Critical Barriers Facing Women in STEM Careers and Education

This questionnaire aims to examine your views and beliefs regarding gender inequality in Stem fields. It is intended to assess the drivers and barriers and is NOT a performance appraisal of individuals.

Your responses are confidential. Subsequent reports as a result of this questionnaire will be written in such a way that no individual can be identified, and no comments will be attributed to any single person or company.

Answer all questions giving your first and natural answer. Please be accurate and honest. In such a way, you should be able to complete the questionnaire in approximately 10 minutes.

Thank you for your cooperation in completing this questionnaire.

First Part - Personal information

Please answer the following questions

1- What is your age category? *

- ☐ 20-25
- ☐ 26-30
- ☐ 31-40
- ☐ 40-50
- ☐ 50-60
- ☐ 60+

2- What is your gender? *

- ☐ Male
- ☐ Female
- ☐ Prefer not to say

3- What is your highest academic qualification? *

- ☐ Vocational qualification
- ☐ Diploma/ two years course
- ☐ Bachelor degree
- ☐ Master's degree
- ☐ PhD
- ☐ Other

4- What is your professional membership (RIBA, JEA, etc.) *

5- What is the STEM related major (engineering, science, technology, math, etc.) *

6- What is the main major of the department/sector you spent your major experience at (architecture, construction, engineering, science, math, computer, etc.)

7- Are you working in your field? *

8- What is your job position (junior, senior, junior management, senior management, main lead, director, etc.

9- Indicate the organization type you spent your major experience at *

- ☐ Not working
- ☐ Freelance
- ☐ Small private company
- ☐ Large private company
- ☐ Governmental institution
- ☐ Private academic/research institution
- ☐ Public academic/research institution
- ☐ Non-profit organization
- ☐ Special interest group
- ☐ Other

10- Indicate your years of STEM-related experience. *

- ☐ 0-5 years
- ☐ 6-10 years
- ☐ 11-15 years
- ☐ 16-20 years
- ☐ 20+ years

Second Part

This part is aimed at understanding the critical barriers that face women in STEM careers and education.

From your experience and knowledge please indicate the level of importance of each barrier considering the following scale

-2 = Not important

-1 = Low importance

0 = Neutral

1 = Important

2 = Very important

11- General Overview of Categories *

	-2	-1	0	1	2
Professional conditions and work attributes	☐	☐	☐	☐	☐
Professional perceptions and gender bias	☐	☐	☐	☐	☐
Societal perceptions and influences and gender stereotypes	☐	☐	☐	☐	☐
Individual confidence/ interest/ awareness/ circumstances	☐	☐	☐	☐	☐
Support and empowerment	☐	☐	☐	☐	☐
Academic related reasons	☐	☐	☐	☐	☐

12- A- Professional Conditions and Work Attributes *

	-2	-1	0	1	2
A-Male domination in STEM careers	☐	☐	☐	☐	☐
A- Few female peers, supervisors, and managers	☐	☐	☐	☐	☐
A- Competitiveness and facing expectations	☐	☐	☐	☐	☐
A-Queen bee syndrome in the workplace	☐	☐	☐	☐	☐
A- Qualification of women compared to men	☐	☐	☐	☐	☐
A- Lack of flexible work conditions and arrangements	☐	☐	☐	☐	☐
A-Working conditions and career insecurity	☐	☐	☐	☐	☐
A- Difficulty in finding work-life balance	☐	☐	☐	☐	☐
A- Demanding schedules for STEM related careers, long working hours	☐	☐	☐	☐	☐
A- Unwelcoming, unsupportive and exclusive work environment	☐	☐	☐	☐	☐
A- Lack of supportive facilities in working environment	☐	☐	☐	☐	☐
A- Difficulty to return to STEM Careers After a pause or leave	☐	☐	☐	☐	☐
A- Slow career progression	☐	☐	☐	☐	☐
A- Difficulty in securing positions in the same geographical area	☐	☐	☐	☐	☐
A- Absence of transport facilities	☐	☐	☐	☐	☐
A- Lack of women STEM abilities and achievements	☐	☐	☐	☐	☐
A- Lack of women career management skills, leadership	☐	☐	☐	☐	☐
A- Few female peers, supervisors, and managers	☐	☐	☐	☐	☐

13- B- Professional Perceptions and Gender Bias *

	-2	-1	0	1	2
B- Explicit and Implicit Gender bias where men are favored	☐	☐	☐	☐	☐
B- Institutional Discrimination	☐	☐	☐	☐	☐
B- Sexual harassment	☐	☐	☐	☐	☐
B- Negative attitudes towards women, Intimidation, and microaggressions	☐	☐	☐	☐	☐
B- Lack of fairness in hiring	☐	☐	☐	☐	☐
B- Income inequality/gender pay gap	☐	☐	☐	☐	☐
B- Lack of fairness in the Evaluation	☐	☐	☐	☐	☐
B- Lack of recognition of women abilities and performance	☐	☐	☐	☐	☐
B-Bias in promotion, career mobility, advancement, rewards	☐	☐	☐	☐	☐
B- [Perceived lack of commitment among women	☐	☐	☐	☐	☐
B-Females perceived level of intelligence	☐	☐	☐	☐	☐
B- Women being perceived less competitive	☐	☐	☐	☐	☐
B- Masculinity associated with creativity	☐	☐	☐	☐	☐
B- General perception that women cannot hold permanent positions	☐	☐	☐	☐	☐
B- General perception that women are not qualified enough	☐	☐	☐	☐	☐
B- General perception that women cannot concentrate for long period	☐	☐	☐	☐	☐
B- Women being forced to take more passive roles	☐	☐	☐	☐	☐
B- Women being given fewer interesting assignments and roles	☐	☐	☐	☐	☐
B- Glass ceiling, suspicious views about women abilities to progress	☐	☐	☐	☐	☐
B- Glass cliff: women assigned riskier positions in leadership	☐	☐	☐	☐	☐
B- Women being discouraged from the managerial positions	☐	☐	☐	☐	☐

14- C- Societal Perceptions and Influences and Gender Stereotypes *

	-2	-1	0	1	2
C- Gender Stereotypes women perceived with lower physical and mental abilities	☐	☐	☐	☐	☐
C- Women being perceived as less rational	☐	☐	☐	☐	☐
C- STEM Misconceptions, not appropriate for women	☐	☐	☐	☐	☐
C- Fear of not conforming to traditional societal views	☐	☐	☐	☐	☐
C- Preferential treatment for men	☐	☐	☐	☐	☐
C- Gender role socialization and interaction, women being treated differently	☐	☐	☐	☐	☐
C- Societal gender roles with Women common role in society	☐	☐	☐	☐	☐

15- D- Individual Confidence/interest/awareness/circumstances *

	-2	-1	0	1	2
D- Self-Perception and Lack of self-confidence	☐	☐	☐	☐	☐
D- Self-imposed fear of STEM	☐	☐	☐	☐	☐
D- Self-efficacy about STEM-related subjects	☐	☐	☐	☐	☐
D- Lack of confidence to apply for positions and promotions	☐	☐	☐	☐	☐
D- Lack of personal interest in STEM fields	☐	☐	☐	☐	☐
D- Lack of awareness of educational opportunities	☐	☐	☐	☐	☐
D- Lack of awareness of career opportunities	☐	☐	☐	☐	☐
D- Female role in family, pregnancy, maternity	☐	☐	☐	☐	☐
D- Effect of life stage and family expectations	☐	☐	☐	☐	☐
D- Feeling like a misfit in STEM-related fields	☐	☐	☐	☐	☐

16- F- Support and Empowerment *

	-2	-1	0	1	2
F- Lack of professional mentorship and counseling	☐	☐	☐	☐	☐
F- Lack of support networks	☐	☐	☐	☐	☐
F- Lack of female mentors/role models	☐	☐	☐	☐	☐
F- Lack of encouragement from men	☐	☐	☐	☐	☐
F- Lack of encouragement from women	☐	☐	☐	☐	☐
F- Parental Influences on interest and achievements	☐	☐	☐	☐	☐
F- Lack of encouragement and support from family members	☐	☐	☐	☐	☐
F- Lack of encouragement from teachers/ teacher influence	☐	☐	☐	☐	☐
F- lack of encouragement from friends/ peer influence	☐	☐	☐	☐	☐
F- Being faced by expectations from professionals, academics, and general public	☐	☐	☐	☐	☐
F- Leaky pipleline, Women dropping from pursuing STEM education and career	☐	☐	☐	☐	☐
F- Lack of access to vocational training and development opportunities	☐	☐	☐	☐	☐
F- Lack of strategies, policies for gender balance in STEM areas	☐	☐	☐	☐	☐
F- Ineffective programs to attract women to challenging jobs	☐	☐	☐	☐	☐

17- G- Academic-related reasons *

	-2	-1	0	1	2
G- Educational expenses	☐	☐	☐	☐	☐
G-Time required	☐	☐	☐	☐	☐
G- Energy required	☐	☐	☐	☐	☐
G- STEM education directed at boys	☐	☐	☐	☐	☐
G- Boys finds it easier to learn STEM	☐	☐	☐	☐	☐
G- STEM courses are difficult	☐	☐	☐	☐	☐
G- Access to schooling and extra curriculum	☐	☐	☐	☐	☐
G- Lack of girls' exposure to Informal Science Experiences	☐	☐	☐	☐	☐
G- Teaching methods, the teachers do not simplify the lessons	☐	☐	☐	☐	☐
G- [Parents, peers and teachers' expectations	☐	☐	☐	☐	☐
G- [Personal Goals and Values	☐	☐	☐	☐	☐
G- Mindset and attitudes towards STEM in school	☐	☐	☐	☐	☐
G- Math and science Anxiety	☐	☐	☐	☐	☐
G- Gender differences in math and science abilities	☐	☐	☐	☐	☐
G- Gender differences in math and science interest	☐	☐	☐	☐	☐
G- Female students cope less with confusion and difficulties	☐	☐	☐	☐	☐
G- Girls less curiosity towards information	☐	☐	☐	☐	☐
G- Girls less persistence to stay in STEM	☐	☐	☐	☐	☐
G- Financial constraints	☐	☐	☐	☐	☐
G- Challenges in accessing educational resources	☐	☐	☐	☐	☐
G- Limited opportunities for specific socioeconomic backgrounds	☐	☐	☐	☐	☐
G- Language barriers	☐	☐	☐	☐	☐

End of questionnaire

Thank you very much for your time and effort