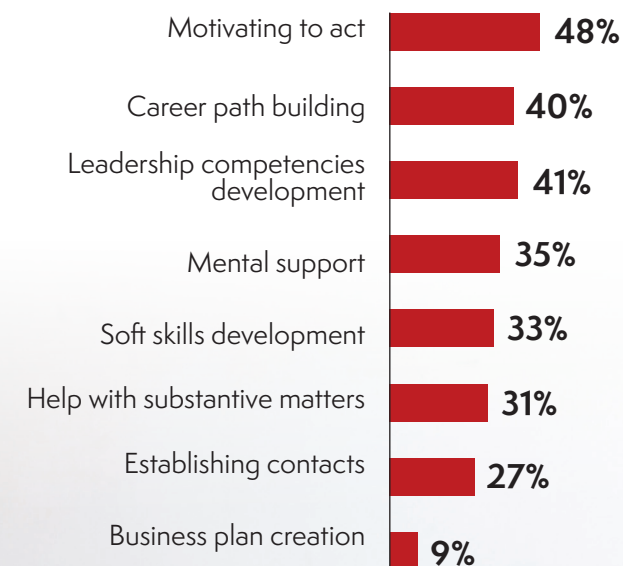
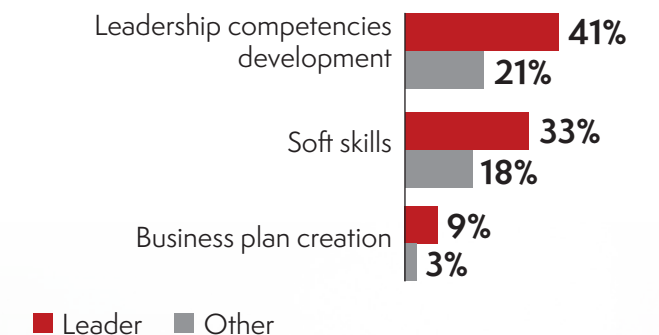


Chart 30
MENTORING SUPPORT: LEADERS VS. OTHERS



89% of leaders evaluates the effects of their work with a Mentor positively



¹² Multiple answers to this question were possible, the responses do not add up to 100%.

Activities supporting other women

To what extent do the respondents themselves want to provide support by engaging in activities supporting other women? Leaders do it much more often than others (53% compared to 29%).

The specific activities undertaken by the respondents included most often inspiration by example (90%), promoting gender equality in social media (73%), and signing petitions (63%). Fewer respondents took part in the demonstrations (56%). A third were active in women's organisations (33%), 27% participated in mentoring programs as mentors, and 23% conducted training courses targeted at women, see Chart 32.

In the last two cases, the probability increased with age: each subsequent age category

increased the chance of being a mentor in a program on average by 84%, and of conducting training by 66%. Higher age categories also meant 49% greater chances of being active in women's organisations. The place of origin was also important here – more than 500,000 inhabitants increased the probability of action by as much as 195%.

The question arises as to what the respondents could do as leaders to improve the situation of women in the Polish labour market. The most popular answer was developing women's soft skills (68%), slightly less hard skills (62%), and promoting women's business-

53%

of leaders are
willing to engage
in activities to
support other
women

es (59%). Lobbying for legal changes was clearly chosen less often (21%).

Depending on the socio-demographic characteristics, professional situation and type of education, the respondents chose various ways of supporting women:

■ Supporting the development of soft skills was the domain of female leaders (75% compared to 56% of the others)

■ The respondents who studied engineering were more likely (53%) to select help in developing hard skills. On the other hand, they were more sceptical than others on the issue of lobbying legal changes (the probability was lower by



45%), which, in turn, was chosen more often by the older respondents (the probability of choice higher by 66%).

In general, it can be said that is important to the respondents that their careers and activities inspire other women to fight gender-related stereotypes. Over a half (62%) selected the answer “definitely important,” while 25% chose “important.” Only 9% were indifferent on this issue, and for less than 4% motivating other women was “unimportant” or “definitely unimportant.” ||

Chart 31
ENGAGEMENT
IN PRO-WOMEN WORK



Chart 32
FORMS OF ACTIVITIES
TO SUPPORT WOMEN



The older the leader, the more likely she is to engage as a mentor and be willing to join pro-women organisations. Older leaders are also more likely to choose legal lobbying as a way to improve women's situation in the labour market



Future goals

What are the goals that the leaders set up for themselves for the future? More than half of the respondents (45%) set themselves the goal of being promoted in the company's structures. Less popular is developing their own startup or company (35%), 31% want to develop a scientific career, and the same number want to introduce innovations in their field. In addition, 28% strive to improve the situation of women, and 24% to solve specific social problems. The least interesting was promotion in university structures (10%). Additionally, the category of "Self-development/self-education/self-improvement" emerged from the open answers, into which 5% of the statements were classified, see Chart 34.

45%

of leaders set themselves the goal of being promoted in the company's structures

of leaders set themselves the goal of introducing innovation in their field

31%

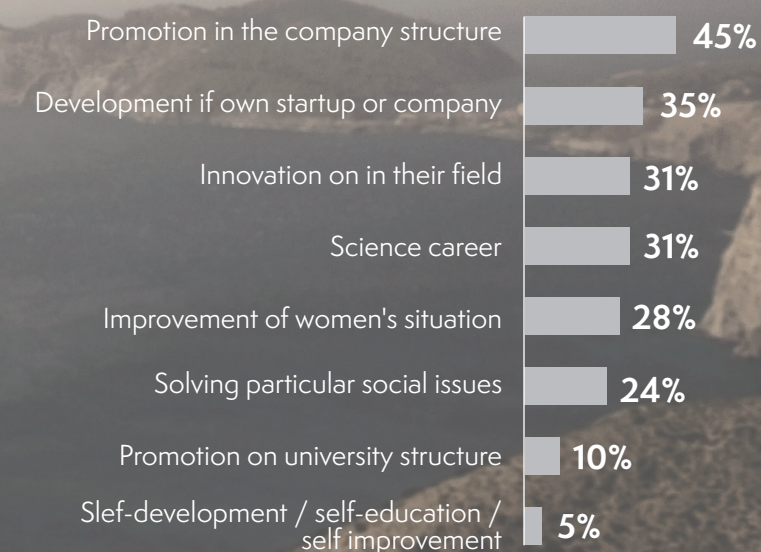
The goals for the future differed depending on:

- The likelihood of interest in a scientific career lessened with age (lower by 33% in each subsequent age category)
- The respondents who undertook engineering studies were more interested in scientific careers (probability of selection higher by 98%)
- The fact of working in a male-dominated environment increased the chance of setting a goal of advancement in the company structure by 55%. ||

LEADER'S MISSION

ON THE SUBJECT OF A LEADER'S MISSION, opinions are divided: 27% of the respondents think that it should involve changes in the immediate environment, and 26% each include also changes on a local and global scale. Only 8% believed that a leader should operate mainly on a country-wide level. Also, 13% gave a different answer, not included in the above categories, such as "it depends," or "all of the above."

Chart 34
FUTURE GOALS



Leaders and the climate crisis

An example of one of the potential challenges that leaders may face is the climate change. This is one of the most pressing problems of our time, the planet's situation is worsening, CO₂ emissions continue to rise and there is still no answer about our common future in this context.

The respondents were asked which of the selected actions they undertook or could undertake in this matter; the answers are presented in Table VI.

The activity undertaken most frequently was changing everyday habits (85%) and

buying products from companies that care about environmental protection (83%). Half of the respondents (50%) mention education, slightly less (44%) providing information on the Internet or supporting environmental organisations (40%). The least frequently chosen activities were active lobbying for legal changes (12%), introducing more environmentally friendly products to the market (12%), and conducting scientific research in this area (11%). From the list of potential activities most often mentioned active lobbying for legal changes (37%), education (34%) and conducting scientific research (30%).

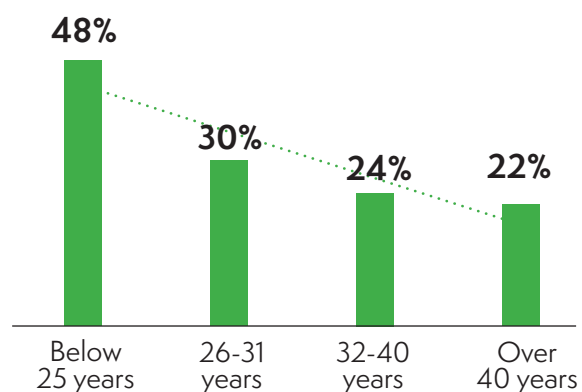
Table VI
ACTIONS UNDERTAKEN BY LEADERS IN ORDER
TO STOP CLIMATE CHANGE

Action	You are taking	You might take
Changing everyday habits	85%	8%
Buying products from companies that care about environmental protection	83%	9%
Education	50%	34%
Providing information on social media	44%	26%
Supporting environmental organisations	42%	28%
Active lobbying for legal changes	12%	37%
Introducing more environmentally friendly products to the market	12%	27%
Conducting scientific research	11%	30%

85%

of leaders introduce changes to their daily habits in order to counteract the climate catastrophe

Chart 35
AGE AND INTEREST IN SCIENTIFIC RESEARCH ON CLIMATE



Some responses varied depending on the respondents' age. First of all, few respondents under the age of 25 marketed organic products (4%); in the other age categories, this percentage was 14 to 17%. This disproportion is understandable, as the student-age respondents may not yet have the necessary knowledge and capabilities. Nevertheless, they show great interest in the subject, as many as 44% declare that they could take such actions. In other age groups, this proportion does not exceed 25%. The young leaders are very strongly interested in the climate issues.

This trend is even more visible in the field of scientific research aimed at protecting the environment, which is covered by 14% of respondents in the categories under 31 years of age. For comparison, in the oldest age group only 7% undertake such activities. With age, the percent-

age of respondents declaring that they could undertake scientific research also drops significantly. In the category under 25 years of age, it is almost one half (48%), in subsequent groups this proportion is decreasing: 30% (age 26 to 31 years), 24% (age 32 to 40 years), 22% (over 40), see Chart 35.

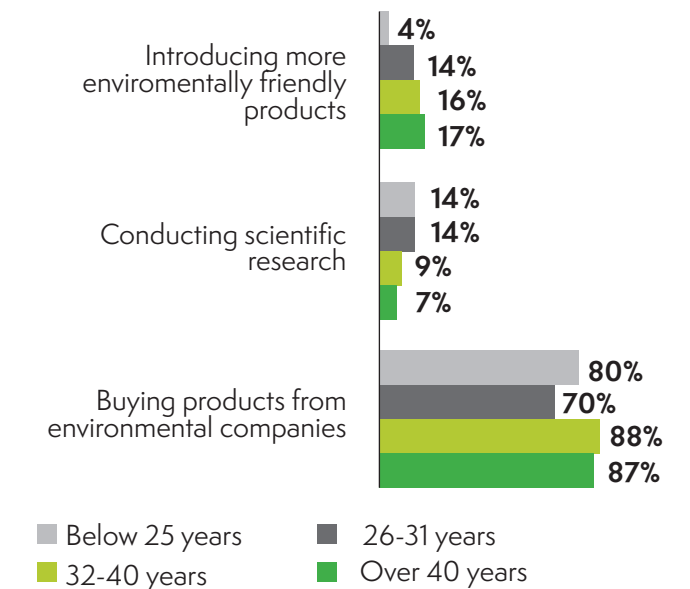
Age also has influence over buying products from companies that care about environmental protection. The least consumers of this kind of products are in the age category 26 to 31 years (70%), then the percentage increases up to 88% (32 to 40 years) and 87% (over 40 years of age); in the youngest category of respondents it amounts to 80%, see Chart 36.

These trends may mean that there is a kind of generational change, consisting of increased interest in the development of science to protect the environment. It is important because

in the analysed activities we did not observe statistically significant differences between graduates of technical faculties, who theoretically could introduce products to the market more often, and other participants of the study. It is quite interesting, as the youngest age group contains more engineers than the rest (76% compared to: 53, 28, and 20% in subsequent age categories). However, this disproportion may indicate that the new generation of engineers is more interested in taking over leadership roles and going beyond the company and the university.

The young leaders are very strongly interested in the climate issues. This is clearly visible in the case of interest in conducting scientific research aimed at combating the climate crisis

Chart 36
AGE AND ACTIVITIES FOR ECOLOGY



The respondents are moderately pessimistic about the perceptions of the risks associated with climate change. More than a third (34%) believe that climate change will cause a catastrophe in an undefined future, 19% believe it will happen within 21 to 30 years, 18% – 11 to 20 years, 8% – 6 to 10 years, and 3% – in the next 5 years. Only 11% believe that the catastrophe will not happen because the economy and lifestyle will change, while 0.6% believe that climatic changes are not a real threat. The remaining 6% expressed another opinion or declared having none on this issue. ||

74% of the leaders pointed to the climate crisis and environmental pollution as the greatest challenge facing humanity

34% of the leaders identified COVID-19 and another possible pandemics as one of the biggest problems in the world

The humanity's greatest challenges

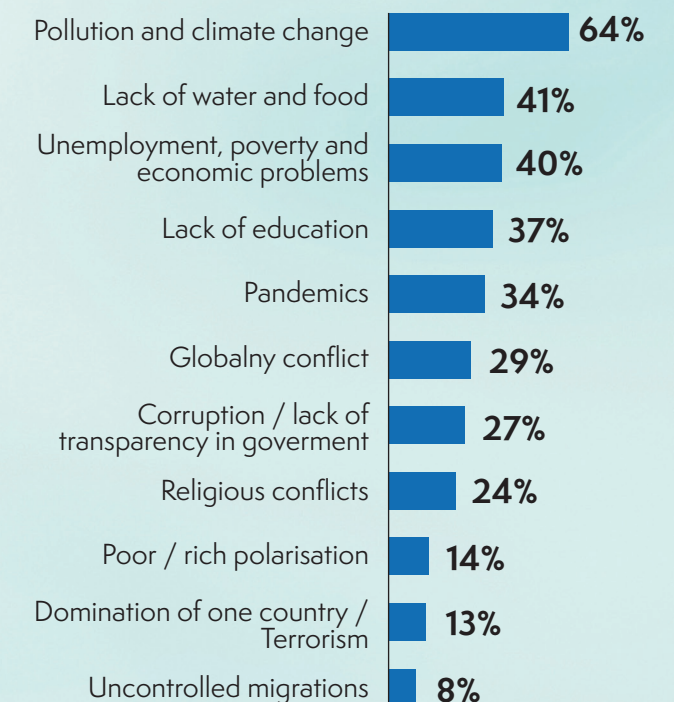
Finally, the respondents were asked what, in their opinion, are the most serious problems that humanity will face in the near future. Almost three quarters (74%) indicated pollution and climate change in this context. Forty one per cent chose lack of water and food, almost as many (40%) unemployment, poverty and economic problems, 37% – lack of education, 34% – the Covid pandemic or other possible pandemics, 29% – the possible global conflict, 27% – corruption and lack of government transparency, 24% – religious conflicts, 14% – poor/rich polarisation, 13% – terrorism, and 8% – uncontrolled migration. The respondents' beliefs regarding potential threats are illustrated in Chart 36.

On the subject of potential threats, there were no significant differences between the leaders and the rest, with one exception. Leaders were more likely to choose lack of education (41% to 31%).

Other differences were related to:

- Age – in older age groups the probability of indicating unemployment, poverty and economic problems decreased (by 38%),
- Having children – mothers were more likely to indicate the above economic problems (probability higher by 106%), as well as lack of water and food (+ 83%).

Chart 37
BIGGEST FUTURE DANGERS



Graph E
PERCEPTION OF THREATS:
AGE AND MOTHERHOOD

AGE
unemployment, poverty and economic problems (38%)

MOTHERHOOD
unemployment, poverty and economic problems (+106%)
Lack of water and food (83%)



RECOMMENDATIONS

HOW TO SUPPORT
FEMALE LEADERSHIP?

■ **THE KEY TO CONFIDENCE IS SELF-PERCEPTION.**

Certain beliefs about oneself, certain habits (impostor syndrome, perfectionism) may adversely affect women's self-confidence and thus inhibit the development of future female leaders. It is therefore important to support women in developing self-awareness, their strengths and leadership style, while at the same time educating them about the harmfulness of gender stereotypes and prejudices. The key psychological competence for women is to recognise and silence the "inner critic."

■ **IN PREPARATION AND DURING WORK,** it is necessary to clearly indicate the social sources

(the way of educating) causing women to be less willing to take risks, to speak in public, and to tend towards perfectionism, and support them in working on themselves in these key areas.

■ **IT IS WORTH IT TO HELP WOMEN** in applying the

20/80 principle (the so-called Pareto principle), which says that 20% of the key inputs of our work bring 80% of the results. Instead of trying to do everything perfectly, it is better to do the job well enough, but focus on the most important 20% of the tasks that will produce 80% of the expected results. Understanding this rule results in greater productivity and efficiency with less intellectual and emotional effort.

■ **WE SHOULD ENCOURAGE WOMEN** to take up

challenges, even if they do not meet all the qualifications 100% – pointing to the educational and developmental value of difficult tasks. Women, even if they are very competent, often limit their activity due to low self-confidence – this in turn translates into the belief that they must meet 100% of expectations to undertake a particular task. Empowering women to take risks and informing them of precautionary measures in the event of failure allows them to increase their readiness and motivation to actions perceived

as risky. The experience of reaching the "high bar" translates over time into an increase in resources, competences and strategies needed to cope with challenges and has a positive impact on an increased self-confidence, self-esteem, effectiveness and courage.

■ **IT IS IMPORTANT TO BE AWARE** of social expectations towards women – being nice, conciliatory,

and in the background – in order to deliberately and consciously care about women's voice and perspective being heard and recognised as important.

■ **FEMALE LEADERS ARE VERY EAGER TO LEARN.** It is

important for the organisation to define clearly the skills and competencies needed to successfully fulfil various leadership roles and outline the paths for promotion. Knowing what the expectations are, it is easier for women to prepare themselves adequately to the requirements and increase their competences and resources.

■ **CAREER DEVELOPMENT PLANS** in the area of

management, prepared by women adequately to the current situation and possibilities, are very helpful in expanding and strengthening their competences.

■ **COMPREHENSIVE LEADERSHIP TRAINING,** openly

addressing the problem of the influence of gender stereotypes on the experiences and development opportunities of women and men, plays a very important role.

■ **LEADERSHIP PROGRAMS** should be tailored to

the needs of female leaders – focusing on those project management skills where women have the greatest developmental needs.

■ **UNIVERSITIES ARE RARELY MENTIONED** as

places for acquiring leadership competences. To change this, the curriculum should be

modified by introducing appropriate subjects. The offer of courses and training in this area should be extensive and widely available. Another option is to promote involvement in student or doctoral organisations that can be (and often are) the school of future leaders.

■ **LEADERS ACQUIRE THE VAST MAJORITY** of their knowledge in the area of leadership through self-education, own experience and practice. It would be good to consider how this path of acquiring knowledge and competences could be facilitated and systematised to make this knowledge more accessible, and how experienced and seasoned leaders could more effectively pass on their experience to younger generations.

■ **EMPATHY SHOULD APPEAR** in the discourse on key leadership competences. Actions should be taken to raise awareness of its importance for high-quality leadership, and more emphasis should be placed on it in programs and initiatives intended to develop leadership knowledge and competences.

■ **IT IS IMPORTANT THAT ORGANISATIONS** consciously take action to invest in retaining and supporting talented female leaders.

■ **AWARENESS, AS WELL AS** emotional and social competences of women should be openly appreciated. It is important that resources, skills and work in the area of managing relationships in a diverse team are noticed, respected and realistically appreciated.

■ **IT WOULD BE GOOD TO EXPOSE THE MYTH** about the polarisation of attributes, predispositions and strengths of women and men. In fact, neither gender has a monopoly on any human personality or character trait. As humans, we are all different from each other, we have very different potentials and we can all develop

them to 100% throughout our lives, regardless of the biological gender we were born with. Stereotypes about human characteristics are a developmental barrier for both men and women. Exposing limiting beliefs about “masculine” and “feminine” predispositions and attributes is the first step for women to open up to increasing those personal competences that are useful in professional development and to being leaders – regardless of whether they are considered “feminine” or “masculine.” For example, assertiveness and empathy are among the many tools that are key to management – It is good to have them in one’s social skills repertoire and to use them flexibly, depending on current needs. The most successful women in managerial positions employ a combination of behaviours that are culturally considered “masculine” and “feminine.”

■ **THE AWARENESS AND ACTIVISM** of female leaders for women’s rights and against sexism should be positively valued and appreciated.

■ **EQUALLY IMPORTANT** is a culture of acceptance for the various forms of networking and support that women give themselves during their careers.

■ **LEADERSHIP PROGRAMS** and work culture should support collaboration among women.

■ **ONE OF THE KEY MECHANISMS** supporting the development of women’s careers is care for security and ethics in gender relations. It is about preventing and effectively responding to cases of discrimination, gender-based violence, and sexual harassment. This means working together with women and implementing a clear, safe, fast, and ethical procedure for reporting and responding to situations of violence – including the kind of violence using new technologies.

■ **WHILE CYBERBULLYING** is a marginal phenomenon, the data showing that the youngest female leaders are exposed to it much more often than other women are worrying. Similar trends, albeit on a larger scale, were observed in the case of sexual harassment, which is more often experienced by the youngest persons and female leaders. This could be remedied by implementing within the institution an appropriate policy, legal solutions, effective incident reporting systems, along with a psychological support system.

■ **OTHER WORRYING DATA** concern mobbing, which in turn affects the oldest age group more often. As in the previous case, appropriate solutions, both in national legislation and internal

company regulations, would be helpful here, along with psychological support and promotion of practices aimed at caring for the well-being of all employees.

■ **IT IS IMPORTANT TO NOTICE** the symptoms of the so-called “microaggressions,” which are everyday, frequent, minor forms of discrimination, such as comments, questions, gestures, exclusions affecting people in low positions in the hierarchy or representatives of minority or marginalised groups, and react to them.

■ **IGNORING, TRIVIALISING,** infantilising, unfair criticising, unfair behaviour, unwanted sexist jokes and comments about appearance or be-





haviour, and other similar behaviours make women feel uncomfortable, treated worse and unimportant – this affects their sense of security and self-confidence.

■ **IT IS GOOD TO SPEAK OPENLY** about the challenges and needs of women at different stages of life and career development in the context of work-life balance and the key role played by gender equality in this area. Professionally working women, especially those raising children and caring for dependents, struggle not only with psychological and physical overload, but also with a sense of guilt. An effective way of supporting women in this area is listening to them, mapping out the needs and problems, and jointly working out the best strategies for combining professional and family responsibilities. An adequate response to the needs and opportunities increases productivity, well-being, career opportunities and successes of women (and men).

■ **MENTORING IS AN IMPORTANT** and forming experience for leaders. With its help many of them develop leadership skills. Mentors act not only as supportive and inspiring role models, but also as empowering allies on the way to leadership, helping to recognise and utilise the potential, but also to overcome (self)stereotypes. Mentoring and intergenerational cooperation – this is also work on building a network of experts and a support system.

■ **THE OFFER OF FORMAL** and informal mentoring should be as accessible as possible, expanded and tailored to the needs of various groups of active women – especially in terms of age and professional experience. It is also advisable to support the creation of mentoring programs based strictly on intermediation in acquisition and development of leadership skills (such as the “LeaderSHEp in Tech Academy”).

■ **THERE IS A NEED TO RECOGNISE**, appreciate, and publicise the projects and successes of female leaders, and to appreciate non-stereotypical, bold, and innovative female solutions and career paths.

■ **IT IS A GOOD IDEA TO SUPPORT WOMEN** in order to work in an environment which is diverse in terms of gender, age and culture. Diverse teams are an opportunity for observation and practical action in a wide range of competences and experience, and therefore motivation to go beyond the standard activities and the “comfort zone.”

■ **DATA ON THE ATTITUDES** of respondents towards the climate catastrophe show that there is a lot of interest among younger participants in conducting scientific research and introducing innovative products to counteract global warming. Both business and science should look for solutions to be able to meet these expectations. Young leaders, especially engineers, have enormous potential for change, which should be fully utilised.

■ **IT IS IMPORTANT FOR ORGANISATIONS** to recognise and appreciate the social sensitivity and awareness of women, their attitudes of responsibility for the well-being of people and the world, and their readiness to conduct socially responsible business.

■ **IT IS IMPORTANT TO EMPHASISE** the value and possibilities of positive influence of women active in politics on the situation of women in the labour market and the possibility of cooperation between leaders from the political and business community in the area of common important issues. ||

Expert comments



dr hab. Aleksandra Cislak

prof. SWPS University
Head of the Centre
for Research on Social Relations,
Vice-Rector for Research

Let's change the system, not the women

The results of meta-analyses – that is, averaging the results of many individual studies – indicate that female leaders are as effective as male leaders. The differences depend on the context. They also depend on who does the evaluation: women turn out to be more effective in the eyes of others, and unfortunately less in the eyes of their own. However, we can speak of there being differences between women and men in terms of leadership styles. And so, e.g., in the typology that distinguishes the autocratic style from the

democratic style, women more often represent the democratic style. On the other hand, when we talk about the division into the transactional style (leadership based on a system of rewards and punishments) and transformational (leadership that inspires positive changes), women prefer a transformational style, and if they represent a transactional style, they choose rewards more often than punishments.

And yet, in social perception, women are not associated with leadership roles. When people think of a supervisor, they think of a man, because the attributes stereotypically assigned to men in social perception are also the attributes desired in a leader. Moreover: women themselves often have a feeling (rooted in their psychological sphere and not reflected in reality) that they are not suited to the leadership role.

Another barrier to the professional development of women, especially in the STEM area, may also be the fact that their professional career is presented as inconsistent with their life goals (and these are, to a greater extent: community, acting with and for the benefit of others). This belief can be overcome by showing women that community can be effectively realised in a particular professional area, i.e., that values important to women are identical with values important in a given industry.

Another obstacle may be the belief that power is “dirty,” so leadership roles necessarily involve getting into “political games.” Here,

breaking the barrier may be based on showing that leadership roles include acting for the benefit of one’s group, one’s environment, and realising some values that are important to one.

Finally, the very language we use to talk about a career and leadership roles is also important. While the term “ambitious” is used in relation to a man striving to occupy high positions, a woman in a similar professional situation is called “obsessively/excessively ambitious.” Even simple things, such as the way in which job advertisements are formulated, can turn out to be a barrier to women – using only male forms, male job titles, can make women think “that is not for me.” And the final issue, which has become more and more heard of recently, is the question whether encouraging women to have more agency, to take matters into their own hands, does not bring about the opposite result. Such incentives are tantamount to expecting women to change, to try harder, and implicitly to suggest that inequality in the labour market is actually the fault of women, not the system. Research confirms that such incentives are linked to holding women responsible for inequalities. On the other hand, changing the system is favoured by all kinds of voices saying that women already are present in a given industry, at certain levels of professional career development, indicating that “already XX per cent of managers are women,” instead of repeating “only XX per cent are women.” ||



Joanna Zdulska

Information Security
Professional Group Manager

Let's be brave!

The number of women in technology is still growing, but there is still not enough of us. Who do we need most of all? Leaders, women who are brave, wise, and creative. Ones who will show the little girls the way, make them realise they can change the world and fulfil their dreams.

Unfortunately, stereotypes remain very strong in our society, women are often perceived through the roles they fulfil and in many situations going outside the box meets with criticism. The “Leadership of Women 2021” report shows that it is female leaders – those, who are most visible – who are discriminated against more often. Only 7% of the respondents did not meet with such behaviours. What is interesting, 80% of the female leaders admit that they were not being treated seriously by others. In my company, Citi, the organisational culture is focused on

eliminating such behaviours and diversity is an important value. Being a man or a woman does not matter here, we evaluate your competences, not your gender.

But I realise it is not like that everywhere. Very often women meet with the “glass ceiling” phenomenon, but I sincerely hope that the change I perceive will continue and, in the end, promotions will be granted according to competences and skills. I believe that breaking stereotypes relating to women and female leaders happens thanks to all the ladies who are brave, who gain new experiences, new positions, and often work in jobs traditionally perceived as “male”.

I hope there will be more and more of them. I want to dedicate this hope to all the participants in the Shesnnovation program, as well as to all the women who want to take up the challenge! ||



dr Małgorzata Starczewska-Krzysztożek

Department of Political Economics,
University of Warsaw

Let's reject the stereotypes and back the female leaders

The job market is changing fast, mainly due to new technologies. Stereotypes suggest that these changes provide much more chances for men than for women. This is a mistake. New technologies go hand in hand with the increasing importance of intellectual capital in business activities. Intellectual capital consists of knowledge, competences, and skills (human capital), and women are better educated than men. Intellectual capital is also the ability to build and develop relationships with stakeholders. And it is women who are more focused than men on building relationships than on competition. And finally, intellectual capital also includes organisational structure and organisational culture (components of structural capital). Leaders focused on building relationships, rather than competition, will not tend to create multiple levels of management and formalise relationships. And it is a flat organisational structure and a collaborative culture that fosters the development of the new economy. Therefore, the leaders' attributes more and more in demand are soft skills, such as communicativeness, ability to work in a team, good organisation of work and coping with time pressure. These competences also include the ability to listen, but also to hear, i.e., openness

to ideas, suggestions, and suggestions of others. These relational competences support the development of creativity and the creation of innovations. In order for innovations to appear, we need to "extract" ideas from people, stimulate their creativity.

Passion is also important in a leader, because it allows the leader to draw others. A leader must also have curiosity, because without it there will be no development and improvement. And this is necessary in times of quick changes we are dealing with now.

In the era of an economy that uses new technologies to an increasing extent, a leader should have these qualities, competences, and skills. Women do have them. Therefore, we need to reject stereotypes and rely not only on leaders, but increasingly on female leaders.

Most of all, women themselves need to reject these stereotypes. Barriers to the development of a professional career also lie within ourselves. Women still believe that they have too little knowledge, insufficient competences, that they are not good enough to take on new challenges. This is due to the fact that in business, women are not treated like men, they usually have to possess much better knowledge and skills than men in order to successfully apply for a specific position. ||



dr Katarzyna Łukasik

Faculty of Management,
Częstochowa University of Technology

Let's appreciate the role of female solidarity

While the percentage of women occupying high managerial positions in domestic and global companies is constantly growing, the place of women on company boards remains (e.g., according to the report "Women in the Boardroom: A Global Perspective") a so-far unresolved problem of gender parity in business. The numbers are quite blunt: women make up only 5.3% of chairs of the board 4.4% of CEOs worldwide. Some will look for habits and stereotypes that favour men, for sexism or misogyny, while for others it will be a symptom of patriarchy still holding strong. Whatever we call the phenomenon of "the lack of a significant number of female business leaders," it will not change the fact that the effects of this situation are felt on the economic, economic and social levels. Global or European gender equality initiatives do not fully eliminate the effects of disproportions in leadership positions, companies often decide to solve this issue individually, fearing the loss of talented women. Gender diversity is seen more and more often as the source of power of the company, manifested by the intensification of entrepreneurial and innovative activities created by male and female groups, which in turn translates into better financial results of the company. Unfortunately, the female leaders still receive lower salaries than men in similar posi-

tions, and an improvement in their economic situation would consequently lead to an indirect increase in GDP. There is still a long way to go to break the stereotype of the "glass ceiling", blocking the development of their careers and exposing the company to the risk of losing a talented leader.

It is comforting that the increase in the number of women on management boards contributes to the increase in the number of female leaders in managerial positions of those companies, and this female solidarity leads to equal opportunities for professional development of women. From the perspective of social implications, this raises morale among female leaders and reassures them that they chose the right course of education, which again motivates other women to act and fight for their own position in business.

We should also remember that gender disproportions in leadership positions, and not only those, also have economic effects: without professional activity of women in the labour market, the chances of economic growth decrease. If the value of women's time in the labour market is relatively low and procreation continues to increase, economic growth will decline (population growth has a direct negative impact on long-term economic performance). ||



dr Wiktoria Domagała

Assistant, Department of Macroeconomics
and Development Research,
Poznan University of Economics and Business

Let's put the stop to educational segregation

In the practice of the labour market, vertical occupational segregation is associated with masculinisation of managerial positions and decision-making bodies (e.g., boards of directors or supervisory boards). A related phenomenon is the glass ceiling effect, which means the existence of an invisible barrier to the professional advancement of women to the next level in the hierarchy of the organisation, despite having professional qualities comparable to those of men. The reasons for this state of affairs should be sought, for example, among socio-cultural and economic conditions, as well as those related to the state policies.

Cultural norms influence the different perception of the professional and family roles of women and men, which in turn contributes to perpetuating a disproportionate division of paid and unpaid work by gender. We can point to the phenomenon of the double burdening of women, both with domestic and professional duties.

In the context of the STEM sector, the phenomenon of educational segregation is of par-

ticular importance. As a result of socialisation, women much more often study subjects related to education, teaching, healthcare and social welfare, while men study subjects related to science and engineering.

Economic factors are mainly related to the situation on the labour market and the structure of the economy. OECD countries, including Poland, are characterised by deepening feminisation of the service sector and the permanent masculinisation of the industry sector, which contributes to, among other things, the occurrence of the gender pay gap.

From the factors related to the state policy that affect the underrepresentation of women in managerial positions in Poland, one should point out the limited availability of institutional care for young children (creches, kindergartens) and dependents (day care homes). Moreover, Poland has one of the longest fully paid maternity leaves in Europe, with the simultaneous lack of systemic support for return to work, which causes depreciation of human capital (maternity gap). ||



Robert Żych

CEO at Kontrakt OSH,
conducts workshops for leaders

We need women leaders!

came up on the history of Arlene Blum, the leader of the first all-female expedition to an eight-thousander, when I was studying the equal opportunities for both genders in access to leadership positions. Women's equality in the fight for the right to achieve social and business goals.

The historic ascents of all-female teams on seven- and eight-thousanders are proof that women display above-average determination and professional organisation, and their projects are distinguished with strong preparations, incredible teamwork and the ability to problem-solve thanks to teamwork. In the above story of Arlene Blum we can see a young leader with short experience accepting enormous responsibility for a mission of proving to the world that women are as strong as men and as ready to achieve great goals. Blum manages a team of

experts – mountaineers who are passionate and determined, but also have very difficult personalities. Many a male leader with a similar project would have huge problems maintaining engagement and achieving the final goals.

It is the same today, in 2021. In my opinion, women leaders have been achieving above-average results in business. For years they have also had to prove more strongly that they deserve leadership peaks. And yet, female leaders are able to flexibly choose the style of project management so as to achieve high quality and high implementation. This is why I strongly believe that the world needs women leaders. Perfect preparation, teamwork, ability to see the common goals, focus on achieving results in agreement with the team – these are the competences we can be sure of when working with women leaders. ||

List of charts

CHART 1. Job positions of the respondents	8
CHART 2. Leaders' self-definition.....	14
CHART 3. The respondents' professional situation ..	16
CHART 4. Dynamics of respondents' professional careers	19
CHART 5. Benefits of activity in student organizations	20
CHART 6. Would you like to be a leader in your future professional or social career thanks to the experience gained in a student organisation?	20
CHART 7. Motherhood and the division of responsibilities at home on the 1 to 5 scale (1 "all", 5 "none")	23
CHART 8. How friendly to mothers is the Polish labour market.....	23
CHART 9. Situation of women in the labour market in Poland in the assessment of the respondents.....	25
CHART 10. Discrimination / aggressive behaviours.....	29
CHART 11. Experience of impostor syndrome – leaders vs. other respondents	31
CHART 12. Sources of support	32
CHART 13. How does the support received change with age?	32
CHART 14. Support needed.....	33
CHART 15. Becoming a leader – influence of leaders in the respondents' environment	34
CHART 16. How do you evaluate your self-confidence on the 1 to 5 scale?.....	37
CHART 17. Characteristics of a leader in the respondents: leaders vs. other respondents.....	39
CHART 18. Age and leader's characteristics.....	40
CHART 19. Characteristics of a leader and self-confidence – summary	41
CHART 20. How much you agree with the opinion that leadership qualities can be developed in a person.....	41
CHART 21. Competences of leaders vs. those of non-leaders.....	45
CHART 22. Age and leadership qualities.....	47
CHART 23. Do you believe leadership qualities can be learned?	47
CHART 24. Did the university/school gave/give you the opportunity to develop leadership skills?.....	49
CHART 25. Gaining leadership skills.....	50

CHART 26. Gaining skills: leaders vs other respondents.....	51
CHART 27. Have you or are you participating in events promoting women's leadership?.....	57
CHART 28. Mentoring experience.....	58
CHART 29. Form of mentoring support	59
CHART 30. Mentoring support: leaders vs. others ..	59
CHART 31. Engagement in pro-women work	62
CHART 32. Forms of activities to support women ...	62
CHART 33. How important is it for you that your professional career and activities inspire other women to fight gender-related stereotypes?.....	63
CHART 34. Future goals.....	65
CHART 35. Age and purchasing products from environmental companies	68
CHART 36. AGE and ACTIVITIES FOR ECOLOGY	69
CHART 37. Biggest future dangers	71

List of tables

TABLE I. Beliefs limiting women's development.....	31
TABLE II. Women's situation in various work environments	31
TABLE III. Characteristics describing leaders and respondents.....	38
TABLE IV. Skills possessed by the leaders and other respondents.....	44
TABLE V. Gaining knowledge in particular areas.....	51
TABLE VI. Actions taken by leaders in order to stop climate change	68

List of graphs

GRAPH A. Self-confidence and other characteristics of a leader	41
GRAPH B. The most important leadership qualities and competences according to the respondents	47
GRAPH C. Sources of knowledge gained by leaders	53
GRAPH D. Changes in ways of gaining knowledge (differences in 3 areas or more).....	55
GRAPH E. Perception of threats: age and motherhood	71



Shesnnovation Academy is a project to accelerate female startups in the STEM area, implemented by the Perspektywy Education Foundation and the Citi Foundation with the substantive support of the Kronenberg Foundation

www.womenintech.perspektywy.org



Perspektywy Education Foundation

www.womenintech.perspektywy.org