

Supporting Women Apprentices

21/01/2022 Henrietta Cameron

EQUATE Scotland
For Women in Science, Engineering & Technology

Where we want this training to take you:

- Understand the current STEM apprenticeship landscape and the impact it has.
- Understand how you can use career decision making theories to shape their support for apprentices.
- Outline ideas to attract, retain and promote women apprentices.
- Practice applying ideas to a case study.

Agenda

- ▶ Introductions & overview of Equate Scotland
- ▶ Current STEM Apprenticeship landscape
- ▶ Career Development Theory
- ▶ Supporting women apprentices
 - ▶ Attraction
 - ▶ Retention
 - ▶ Progression



WHAT WE DO

PROVIDING EXPERTISE NATIONALLY THROUGHOUT STEM

MAKING POSITIVE CHANGE FOR WOMEN IN STEM & ACADEMIA

STEM & ACADEMIA

WORKING TO CHANGE CULTURE IN ORGANISATIONS

TOWARDS OUR VISION

ALONGSIDE INDUSTRY & ACADEMIA

THROUGH PROVIDING WOMEN AND EMPLOYERS

TRAINING OPPORTUNITIES

INFLUENCING POLICY

CONSULTANCY

CAREERHUB & SERVICES

A PROGRESSIVE STEM LABOUR MARKET

WHERE WOMEN CAN CONTRIBUTE EQUALLY TO ADVANCEMENT IN SCIENCE

ENGINEERING & TECHNOLOGY AND HAVE FAIR ACCESS TO THE JOBS OF THE FUTURE

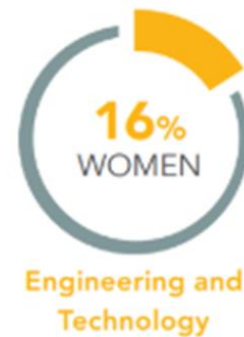
Boys and girls start with an equal interest in STEM. But this begins to drop before secondary school is started

Only a small portion of this already low number will continue on to further qualifications in STEM and construction

It then comes as no surprise that only 12% of managers in STEM are women.



We lose the highest proportion of interest from girls when they start subject choices around age 14



70% of female STEM graduates leave the sector

Current STEM Apprenticeship landscape

▶ Time for a quiz

What percentage of women modern apprentices had an 'Engineering & Energy related' occupation (Scotland 2020/21)

- 1%
- 2%
- 10%
- 20%

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A total of 3057 modern apprentices (Scotland 2020/21) were working in Construction or related occupation. How many were women?

- 69
- 690
- 1500
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According to the most recent statistics of foundation apprentices in which subject framework was the gender breakdown closest to 50/50.

- Financial Services
- Food and Drink technologies
- Creative and Digital Media
- Business Skills

According to the most recent statistics of foundation apprentices in which subject framework was the gender breakdown closest to 50/50.

- Financial Services (19.5 to 80.5 male)
- Food and Drink technologies (46.7% female to 53.3% male)
- Creative and Digital Media (45.6 to 54.4% male)
- **Business Skills (49.1 female to 51.9 male)**

Occupational grouping	Female	Male
Administration & related	76%	24%
Automotive	2%	98%
Construction & Related	2%	98%
Engineering & Energy related	6%	94%
IT & Other Services	33%	67%
Sport, Health & Social Care	86%	14%
Transport & Logistics	4%	96%

Modern Apprenticeships 2020/21 Scotland

- ▶ Why does this matter?
- ▶ What impact does inequality have on:
 - ▶ Women?
 - ▶ Organisations?
 - ▶ Society?

Hodkinson's 'Careership' Theory

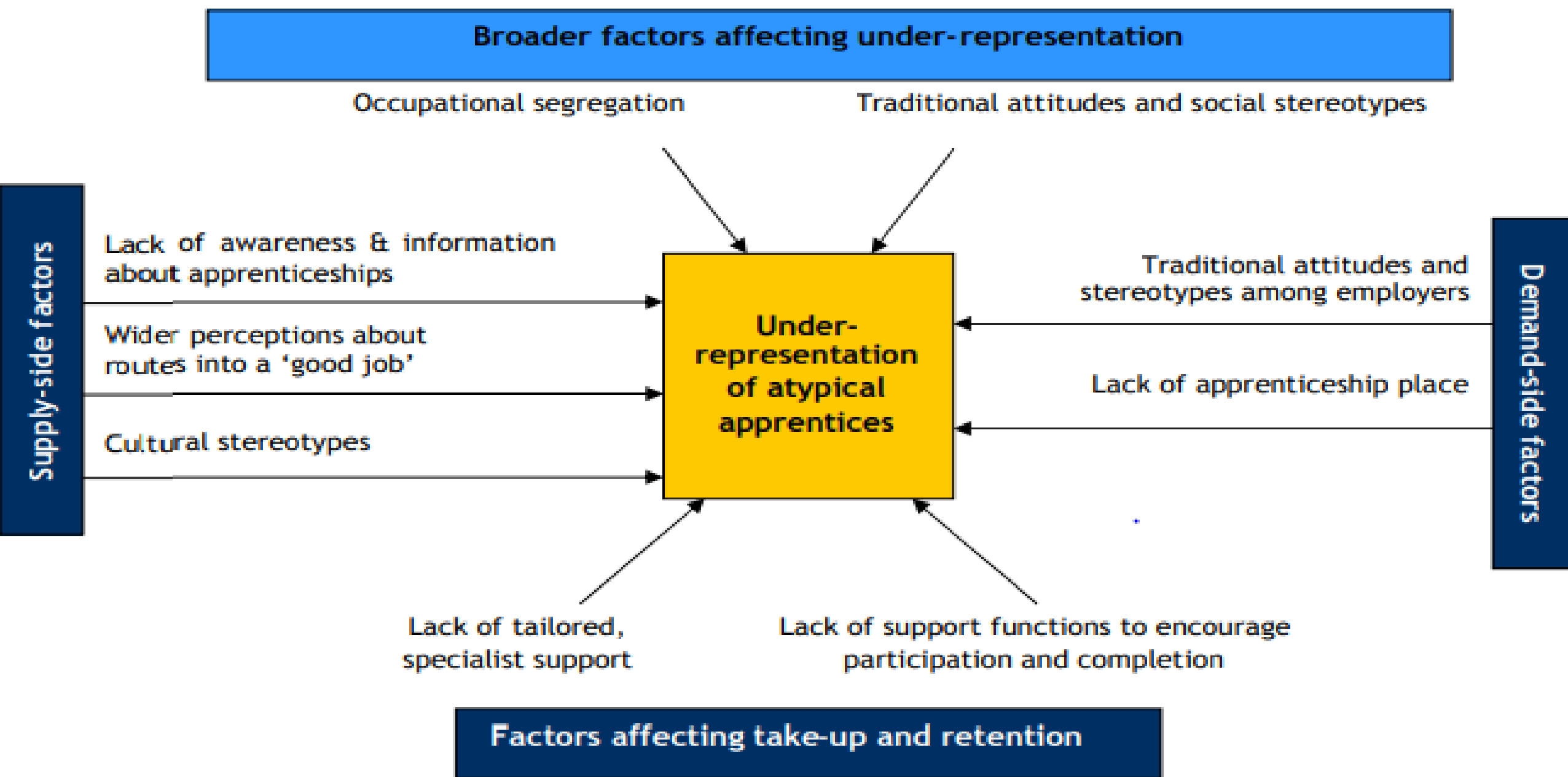
- ▶ Career decision-making and progression:
 - ▶ often pragmatically rational
 - ▶ often not linear
 - ▶ influenced by events and circumstances beyond our control
 - ▶ bounded by a person's **'horizons for action'**



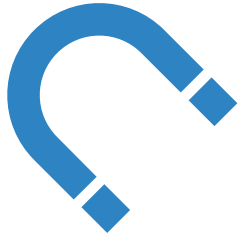
The decision making process

- ▶ Information... or the lack of
- ▶ Other people's decisions influence your own decisions
- ▶ Resources available e.g:
 - ▶ Who you know - social
 - ▶ What you know/what is expected in society - cultural
 - ▶ What you have - economic
- ▶ Horizons for Action

Figure 4. 1: Barriers to apprenticeships for atypical groups



Supporting women apprentices



Attraction



Retention



Progression

Attraction

- Broadening horizons
 - Case studies
 - Role models
 - Information
- Data
- Positive action

Examples

Scottish Water promoted apprenticeship opportunities to Asian communities by participating in a careers event at the Edinburgh Mosque.

Beith Community Development Trust held an open day for apprenticeship opportunities and promoted this to the Ayrshire College Additional Support Needs team to try to attract more disabled young people to apply.

Microsoft ran a taster day to inspire girls in S3 to consider a career in technology.

DigiGirlz, a Microsoft YouthSpark programme, gives girls opportunities to learn about careers in technology, connect with Microsoft employees, and participate in hands-on workshops.

Applied Arts Scotland has promoted their apprenticeship opportunities through equality organisations such as **Enable Scotland**, **BEMIS**, **All in Edinburgh** and **Barnado's**.

BAE Systems offer work experience placements to girls that explain the different routes into the organisation and how to apply.

Retention

Feeling that they belong

- ▶ Flexibility or part time work
- ▶ Networks
- ▶ Affordability
- ▶ Harassment
- ▶ Facilities
- ▶ Induction
- ▶ Uniforms/PPE

Induction

- ▶ What makes a good induction?

Induction

- ▶ Induction checklist
- ▶ Equipment
- ▶ Buddy
- ▶ Setting goals & reflective practice

- ▶ *Where am I going?*
- ▶ *Who am I meeting?*
- ▶ *What am I wearing?*
- ▶ *How long am I working for?*
- ▶ *How do I get there?*
- ▶ *Do I need my own equipment?*
- ▶ *When do I get paid?*

Equipment - PPE

- ▶ **29%** of respondents reported that PPE they wear is designed for women
 - ← 10% in energy sectors
 - ← 17% in construction
- ▶ **28%** of respondents have been on the receiving end of comments (mainly derogatory) while in PPE
- ▶ **57%** reported their PPE impacts their work

▶ You look like a kid playing dress up

Your boobs look big in that

Are you wearing your Dad's clothes?

Progression

Glass Ceilings and Sticky Floors

- ▶ Data
- ▶ Mentoring
- ▶ Shadowing
- ▶ Maternity/paternity policies
- ▶ Menopause

Case studies

- ▶ Read through case study
- ▶ Initial thoughts. Any surprises?
- ▶ What barriers have they overcome, or are still overcoming?
- ▶ What extra tailored support might this apprentice need?
 - ▶ Practical support
 - ▶ Employer policy change
 - ▶ Additional resource
 - ▶ Anything else

Ricarda, 25, CAD Technician Apprentice

There were a **few raised eyebrows** from friends and family when I suggested I wanted to do an apprenticeship in carpentry or joinery or as an electrician...I wanted someone to be able to challenge me and help me progress in a career but instead I felt they could just **let you trundle along**. I was expecting a bit more support and mentoring which didn't happen, especially later on in the apprenticeship...It's quite a **male dominated field**. There's not a lot of young women that are working on the construction side, or the architectural side, it's mainly men. So, that is quite challenging. **Sometimes it's hard to be taken seriously**, if you, I don't know. People might not consider your opinion or acknowledge a contribution you've made. Or there's just a lot of "banter" I guess you'd call it, which can be kind of distracting. It would make a huge difference if there were more women there. **It's strange, most of the people on our payroll are women**, but they all work in the administration side of the business, but it's run by men, most of the people who work for us are also men, the culture is very male. I don't know, I think it's just really hard as a woman.

Matilda, 21, Digital and Tech Apprentice

Living in quite a remote part of the country has had its difficulties. We're in a small office in the South West which presents a challenge in itself. **I've had to say no to a lot of opportunities** because I can't get the travel funding or time out. ...I don't encounter many other women in work or college. **I was the only girl in my class** for the two years of my BTEC and there are two of us in a class of six now. I'm the only full-time female engineer in my office so it can be quite isolating. I had sexist remarks in college, I remember my name would be on the attendance list and some of the tutors would laugh and ask **"have you ever heard of a female engineer"** which was quite jarring in that environment. I had to put in a report against a fellow classmate. It was about then that I thought about leaving the qualification.

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