A Million

ASSOCIATION OF POLISH ENGINEERS IN GREAT BRITAIN

UNLEASH THE POTENTIAL

Report on Polish Women Working in STEM in the UK

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Address: POSK (3rd floor),
238-246 King Street
London W6 0RF
Email: office@stpuk.org
www.stpuk.org
www.amillion.org.uk
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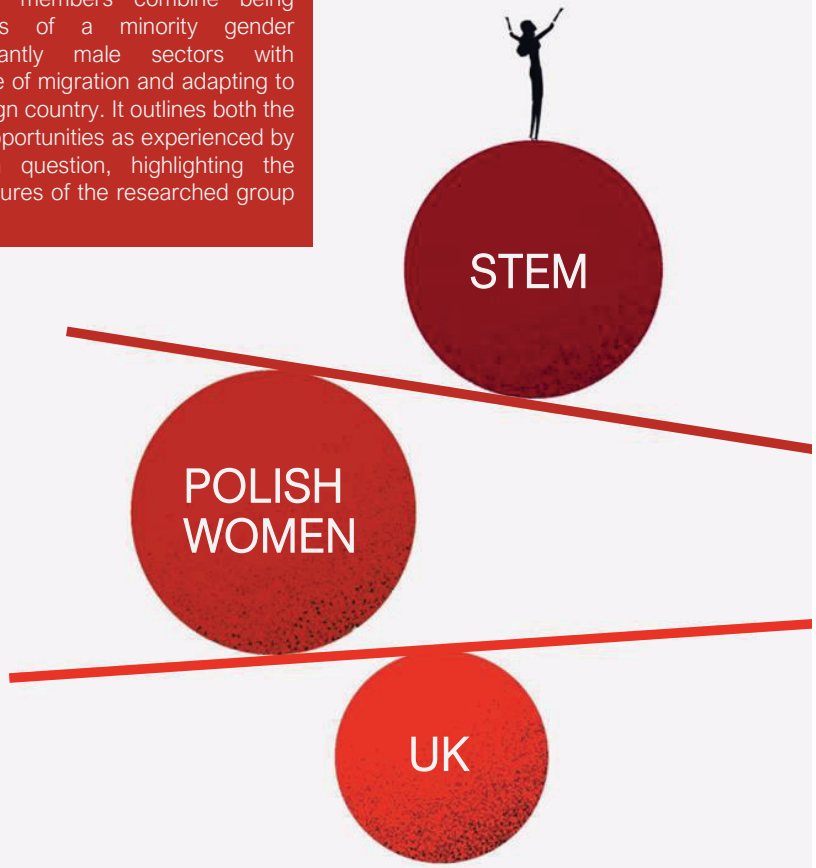
1 INTRODUCTION

Unleash the Potential: Report on Polish Women Working in STEM in the UK explores common characteristics of Polish women who decided to pursue their careers in Science, Technology, Engineering and Mathematics in the United Kingdom.
The report provides an insight into a **unique group** whose members combine being representatives of a minority gender in predominantly male sectors with the experience of migration and adapting to a life in a foreign country. It outlines both the threats and opportunities as experienced by the group in question, highlighting the distinctive features of the researched group members.



Since 2004, when Poland joined the European Union, around a million Poles have arrived in the United Kingdom. As a result, Polish citizens have became one of the largest minorities in the country, **changing the landscape of the British Isles for ever**.
While the phenomenon of migration is commonly associated with low paid jobs which do not require extensive qualifications, **a substantial proportion of incoming people are well educated and already pursuing careers in STEM in their homeland.** Polish women are no exception here and representatives of this group are commonly encountered in various workplaces.

Much has been written in the social sciences about the challenges faced by migrants in the UK, by women in general, and by people who fall in both these categories. However, there is very little literature describing the **experiences of female migrants working in STEM, let alone those of a particular nationality**.

STEM careers rely on a unique skill set which gives employees a strong position in the job market regardless of their gender and national background. Well-educated and experienced professionals are usually able to find positions which give them a degree of financial stability and independence which somewhat offset the challenges related to their immigration status.

On the other hand, migrants, particularly those of the first generation, face **numerous difficulties** stemming from low levels of knowledge of the language, rights and "systems" in the host country. On top of that, women struggle to receive equal pay to that of men for the same work and are often additionally laden with family-related duties. The latter is particularly true of the societies where a "traditional" family model frees men from most house duties, burdening women with care duties, chores and household management. In this context, a **STEM career can be viewed as a path to a good, balanced life.**

Understanding the interactions between different factors affecting the lives of the participants is the key objective of the report. The paper seeks to investigate how the participants' successes are measured, what their broad work/family/migration plans are and which aspects of the present situation, as assessed by the participants, need to change to allow Polish STEM workers to reach their career potential. The presented investigation will allow to identify any unique characteristics that are typical for the analysed group.

There are significant differences in the circumstances in which career choices of the three main groups we researched were made. The generation **of those over 50** would have grown up in **communist Poland** and likely made their career choices before 1989, the year of the regime fall. Opportunities were limited, foreign travel beyond the Eastern Bloc was rare and required ministerial approval so their career outlook tended to be outlined as a relatively good job in the grey motherland.

However, a series of events that brought on the change of the political system also shook up the views of those entering adulthood and the final stages of education. Apart from frequent government changes and hyperinflation, the **1990s brought about an explosion of business opportunities**, the country's ambitions to join the **NATO and the European Union**. The generation of today's 40-somethings suddenly could look beyond the greyness into the great unknown, full of often yet undefined but positively existing opportunities.

The report presents a summary of the obtained data and an intricate network of interdependencies between the areas explored. It offers a unique insight into the specific group, as well as some pointers on improving the participants' overall situations and unleashing the potential as per the report title.

The results offer just a glimpse into this fascinating group of pioneering women who are breaking barriers in both their personal and their professional lives.

The authors believe this work will help to understand the participants better and will be an inspiration to future generations of STEM workers.

For those **aged 30–39 today**, or born in the 1980s, the great shift of 1989 came in early childhood. Many can barely remember communism. They grew up mostly in democratic Poland, witnessing first hand its joining of the NATO in March 1999 and then the EU in May 2004 and the dynamic changes in and around Poland. When making career choices in **the late 1990s and early 2000s**, they could realistically hope that soon they'd be able to move and work abroad, with the UK opening its labour market right from the EU's extension date. The ease with which one could just migrate to London, Birmingham or Glasgow is reflected in the high representation of the 30-somethings in our survey.

Finally, the 20-somethings, born in the 1990s, and choosing their professions in the 21st century, have **only ever lived in the democratic Poland and took the pan-European migration option for granted**. Some arrived in the UK as children or adolescents, others chose to move here after graduating from universities. It was perhaps these relatively youngest professionals who, not remembering the state of affairs faced by older generations in their early 20s, were hit the hardest by the closing door that Brexit turned out to be.

2 LITERATURE REVIEW

There is ample **research on women in STEM in general**, both in Poland and in the UK, but not so much on minorities. In this chapter, we will showcase a few of the many great examples of research and sources of information, at the same time outlining the reasons for undertaking our own project of exploration of our chosen field.

Having researched the careers of Polish women in "men's" fields for more than a decade, the Perspectives Educational Foundation is one of the leading observers of the situation of female professionals in Poland.

One of the more comprehensive documents they have produced was the report ***Women at the Polytechnics***, compiled in 2020 as the 10th edition of the series. This in-depth research explores several aspects relevant to women in technologies, from the education stage to employment and business creation. Based on a large sample, it provides many examples of the contemporary trends, challenges and changes.

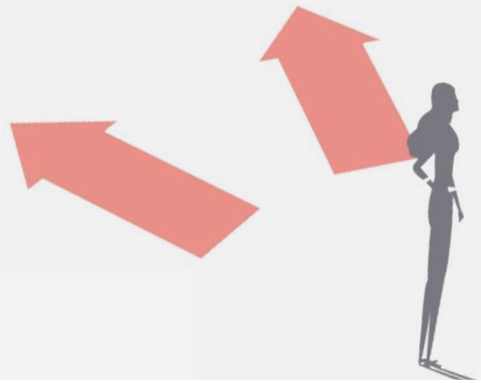
Why talking about woman in STEM is important?

TALENT POOL

There is a global shortage of skilled workforce; this is how fast the world is changing. By not encouraging women to join this game, half of the potential is missing.

DIVERSITY

By hiring people from diverse backgrounds and of different genders, different sets of skills and experiences are brought to the workplace. That improves creativity, innovation and teamworking as employees feel engaged and valued.



In the UK, a wide range of data is available from the Office for National Statistics, UCAS and other sources. Based on these, **StemWomen.com** have compiled an overview, detailing trends in terms of education and employment for women in the fields traditionally dominated by men. It notes, for example, that in the most recent four-year period available, only the physical sciences have recorded a year-on-year growth in the proportion of female students, while mathematics, computer science, and engineering and tech remain stable in this regard. Interestingly, another source, a recent report by **EngineeringUK.com**, suggests a substantial increase of women in engineering between 2010 and 2022, in terms of both a percentage of the whole group and the absolute numbers.

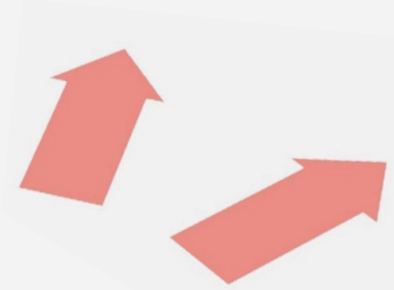
Complementing the statistics is the ***Women in Tech*** **report by PwC.** It explores, among others, the main reasons why women still rarely choose a career in STEM and highlights how underrepresented they remain to be, in particular in leadership positions.

Browsing these extensive documents, we realised that we knew very little about Polish women in STEM in the UK. Those who arrived already holding their diplomas are not included in the student statistics, and those employed here are unidentifiable when it comes to nationality or the country of origin. Trying to obtain data on STEM Polish diaspora, we found reports on males and females, notably on e-migracja.eu, but nothing dedicated to the UK alone. With our research we are filling a void in data on this specific group of migrants, partly responding to the theses of **Criado Perez** included in ***Invisible Women***, and **partly out of our own curiosity.**

Invisible Women **exposes the gender data gap** - a gap in our knowledge that is at the root of perpetual, systemic discrimination against women, and that has created a pervasive but invisible bias with a profound effect on women's lives.

BREAKING BARRIERS

As our personal and working lives are increasingly shaped by technology – technology products and services are being developed and delivered based on the perspectives of only one half of the population, and not designed with the needs of everyone in mind.



ROLE MODELS

Girls have very limited examples of female scientists and engineers available to them in the media, books and pop culture. To get more females interested in technology as a career option, we need to give them access to more role models at all levels.

3 METHODOLOGY

The research team chose an extensive **online survey and follow-up remote interviews** as the main tools for this report. Much of the data gathered is quantitative; however, there is also a good amount of qualitative findings, particularly in the interviews, which allowed us to explore many aspects of our enquiries in more depth.

Using personal and professional connections, social media and the snowballing technique, the team were able to reach 70 participants. While the Association of Polish Engineers in Great Britain acted as the main gatekeeper, we also reached for additional channels. In the recruitment process the team not only used their personal and professional social media accounts, but also asked for help a variety of bodies within the Polish diaspora in the UK. At the second stage of the research, we conducted interviews with those participants who expressed a willingness to be contacted after the survey.

The survey was divided into sections and its questions utilised a variety of formats, including multiple-choice questions, answers on a 1–5 scale as well as the free text option. While the opening part of the survey focused on the demographics and the reasons for deciding to go into STEM, the main four sections were aimed at learning about the career choices, experiences of working in a STEM environment, work experience for women and their opinion on their lives as migrants.

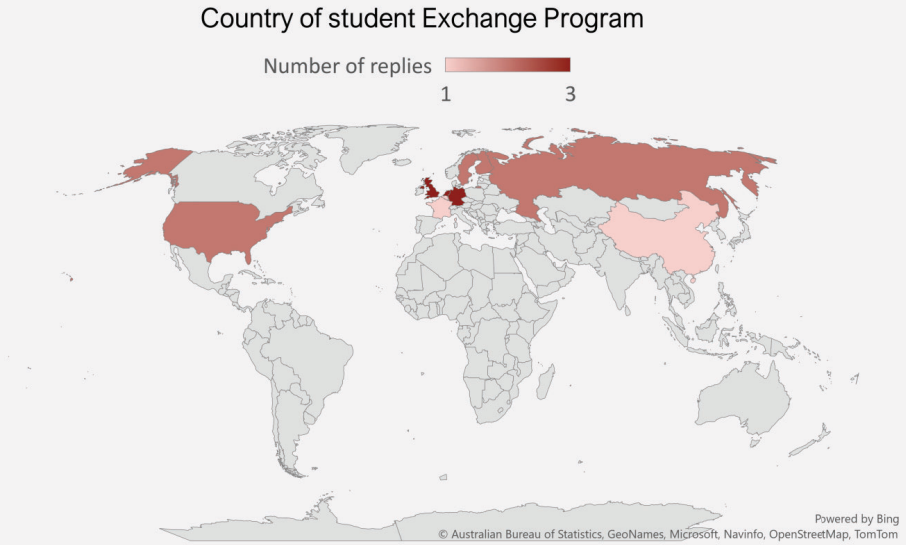
Limitations and exclusions

As previously mentioned, it is important to bear in mind that the sample was not selected, nor was intended, to be representative. This applies to the age ranges, professional areas represented and care responsibilities, among others. This subject is covered in more depth in Chapter 5.

There is also a certain positive bias to the respondents: people who are more successful are also more likely to share their experiences. On top of that, while there was a broadly good response, we may not have reached women who fall outside of the reach of the organisations involved or the media platforms used.

There are also important exclusions which need to be mentioned. The research was conducted in Polish and thus excluded any participants of Polish heritage who did not speak the language. Also, living currently in the UK was a requirement, so those who had left the country, following a career of any length of time, were not included. Regardless of this, the paper presents existing occurrences and factual experiences, and this has allowed us to draw realistic conclusions.

4 DEMOGRAPHICS



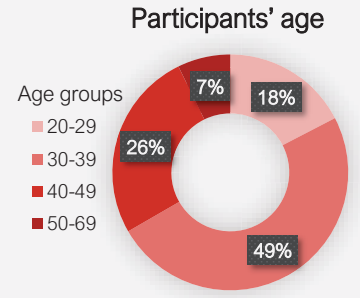
The research team asked questions in several categories. We wanted to learn about the sample's basic demographics, their reasons for and circumstances of the participants' decision to choose STEM and the support they received while in education and at work. They shared their insight into the most important aspects of their professional experiences, including perceived risks, job satisfaction, as well as their pay rise and promotion prospects.

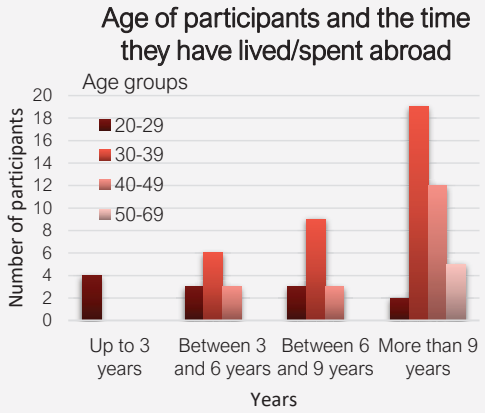
On top of that, we also asked them to evaluate the situation of women in STEM in general and indicate how their own care responsibilities (which traditionally fall predominantly onto women) had influenced their careers. Finally, we invited them to assess their migration experience and outline their plans for remaining – or not – in the UK.

The overarching goal was to capture the unique characteristics of the analysed group and examine any interactions between those characteristics. Below we present the results in their simple form, while the discussion dissecting a variety of interdependencies between the results takes place in Chapter 6.

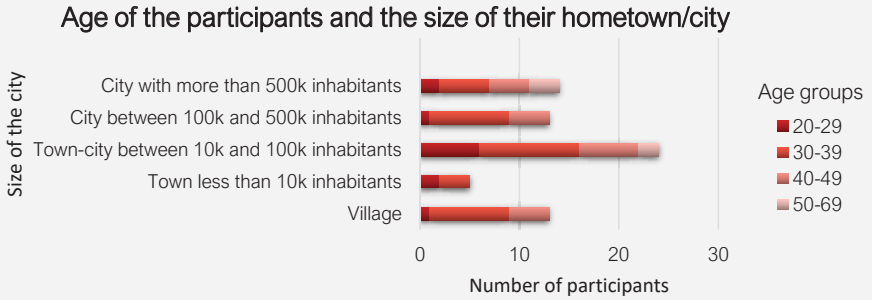
As the sample was all Polish, all female and all STEM, we felt it was important that we looked at its other characteristics in order to better understand its composition. The sample is generally young, successful and well-educated, often unlike their parents. It represents all types of home locations, from villages to cities, and a range of STEM branches.

The youngest participants were in their 20s and the oldest were in their 60s; however, nearly half the sample happened to fall in the 30–39 bracket, with those in their 40s constituting just over a quarter of all and those in their 20s one sixth.
This age composition is broadly representative of the Polish post-accession migration to the UK, with the strongest representation in the younger working age groups.

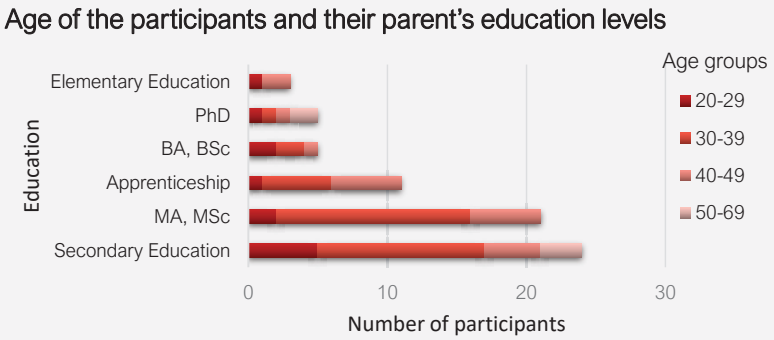




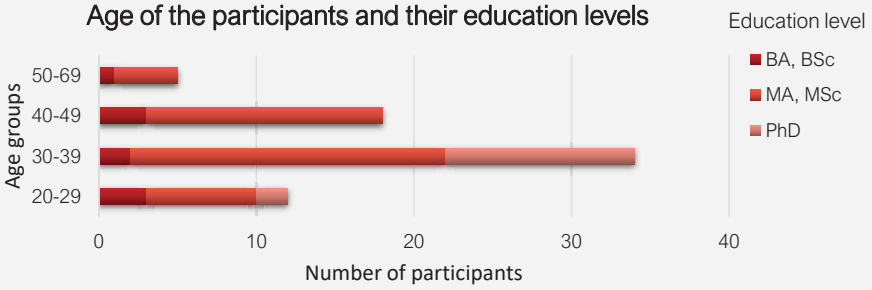
We felt it was important to know where our participants were born and grew up.
Most participants, just over a third, stated they grew up in medium-sized towns (up to 100k inhabitants), while medium and large cities as well as rural locations were each represented by about a fifth (20%) of the sample. The fewest participants indicated a small town (fewer than 10k inhabitants) as their place of origin.



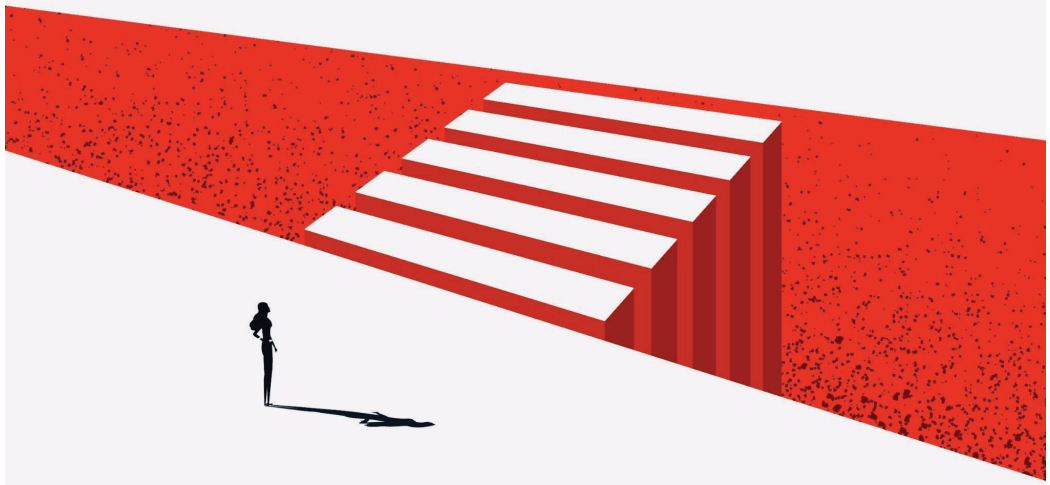
We were very interested in education. **After all, it is one of the most powerful social development tools.**
It was interesting to see how varied the levels of parents' education were. The parents of three of our participants had only primary education, the parents of another 11 were low-level technical school graduates and those of further 24 had reached the secondary school level. Parents of 5 participants had a bachelor's degree and those of 21 had obtained a master's degree while those of another 5 reached a higher academic level.



Regardless of the above, all the participants, without exception, had graduated with a degree. About one in seven had so far obtained a bachelor's degree, more than half held a master's degree, and one in five had gained a PhD. Forty-two participants, or nearly 60% of the sample, studied only in Poland, while twenty-nine women studied at least partially abroad, with places of studies including mainly European countries, but also such remote destinations as the US, Canada, Singapore and Russia. About one in three also took part in student exchanges, including the Erasmus programme.



To summarise, our sample indicates that achieving success abroad as a woman in science, technology, engineering and mathematics is possible regardless of age, the place of origin, or one's parents' level of education. Indeed, more than half the sample represents a first generation in their families to have obtained a degree. This reflects a significant potential in terms of social mobility, enabled at least partially by the choice of a career in STEM.



5 MOTIVATIONS

Understanding motivations behind the decision to pursue a career in STEM is essential for the development of strategies which could encourage more girls to embark on this career path. Some girls may be drawn to the problem-solving and critical thinking skills that are developed in STEM fields, while others may be attracted to the potential for innovation and making a positive impact on society. Some girls may be motivated by the high demand and strong earning potential of STEM careers, while others may be inspired by role models in their personal or professional lives. Ultimately, the motivations for girls to pursue careers in STEM are diverse and varied, and understanding these motivations can help educators and policymakers support and encourage girls to pursue careers in these fields.

Understanding the motivations that drive girls to pursue careers in STEM is important for a number of reasons.

Firstly, understanding the motivations that influence girls' career decisions can help educators and policymakers create more targeted and effective programs and initiatives to encourage girls to enter STEM fields. For example, if a significant number of girls are motivated to pursue STEM careers because of the potential for innovation and making a positive impact on society, educators and policymakers could focus on highlighting the ways in which STEM careers can make a difference and create positive change.

Secondly, understanding the motivations behind girls' career choices can help identify any potential barriers or challenges that may be preventing girls from pursuing careers in STEM. For example, if a significant number of girls are motivated to pursue STEM careers but are deterred by a lack of role models or mentors, educators and policymakers could focus on creating more opportunities for girls to connect with successful women in STEM fields.

Finally, understanding the motivations behind girls' career choices can help promote equity and diversity within STEM fields. By identifying and addressing any barriers or challenges that may be preventing girls from entering STEM fields, we can work towards creating a more diverse and inclusive STEM workforce that represents the full range of talents and perspectives within our society.

"Dream big little girl !

EDUCATORS

"My science and maths teachers, and the participation in national competitions, have channelled a passion into my engineering profession."

"I have always been good at doing research and my supervisors directed me really well towards my PhD."

"Wonderful teachers and inspiring speakers."

FAMILY

"I wanted to choose passion, but my mom directed me towards IT. There was a future job security, good earnings and I'd already had some experience."

"My parents, both engineers."

"My sister."

STEM

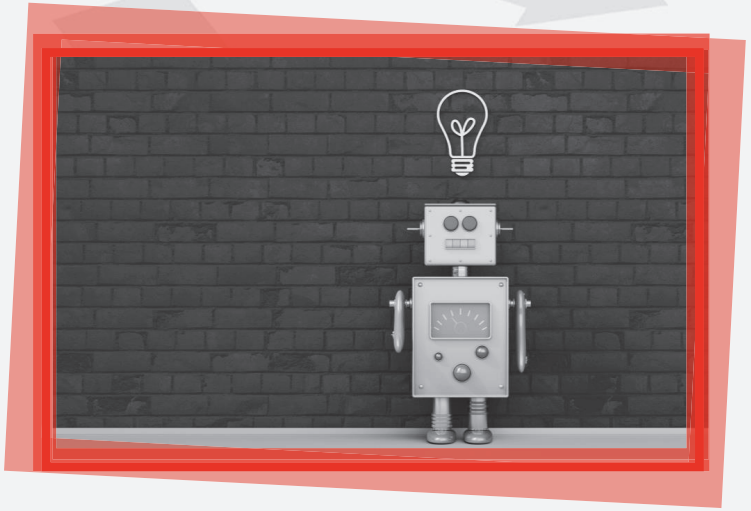
"Breakthrough in cloning and genetic engineering as a whole."

"The unavailability of engineering professions for women inspired me."

"The Jurassic Park."

"Our neighbour, a surveyor, created a map for us. I thought it could be an interesting job."

UNANTICIPATED



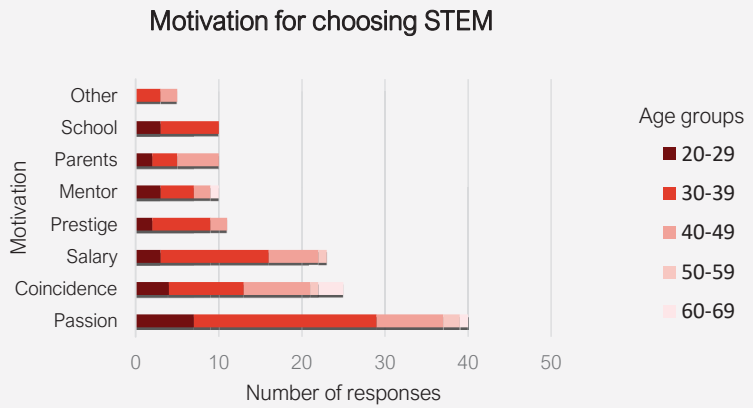
As seen from the answers above the individual motivations can be grouped into several categories:

Educators: Girls may be motivated to pursue STEM careers because of the influence of their teachers or other educators, who may have sparked their interest in these fields and provided encouragement and support.

Family: Girls may be motivated to pursue STEM careers because of the influence of their family members, who may have supported their interests in these fields or encouraged them to pursue careers that are in high demand.

Passion: Girls may be motivated to pursue STEM careers because they are genuinely interested in these fields and want to pursue their passions. They may be drawn to the problem-solving and critical thinking skills that are developed in STEM fields, and may enjoy the challenge of tackling complex problems.

Unexpected: Girls may be motivated to pursue STEM careers because of unexpected experiences or circumstances. For example, they may have stumbled upon an exciting scientific discovery or had a chance encounter with a mentor who sparked their interest in these fields.



Looking at the data from a more quantitative angle reveals three answers for the main motivation: **passion, random chance, and salary,** with the first option being the selected one in more than 50% answers.

This would suggest that the majority of the analysed women made a conscious decision; however, the second most popular option was “by chance”. While it is not obvious, both options are not necessarily mutually exclusive since passion for STEM might coincide with the lack of understanding of the specific path being chosen.

Salary and associated security appear to be also highly valued. On the other end of spectrum, prestige and parents appeared only in 10 responses each. **This suggests that either the STEM field was not widely regarded as a prestigious and sought-after career choice or the women were internally driven.** The prevalence of salary and chance as answers implies that it is most likely the former and that the status of STEM professions should be improved in the eyes of the female audience.

6 CAREER AND WORK ENVIRONMENT

Questions about career and work environment focused on understanding what roles and positions were most common and what the overall level of satisfaction among women who chose career in STEM was. **We wanted to gain insight into how they perceived themselves and what they thought about their work environment.**

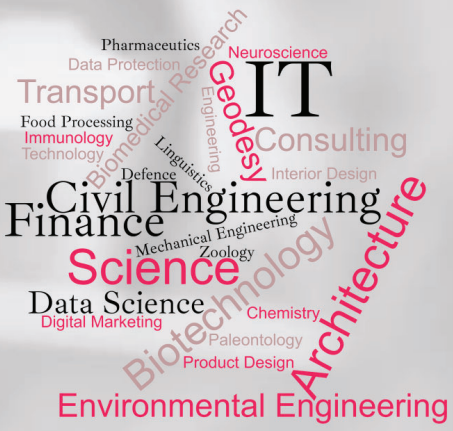
Career Profile

As may have been expected from a positively biased sample, most respondents worked in their field of study with over 83% declaring that their career was directly related to their degree. A further 3% were still in training, and the remaining 14% had developed a career in an area different than that resulting directly from their degree.

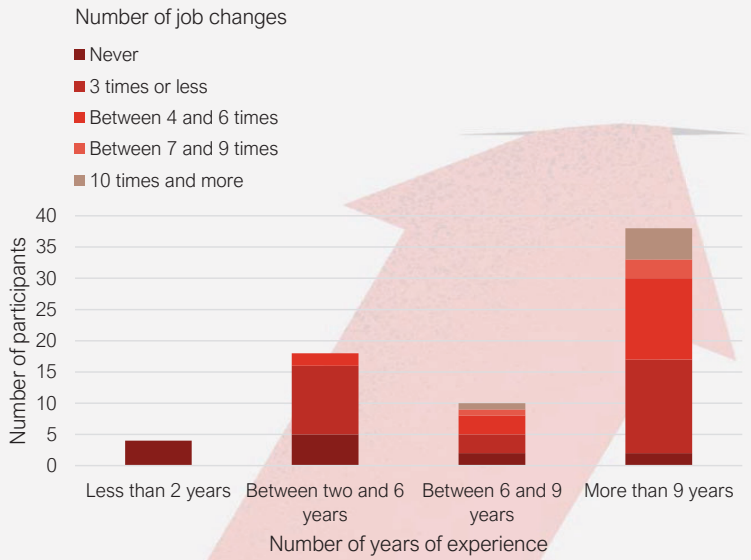
While our sample covered a wide range of disciplines, most participants represented civil engineering. This suggests some data bias which can be attributed to the methodology since one would expect more answers from sectors which traditionally had larger female representation.

Work experience was directly correlated with age. Those aged 30 and under usually had six years of experience or less, while those who were older, had at least seven years of professional experience. Additionally, more than 50% of our participants had already worked for more than a decade, with all aged 40 or over falling in this category.

The number of positions held appeared to be broadly proportionate to the career length. While there were women still in their first job after being on the market for more than a decade, most had changed their job at least once after 3 years since graduating. **There was a visible tendency of regular position changes as the career extended in time; this, however, does not apply to all women.** For more experienced groups (7+ years on the market) we can distinguish two, almost equal, groups. Women in the first one were very mobile changing their jobs more often than every 3 years on average. The second group seemed to prefer stability and changed their jobs far less frequently.



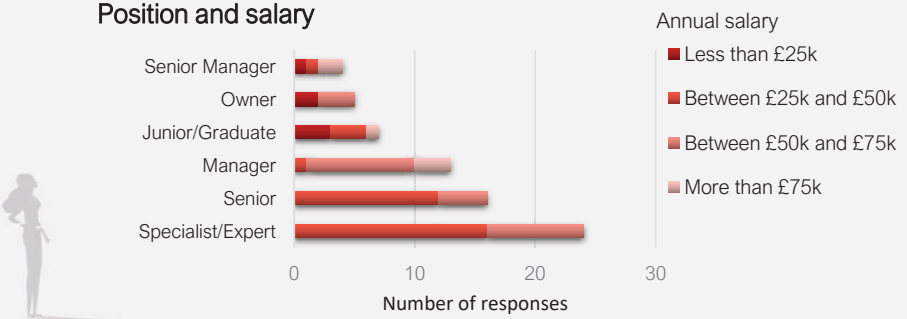
Years of professional experience and number times participants changed their job



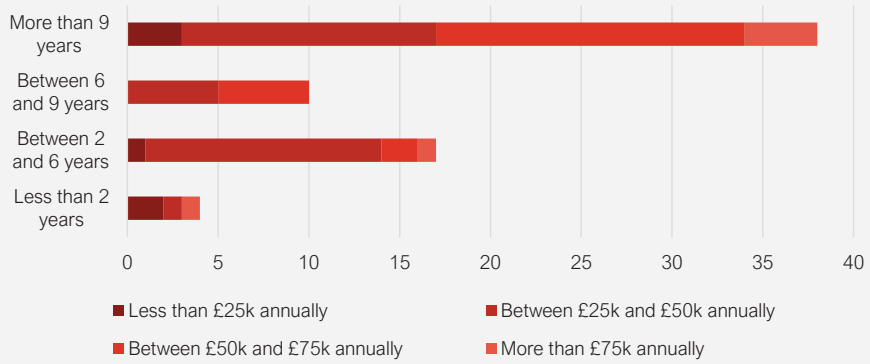
About a third of our sample were employed as specialists or experts, nearly a quarter held senior positions and roughly one in six were in a managerial role. The remainder represented juniors (7%), owners (7%), and the highest executive levels (5.6%).

Interestingly, only juniors, business owners and executives in our sample were earning below £25k per year, and almost only the select few from managerial/higher managerial roles made more than £75k annually. Managers as a group showed consistently the highest earnings overall. The salary correlated with the job experience, as the proportion of high earners increased as the career progressed.

Position and salary



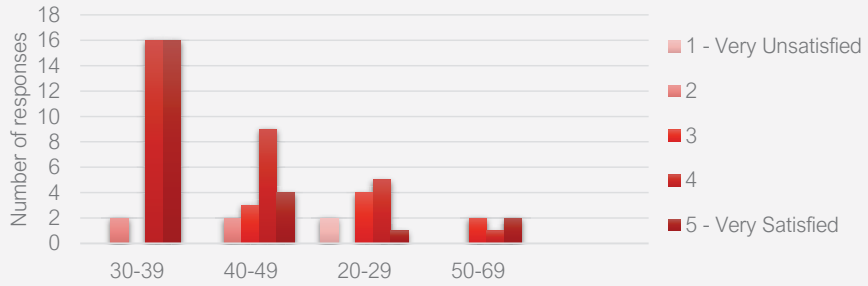
Correlation between salary and job experience



Overall Sentiment

While positive sentiment towards the STEM career was somewhat expected given the sampling methodology, the overall level of satisfaction was quite encouraging. Most of the women were very satisfied, especially in the 30–39 age group. The only responses with very low satisfaction levels were among the youngest respondents, which might be a sign of potential attrition as it is relatively easy to change career at this stage of life.

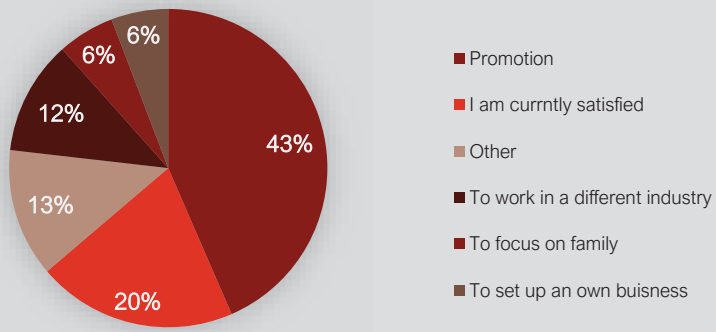
Overall satisfaction by age group



Despite the stressful circumstances of the COVID-19 pandemic, the majority of respondents in the survey displayed a high level of optimism about their career prospects. When asked about their expectations for pay raises and promotions within the next three years, only 5 respondents felt that they could not count on such opportunities. The vast majority believed that their careers would continue to develop in terms of pay and promotions, either in their current company or when they moved to a new one.

Overall, the respondents reported high levels of satisfaction with their jobs, but there were some areas of concern. The lowest levels of satisfaction were reported in terms of responsibility. This suggests that the respondents may have felt that they were not being given enough opportunities for development. Despite this, the respondents demonstrated a clear ambition to advance in their careers and take on more challenging roles, indicating a desire to continue learning and growing professionally.

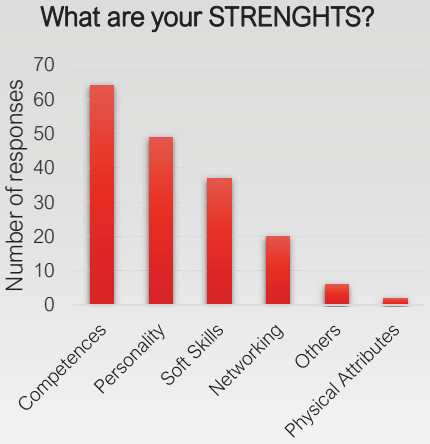
What are your goals/plans in the next 3 years?

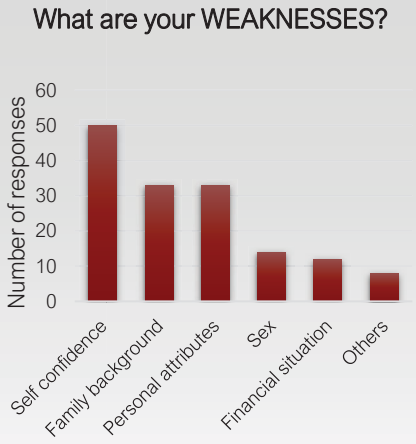


How do you rate your workplace and its attributes?

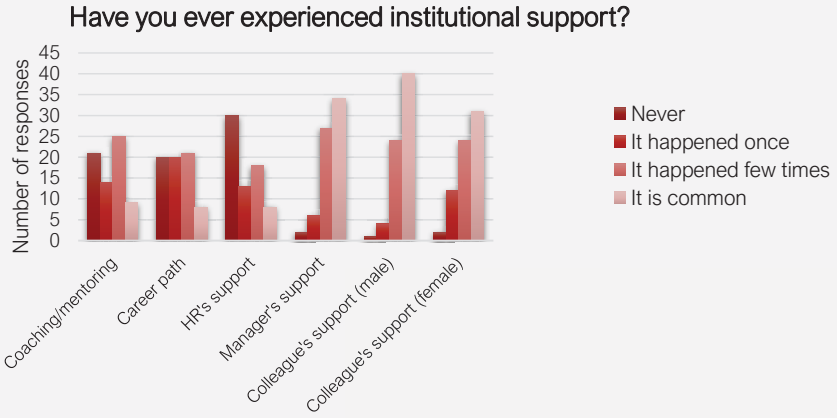
One of the main findings of the study was a **"competence paradox".** When asked to choose their top 3 strengths almost every respondent selected competence and personality; however, when asked to do the same for their weaknesses. 70% selected lack of confidence as their primary weakness. This shows that while our respondents were fully aware of their skills and abilities, they felt that their own attitude played against them. **It is an important signal to employers and managers to create an environment which provides opportunities for the female members of their teams.**

Similar observation could be made for personality which was chosen as the second most common strength but also appeared very often as a weakness next to family background. For some women, their sex was still considered as a burden; however, almost none of the women in the 40+ age group chose this option.





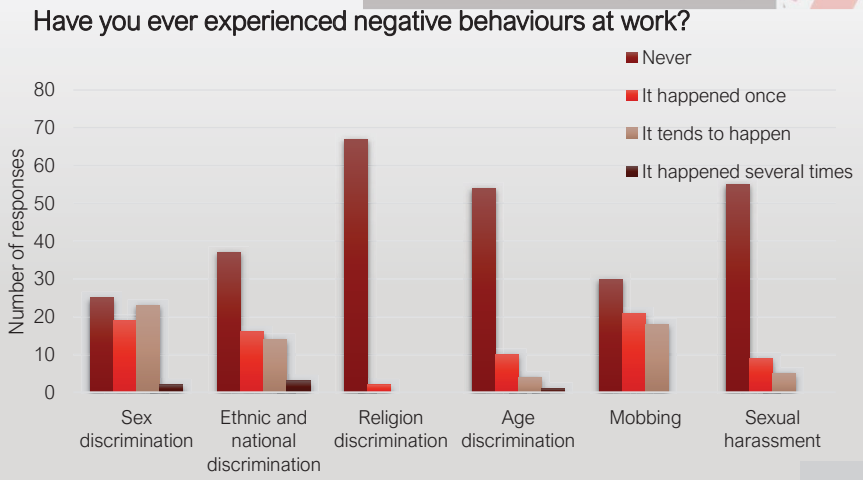
We also asked about **positive and negative experiences in the workplace**. In terms of the positives, we can identify two groups. Individual support from managers, both male and female colleagues, is common and was experienced by almost everyone, with a slightly positive bias towards the male colleagues. Institutional support was more evenly distributed with nearly 30% never exposed to coaching, a clear career path or HR support. This disproportion was mostly visible in the older age groups which relied mostly on individual support



Negatives are a bit more complicated. Sex is a critical factor here – more than 50% said that they had at least once experienced sex discrimination and 30% said that it had happened several times. Discrimination due to origin was experienced by half with 20% more than once – being a migrant can also lead to discrimination, although not to the same extent as being a woman.

It seems that mobbing of some sort was a common experience which had not been experienced by 30% of the sample population. While it might be encouraging that 90% did not experience sexual harassment, it can still happen in workplace which indicates that there is a field for improvement.

None of the negatives seem to change if we look at individual age groups, which suggests that there is still not sufficient progress and even the youngest groups are exposed to negatives in the workplace.

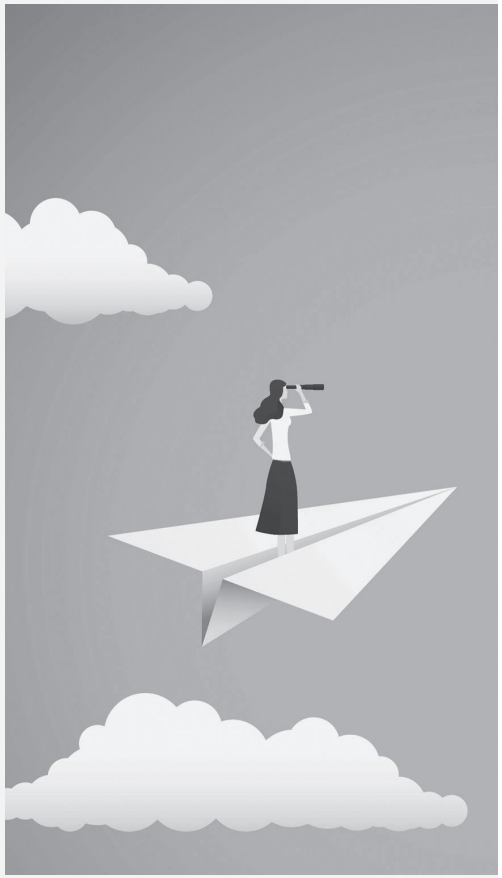


7 EMIGRATION

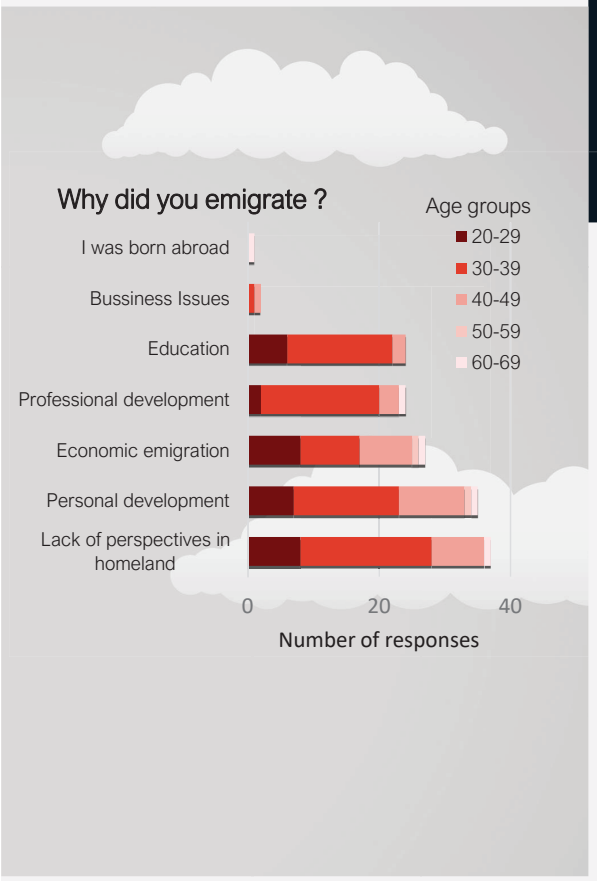
This report would not have materialised if our participants had not taken the highly significant decisions to change their country of residence. After all, being a transnational migrant was one of the three unique characteristics of our chosen analysed group. The choice to leave behind one's support network, along with the country where all social, legal and informal mechanisms are thoroughly known and the language barrier inexistent, is rarely made lightly.

We wanted to know the main reasons why our respondents chose to emigrate. The most frequent answers included few opportunities in Poland, **a chance for personal development abroad and better earnings, closely followed by professional development and education.** More than half of the sample also hinted at the political situation as a factor affecting the decision.

The relative difficulties faced by STEM women in Poland are further exacerbated by the system where employees can be off sick throughout their pregnancies and well beyond, much at the cost of the employer. **Young females find it increasingly difficult to secure permanent positions and companies often choose men over women as they have very few paternity-related rights and traditionally fill most of the roles in the sector.** This double whammy is clearly illustrated by a quote from one of our interviewees.

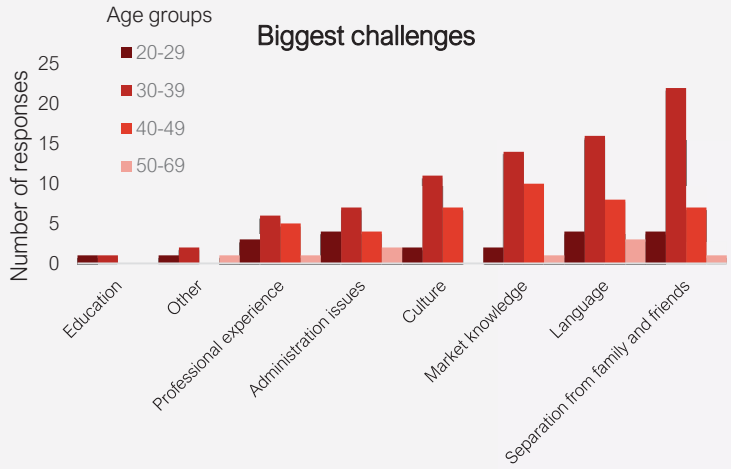


> *"Work at a building site is not easy, neither for women, nor for men. While it has been changing in the past few years, a woman at a building site still isn't an everyday sight*
>
> *Another reason why I may have had problems with finding a job [in Poland] was the employer's fear that shortly after securing a permanent job I would proceed to getting pregnant, taking time off "sick" and then my maternity leave. My British employer did not have such suspicions*



Regardless of the reasons for relocation, our participants was **overwhelmingly satisfied with their decision to migrate**: more than half very much so. Only around one in five respondents felt neutrally about coming to live in the UK and only a handful were unhappy.

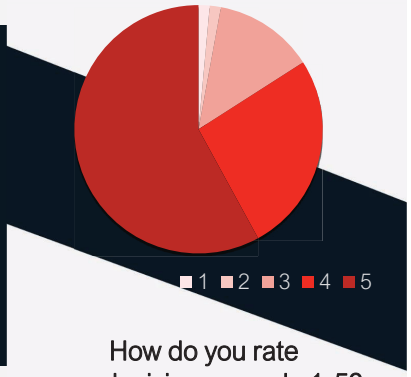
The trend to be highly satisfied with the decision of leaving the home country is further confirmed with the declared plans for the future. Nearly half of the sample (45%) wanted to stay in the UK, and just 13% wished to go back to Poland. Just under 9% considered a further move to another country and about 33% were undecided.



While the majority were happy to have **migrated** and believed that life would have been more difficult if they had stayed, there were challenges too. Thinking particularly of the beginning of their stay, the participants hinted at multiple challenges.

Separation from friends and family came first in the overall ranking, with language issues second and a limited knowledge of the market third. Other barriers mentioned included cultural differences, unfamiliar formal and administrative systems as well as the lack of professional experience abroad.

> *"The biggest challenge was my separation from family and friends. Thanks to cheap flights between Poland and the UK, I was able to visit my home country quite regularly and to catch up, but it's still not the same as spontaneous meetings.*
>
> *Overcoming the language barrier took me some time, too. My English is much better than a few years ago but still sometimes I wonder what exactly my interlocutor means.*



How do you rate your decision on scale 1-5?

> *"I haven't faced any significant problems related to migration. I came here to study for my master's and spoke the language very well. All in all, the only thing I had to get used to was the fact that the British weren't as direct as the Germans, with whom I had worked earlier. So all the comments along the line of "Oh, what an interesting idea" in fact mean that you have to implement immediate changes.*

> *"For a few years I had nobody to help me with finding a job in construction, e.g. tell me about the need to have the CSCS card or that geodesist and land surveyor were not the same.*

Despite all the hindrances, finding the first employment appears to have been **relatively easy for most**, with a third of the sample securing their first position through direct contact with the employer, a quarter via an agency and a further 16% thanks to recommendations and friends. The remaining first jobs, approximately 25%, were found using other means, including dedicated internet portals.

It is perhaps worth noticing that while **language was initially a significant barrier** in the early stages of our participants' UK careers, very few recalled problems relating to **being educated** in a somewhat different system and in a foreign tongue. **This seems to suggest that STEM offers a relatively smooth transnational career move, potentially due to the universal nature of the sciences and technology, easily transferrable and applicable in practice.**

> *"Migration has allowed my career to flourish. I managed to gain not only two separate Polish construction licenses, but also a prestigious Chartered Engineer title.*

8 FAMILY

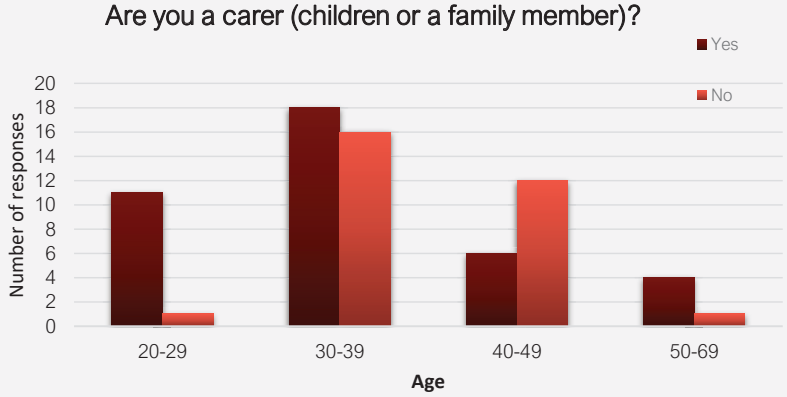
Much has been written about the fundamental need to achieve a **good work–life balance.** It is especially true in cases of multiple adversities.
Long working hours, little flexibility and highly demanding jobs, created with men in mind, are just a few. With limited support networks and expensive childcare, the decision to start a family is even more difficult for the first-generation migrants.

> *Only 5% of the women believed that their spouse would alter his career to accommodate their child.*
>
> *Personal choices are not always as personal as they appear. We are all influenced by social conventions, peer pressure, and familial expectations.*
>
> *On top of those forces, woman who can afford to drop out of the workplace often receive not just permission but encouragement to do so from all directions.*
>
> *Lean In, Sheryl Sandberg*

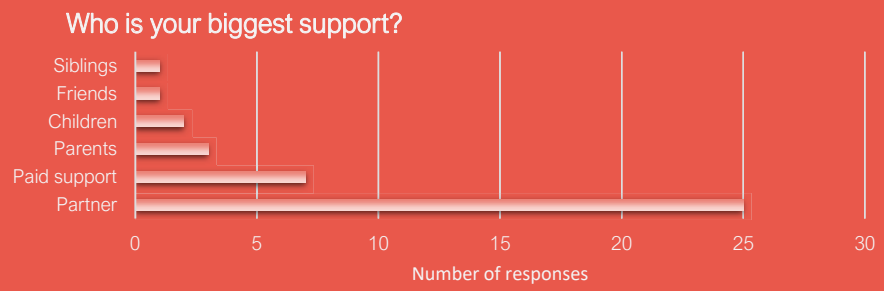
One of our respondents put it bluntly: in construction, where women constitute just 11% of the workforce, the lowest factor across all STEM sectors, according to the 2018 Wise report, it's either work or family.

> *My work at a building site takes 10 hours a day, sometimes more. If you add the commute, this means 12 hours away from home. Part-time work is not possible.*
> *I don't have children yet but I'm planning to; this means I will soon have to give up my job in construction.*

Despite the odds, our participants undertook care responsibilities in good numbers, even if relatively late in life. While those in their 20s in our sample happened to be almost completely care-free, more than half of those in their 30s and two thirds of those in their 40s were currently parents/carers.



With rather tricky career choices in mind, we asked our respondents about the most important people who share their caring responsibilities. Overwhelmingly, in all age groups, the most significant support came from their partners, followed shyly by using paid help and engaging other family members. This is particularly interesting, given that UK-wide statistics show that only 2% of men take shared parental leave and barely 1 in 3 use their two-week statutory paternity leave.



In spite of the relatively strong support from the partners and husbands, the women we spoke to reported a significant impact that parenting and caring responsibilities have had on their careers. With just 6% describing no present influence of the family duties on their work life, for the vast majority it is a matter of the degree of the impact they have had. Half of our respondents described it as minor, 27% as significant and about one in six as life-determining.

> *Still, disproportionate participation of fathers in childcare is one of the main obstacles to actual equality between men and women in the workplace.*
>
> Women in Tech 2020

NOTES

SUMMARY

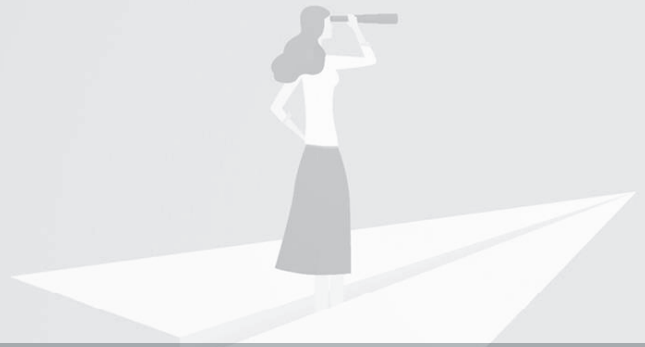
The report provides an overview of Polish women working in STEM in the United Kingdom. Each chapter of the report focuses on different aspect of the topic and allows for the drawing of certain conclusions, the answering of questions, or the posing of new ones. Although the analysed group is not representative of the broader population, we can still observe certain interesting characteristics.

The majority of the survey participants were women in their thirties, with a lower participation rate among younger women, which may suggest a slowdown in the trend of migration from Poland to Great Britain in recent years. These women were highly educated, with many having studied both in Poland and abroad. The survey also found that younger respondents were more likely to have studied outside of Poland, indicating an increase in access to international education and mobility among women in recent years.

Most women were better educated than their parents, which may be due to various factors such as changes in the job market, personal ambition, a desire to improve living conditions, or degree inflation. When choosing careers in STEM, the participants cited a range of motivations including passion, the desire to improve living conditions, and unplanned decisions. It is not clear how these motivations compare to those of individuals in other industries. The survey participants received strong support from family, friends, and schools in pursuing STEM careers.

As many as 83% of the surveyed women were working in their chosen profession, with many employed in the civil engineering and construction sector. These women occupied middle and high-level positions and were relatively risk-averse when it came to changing jobs. The overall level of satisfaction among the surveyed women was high, although it is possible that some migrants with lower levels of satisfaction did not participate in the survey or are no longer living in the UK. This high level of satisfaction seemed to impact the respondents' future plans, with only 6% considering starting their own business and 43% hoping to be promoted.

The survey results also revealed what may be called a "competence paradox," in which the participants identified competence as both their main advantage and weakness in the workplace. A more detailed analysis would be needed to fully understand this phenomenon. The main factors that influenced the participants' decisions to emigrate were a lack of prospects in Poland and economic conditions. The greatest challenges faced by Poles in UK were being separated from family and friends and the language barrier, with similar levels of these challenges reported across all age groups.



Overall, the report provides valuable insights into the experiences and career aspirations of Polish women working in STEM fields in the United Kingdom. While the analyzed group is not representative of the broader population, the study offers a detailed look at the characteristics of this group and identifies areas of both satisfaction and concern. Understanding the experiences of these women can help inform policies and practices aimed at supporting and promoting diversity and inclusion in STEM fields, both in the UK and beyond.

BIBLIOGRAPHY

Online resources

300gospodarka.pl/analizy/urlop-rodzicielski-statystyki-gus-mezczyzni

ec.europa.eu/eurostat/cache/infographs/womenmen

e-migracja.eu

potencjalkobiet.pl/pdf/rekomendacje.pdf

www.dziewczynynapolitechniki.pl/pdfy/raport-kobiety-na-politechnikach-2021.pdf

www.engineeringuk.com

www.peoplemanagement.co.uk/news/articles/shared-parental-leave-uptake-still-exceptionally-low#gref

www.pwc.co.uk/women-in-technology/women-in-tech-report.pdf

www.stemwomen.com/blog/2021/01/women-in-stem-percentages-of-women-in-stem-statistics

www.wisecampaign.org.uk/the-business-case-for-gender-diversity

www.womenintech.perspektywy.org/raport-kobiety-w-technologiach-2020

www.wysokieobcasy.pl/akcje-specjalne/7,174350,26047824,ojcowie-czesto-nie-chodza-na-urlop-rodzicielski-bo-ich.html

Printed resources

Bohnet, I. (2018) What works: Gender equality by design.
Cambridge, Massachusetts; London, England: The Belknap Press of Harvard University Press.

Criado-Perez, C. (2021) Invisible Women: Data bias in a world designed for men.
New York: Abrams Press.

Sandberg, S. and Scovell, N. (2019) Lean in: Women, work, and the will to lead.
New York: Alfred A. Knopf.

Report prepared by:

Joanna Gos

Marian Zastawny

Alina Antonik

Mirosława Michniewicz

Tomasz Dudziak

Review

Justyna Bielecka

Support

Ewelina Wachnicka
Anna Gomółka

Contact

office@stpuk.com

A Million

ASSOCIATION OF POLISH ENGINEERS IN GREAT BRITAIN

Contact
Email:
office@stpuk.org
Our Address:
POSK (3rd Floor),
238-246 King Street,
London W6 0RF