




OLD SPACE AND NEW; LESSONS ON THE ATTRACTION, DEVELOPMENT AND RETENTION OF FEMALE TALENT

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AGENDA

Introduction:

- Data Collection
- Participants
- General Trends

Analysis:

- Continent
- Organisation Age
- Organisation Size
- Organisation Type
- Company Practices:
 - Policies
 - Facilities
 - Recruitment Measures
 - PR and Communications





INTRODUCTION

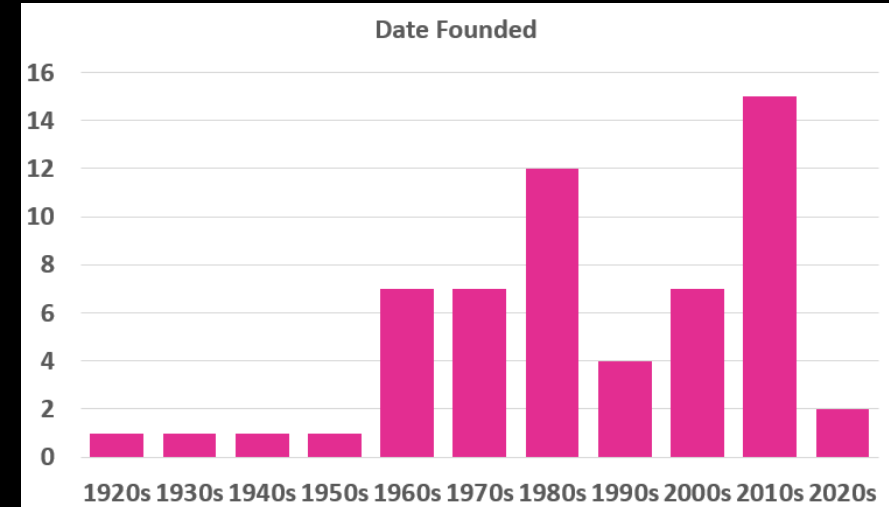
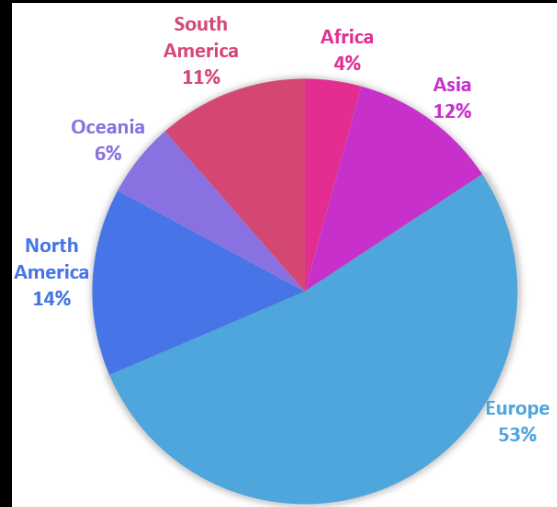
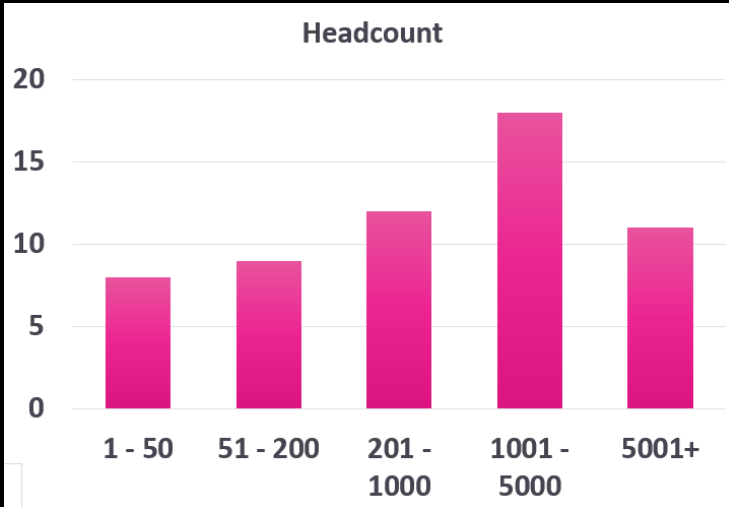
- A survey was sent to 50+ companies and organisations around the world about their gender balance and policies
- All data from these participants is anonymized
- Other data has been located where possible from shareholder reports
- Not all questions were answered, or data were available, for all organisations, so sample size varies between topics
- Due to the small sample size, all data should be considered indicative only

DATA COLLECTION

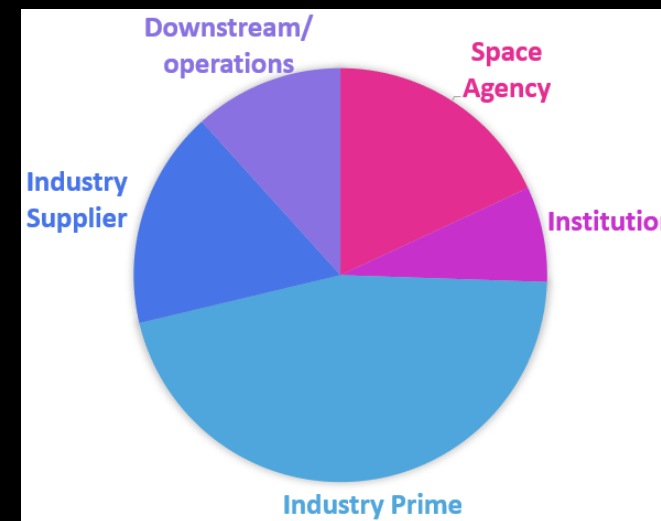
- 32 Companies responded to the survey
- A further 26 companies' data were added based on publicly available data from shareholder reports
- The final data includes data from
 - 58 Companies and organisations
 - ...headquartered in 25 different countries
 - ...with operations in 65 different countries
 - ...employing a total of over 432,000 space industry staff



PARTICIPANTS



- Data was obtained for:
- A good range of organisational sizes, but with higher participation from larger companies
- A good range of organisational ages
- Higher participation from European companies
- Higher participation from Industry primes



GENERAL TRENDS

432,056 total employees

Industry population in this sample is **33% female**

22% female leadership

34% of new hires are female, but only

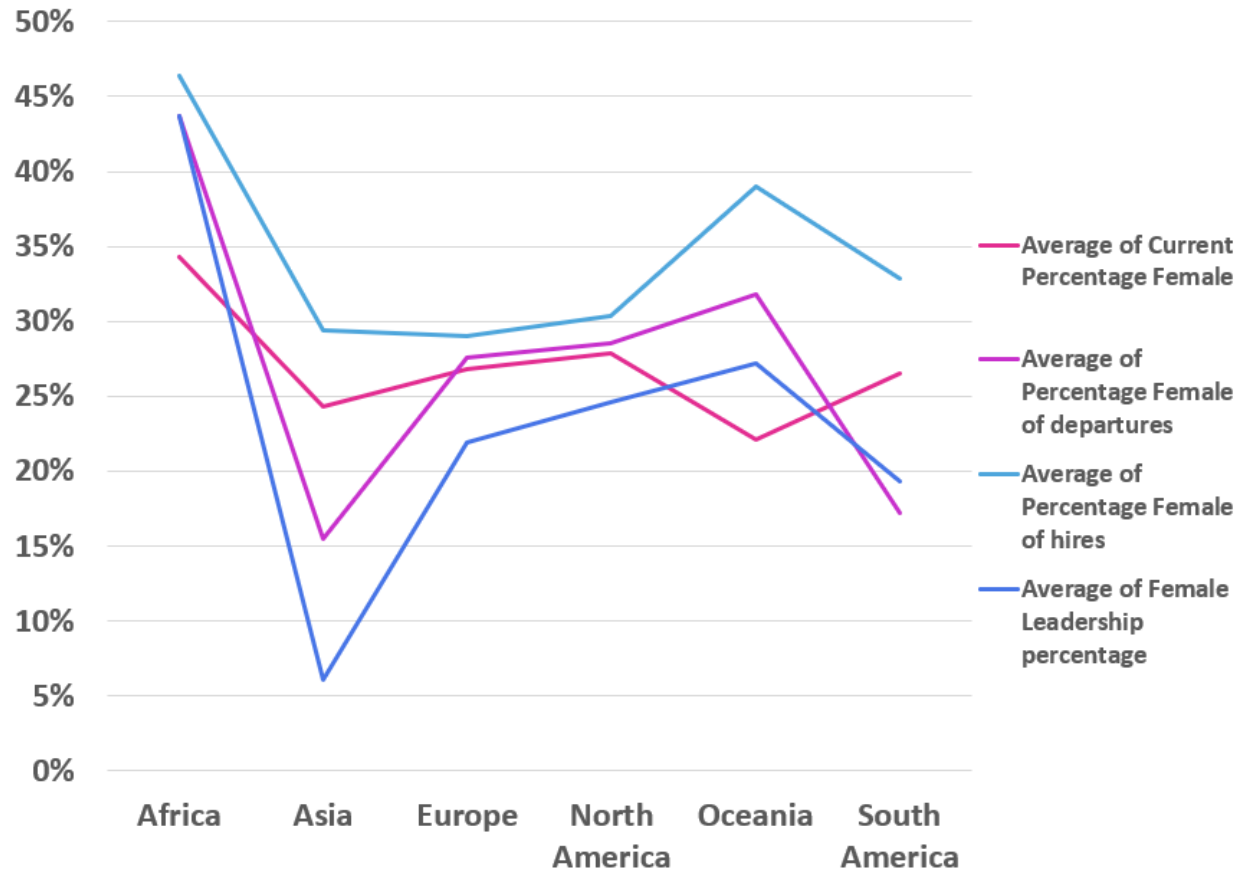
17% of employees leaving are female

Across organisations, female participation ranged from

60% to just 8%.

CONTINENT ANALYSIS

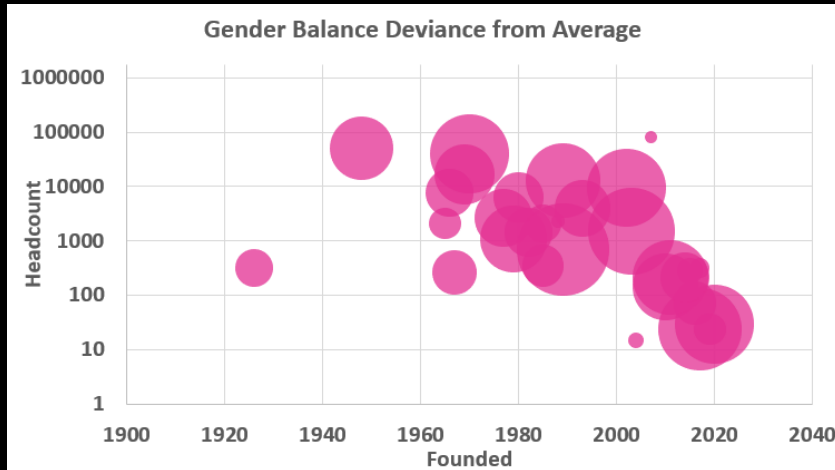
CONTINENT ANALYSIS



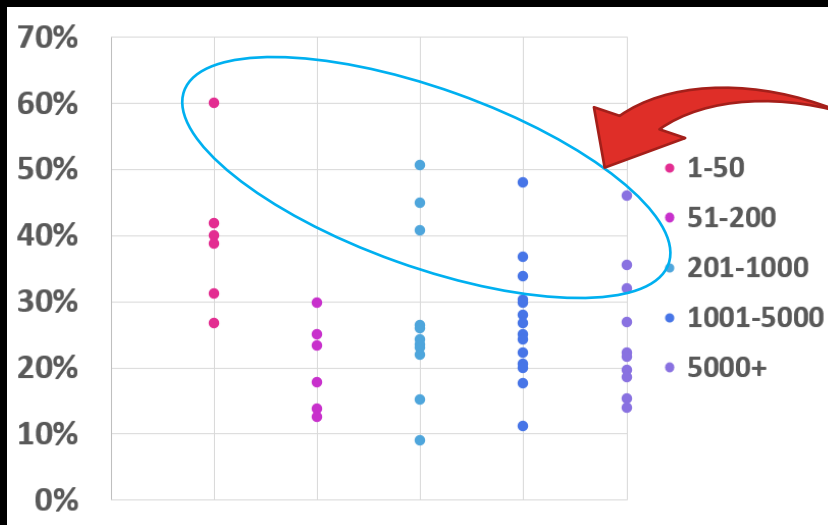
- Africa performed the highest in terms of gender balance on all measures (although note small sample size)
- Across all continents, hiring of women is occurring at a higher percentage than the existing workforce population
- Only Asia and South America appear to be retaining more women than men; for all other continents women are disproportionately leaving the workforce compared to the workforce population
- Asia followed by South America and Europe perform the worst in terms of gender balance of senior leadership.
- For all continents except Africa and Oceania, women do not reach leadership positions at the same proportions that they exist in the workforce

COMPANY AGE ANALYSIS

COMPANY AGE AND SIZE ANALYSIS



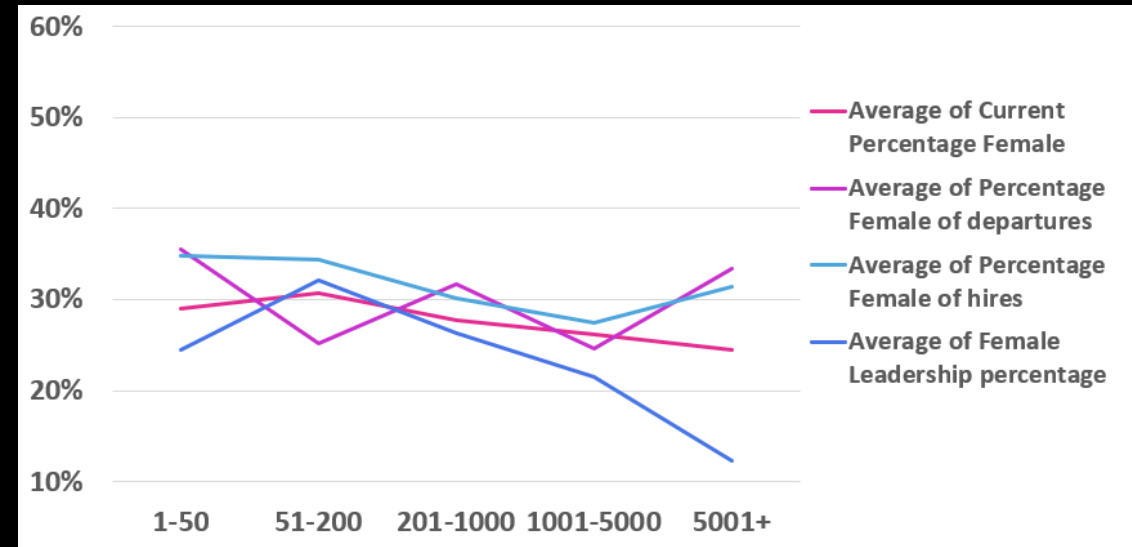
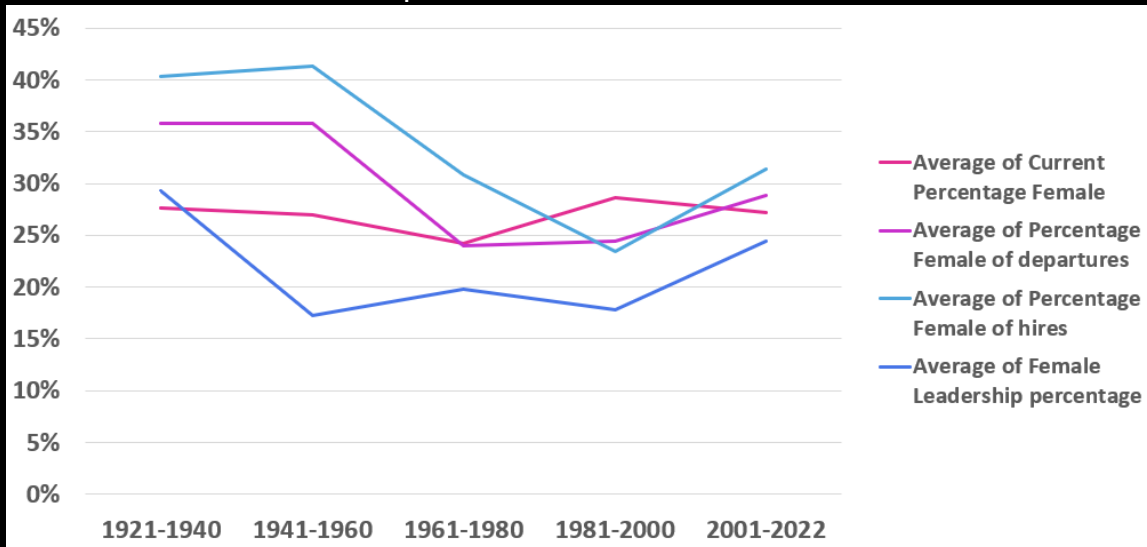
- Organisations whose gender balance was furthest from the average (largest bubbles) tend to be:
 - medium sized and medium aged
 - small, new companies
- The smallest companies have the best average gender balance, but also some of the worst single company data.
- Medium sized organisations (50-1000) fare increasingly worse as size increases.
- The worst modal gender balance figures belong to the largest (1000+ headcount) organisations, however a small number of outliers in this group perform significantly better.



Some companies across all size categories dramatically out-perform their competitors in terms of gender balance (blue outline) meaning that gender balance can be strongly influenced by the culture and practices at company rather than purely industry level

COMPANY AGE AND SIZE ANALYSIS

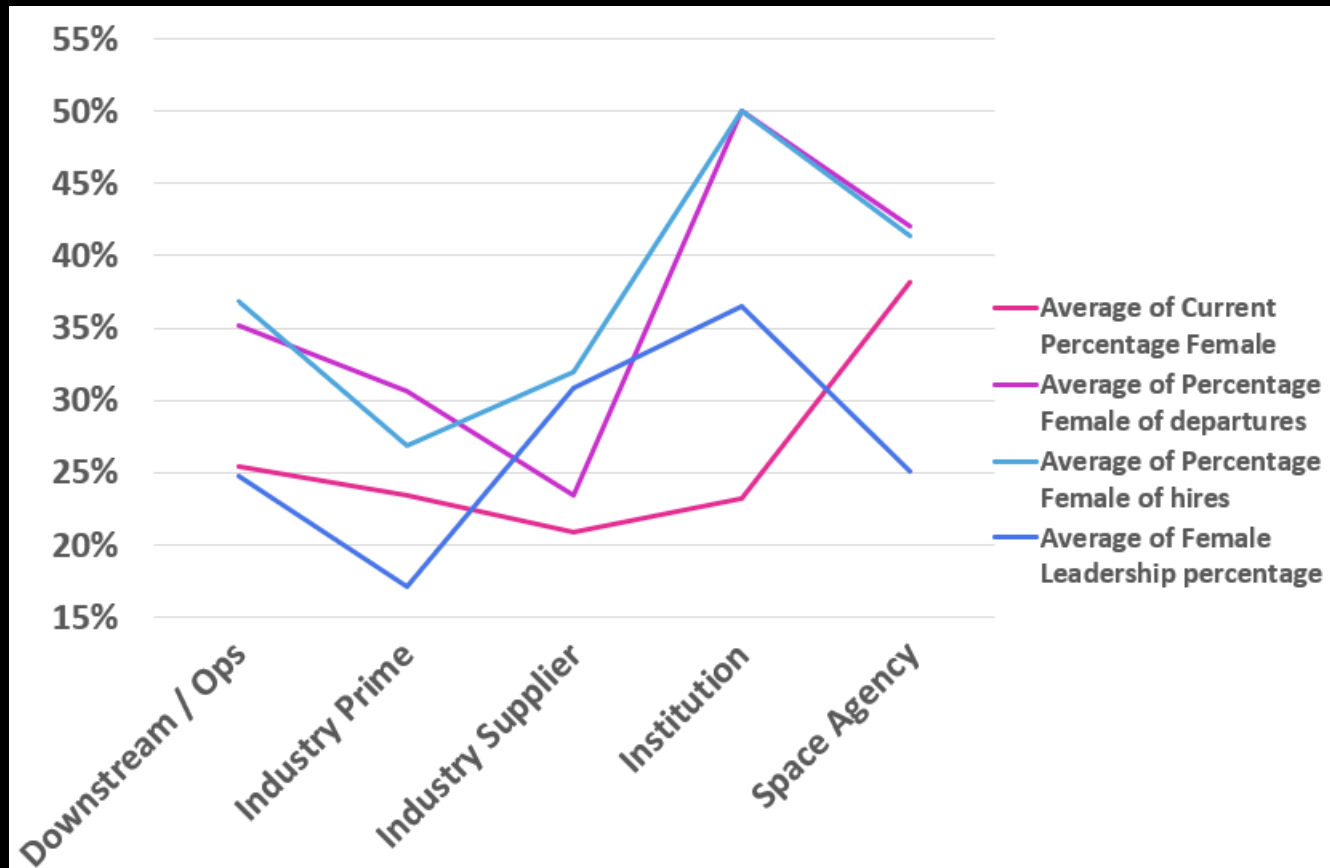
- Smallest, newest companies have comparatively good gender balance overall, but the highest female turnover and often poor female leadership statistics
- At company sizes over 50, workforce gender balance, female leadership and female hires all decrease almost linearly with company size increase
- Very few space companies were founded in the pre-1960s, and those that were differ in nature (often institutions) compared to the broader industry. Data for these ranges is skewed by the performance of individual companies!





ORGANISATION TYPE ANALYSIS

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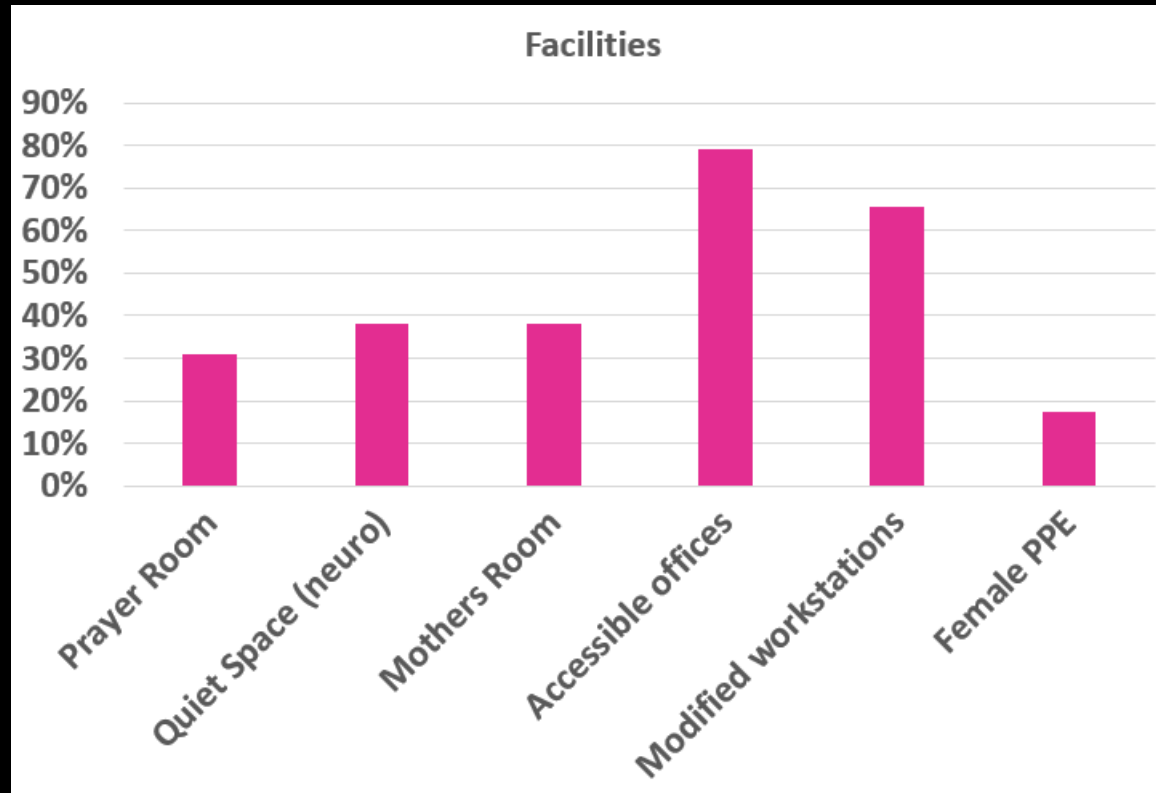


- Industry primes fared poorly in hiring women and having women in leadership. They were also the only category to be losing more women than they recruit.
- Institutions have very high turnover of women compared to their average workforce population. They have the highest proportions of women in leadership positions, but the overall workforce proportions remain low.
- Space Agencies have the highest proportions of women in the workforce, but also have high turnover. The trend of gender balance does not extend to their senior leadership.
- Industry suppliers are the only group in the sample retaining significantly higher proportions of women than they hire, but starting from a low percentage female in the workforce.
- Across all organisation types women leave the industry disproportionately to men (higher percentage than the existing workforce population)
- It should be re-iterated that these figures are based on small datasets!



COMPANY PRACTICES

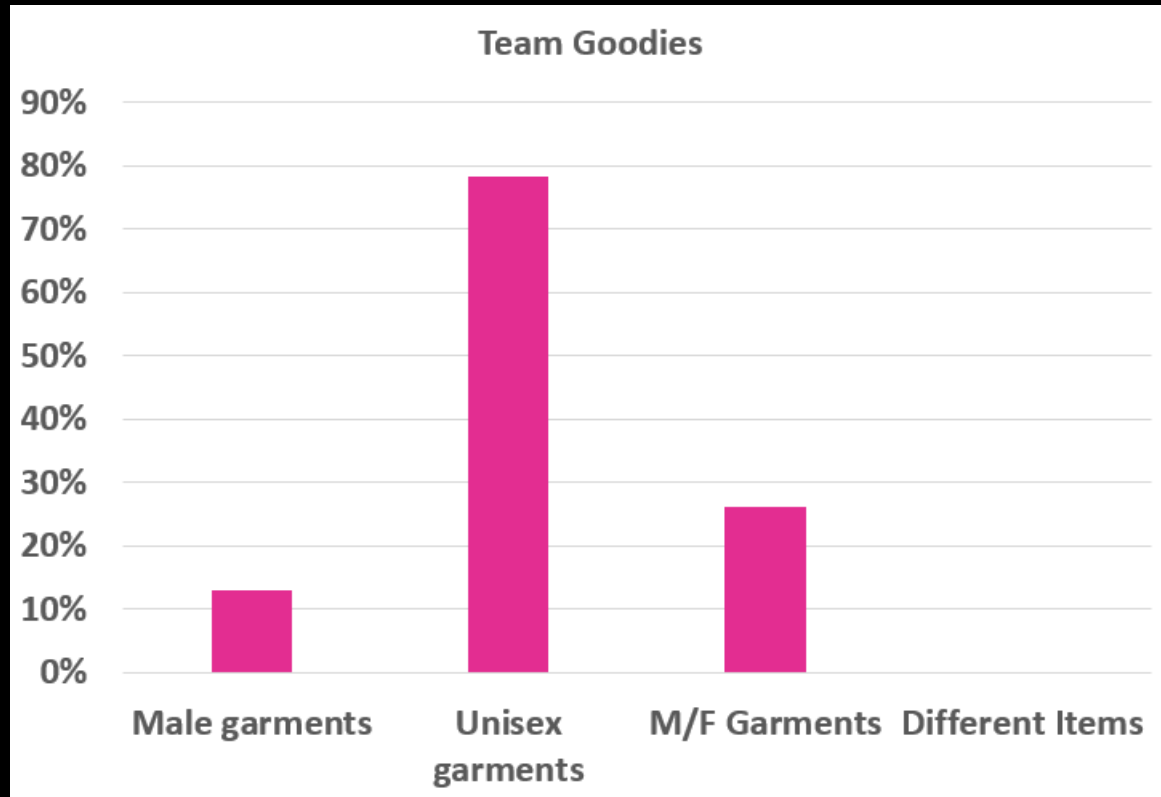
FACILITIES



Which of these facilities does your company provide for employees?

- Room for prayer
- Quiet spaces for needs of neurodivergent employees etc
- Private room for lactating mothers
- Accessible office buildings (all locations and floors are wheelchair accessible)
- Modified workstations for accessibility needs/software support tools for disability
- PPE specifically designed for women (clean room/hazardous environment garments, safety shoes)

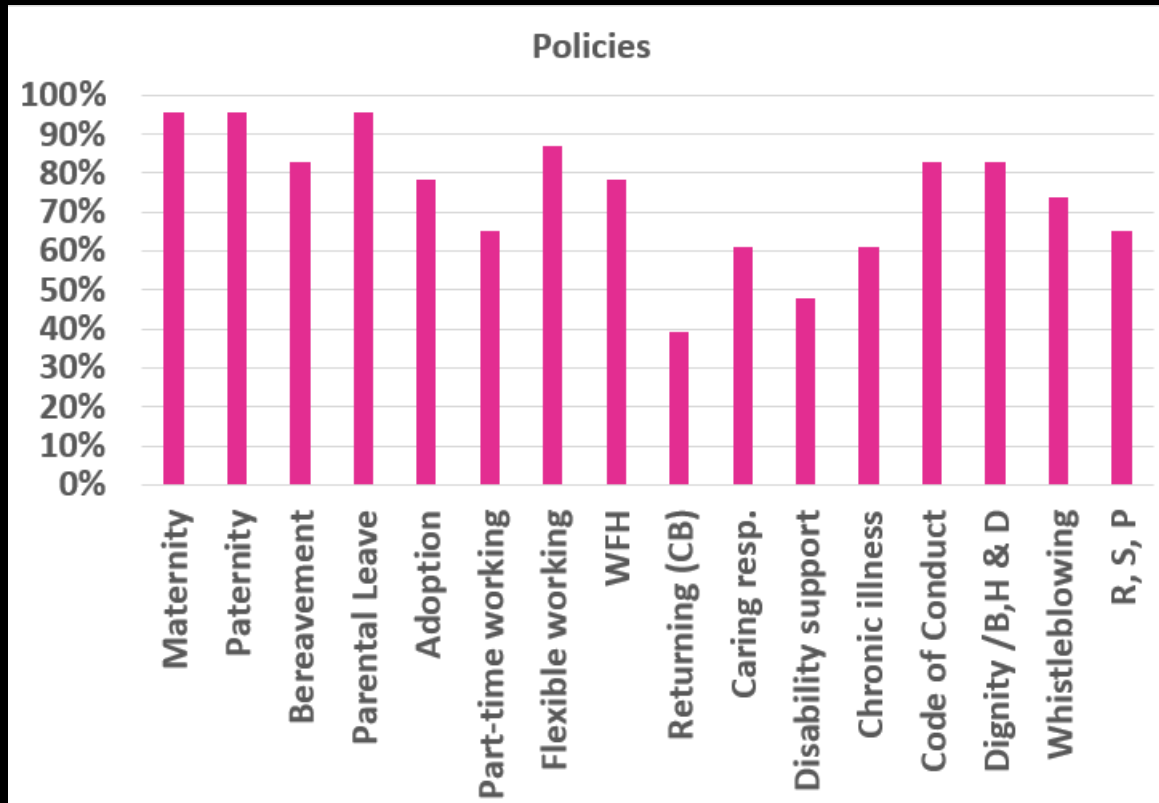
TEAM GOODIES



If team workwear has previously been provided (project/department t-shirts, jackets, accessories etc) has the provided garment been:

- Garments designed for men
- Unisex garments
- Male and female garments (different cuts, but the same type of garment)
- Different items, stereotypically suitable for only one gender (men's neck ties vs women's scarves, cufflinks vs brooches, etc)

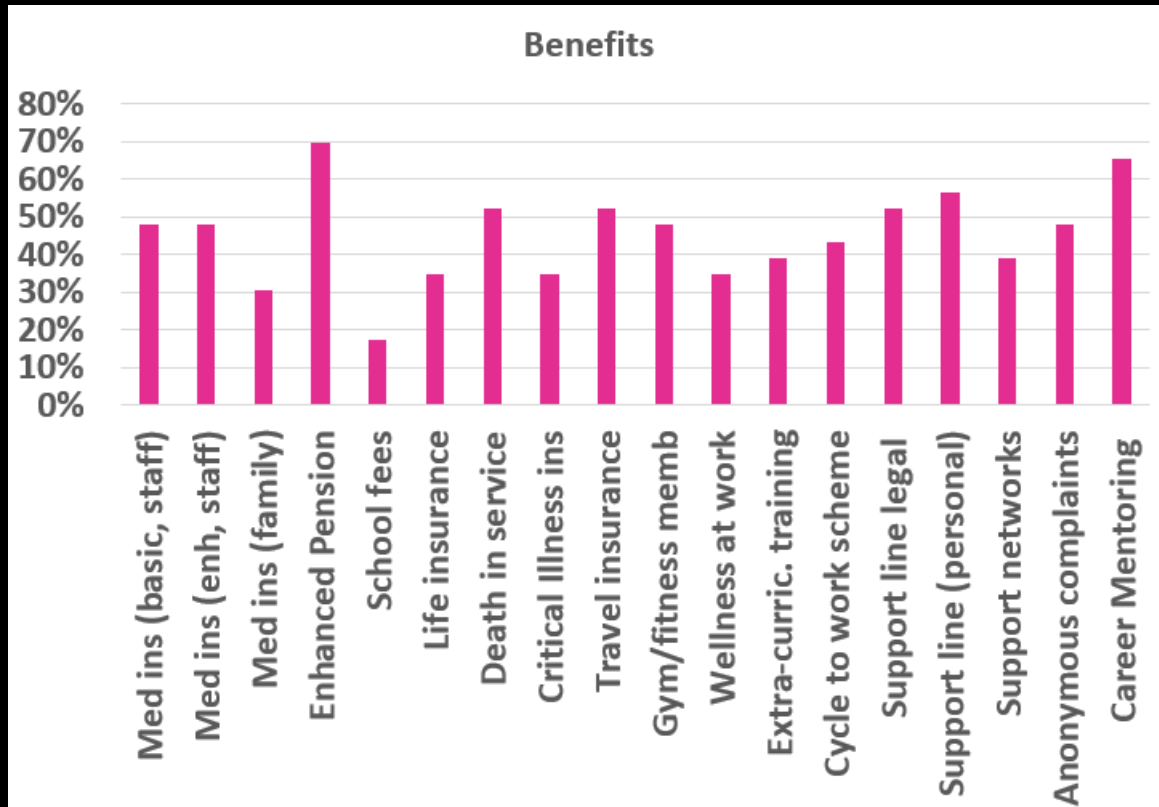
POLICIES



Which of the following topics do you have official company policies for (currently issued and available to staff)

- Maternity
- Paternity
- Bereavement
- Parental Leave
- Adoption
- Part-time working
- Flexible working
- Working from home
- Returning to work after a career break
- Caring responsibilities
- Disability support
- Chronic illness
- Code of Conduct
- Dignity at work/Bullying, Harassment and Discrimination
- Whistleblowing Policy
- Recruitment, Selection and promotion

BENEFITS

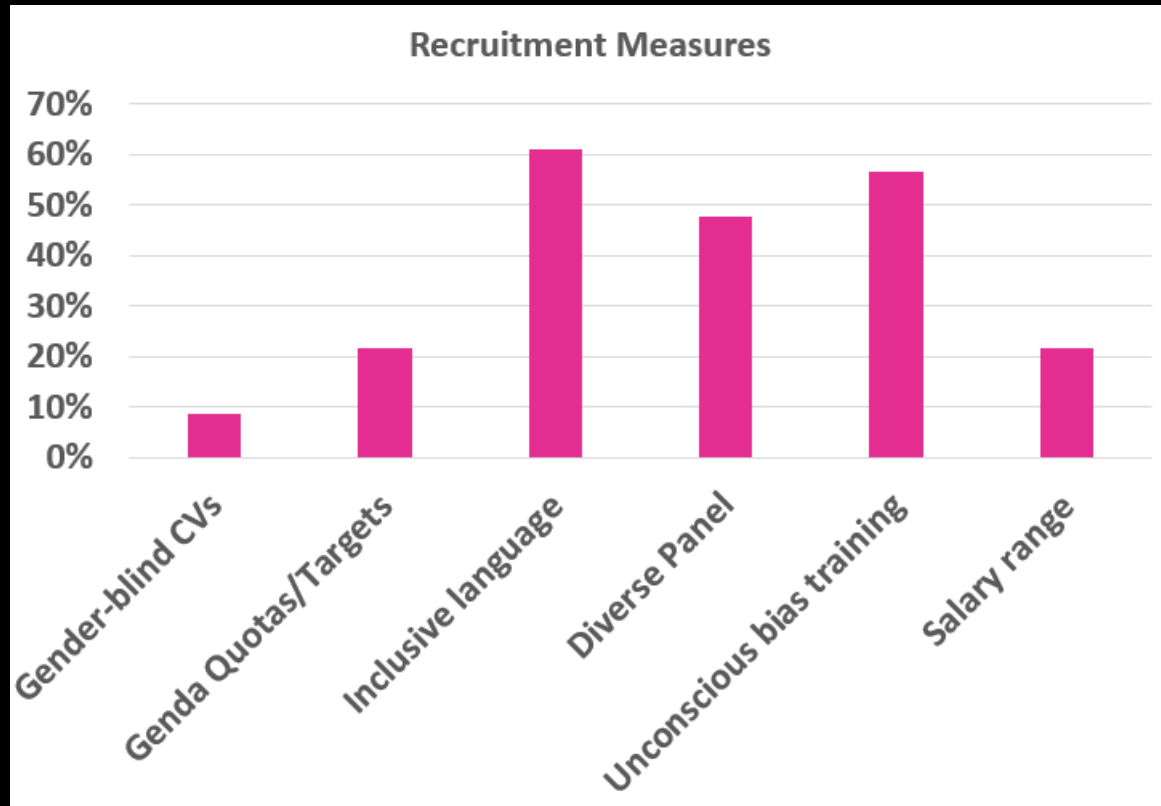


What lifestyle support do you provide for your employees?

- Medical insurance (basic, for staff only)
- Medical insurance (enhanced, for staff only)
- Medical insurance for family members
- Enhanced Pension Scheme
- School fees assistance or memberships
- Life insurance
- Death in service
- Critical Illness insurance
- Travel insurance
- Gym/other fitness memberships

- Wellness activities at the workplace (Yoga, Meditation, Massage)
- Extra-curricular training in the workplace (Language courses, art courses, other)
- Cycle to work scheme
- Support line memberships for legal topics
- Support line memberships for other topics (mental health, financial concerns, substance abuse, other)
- Special interest support networks (bereavement, mental health, LGBTQ+, other)
- Anonymous complaints service (for complaints about colleagues or the employer)
- Career Mentoring within the company

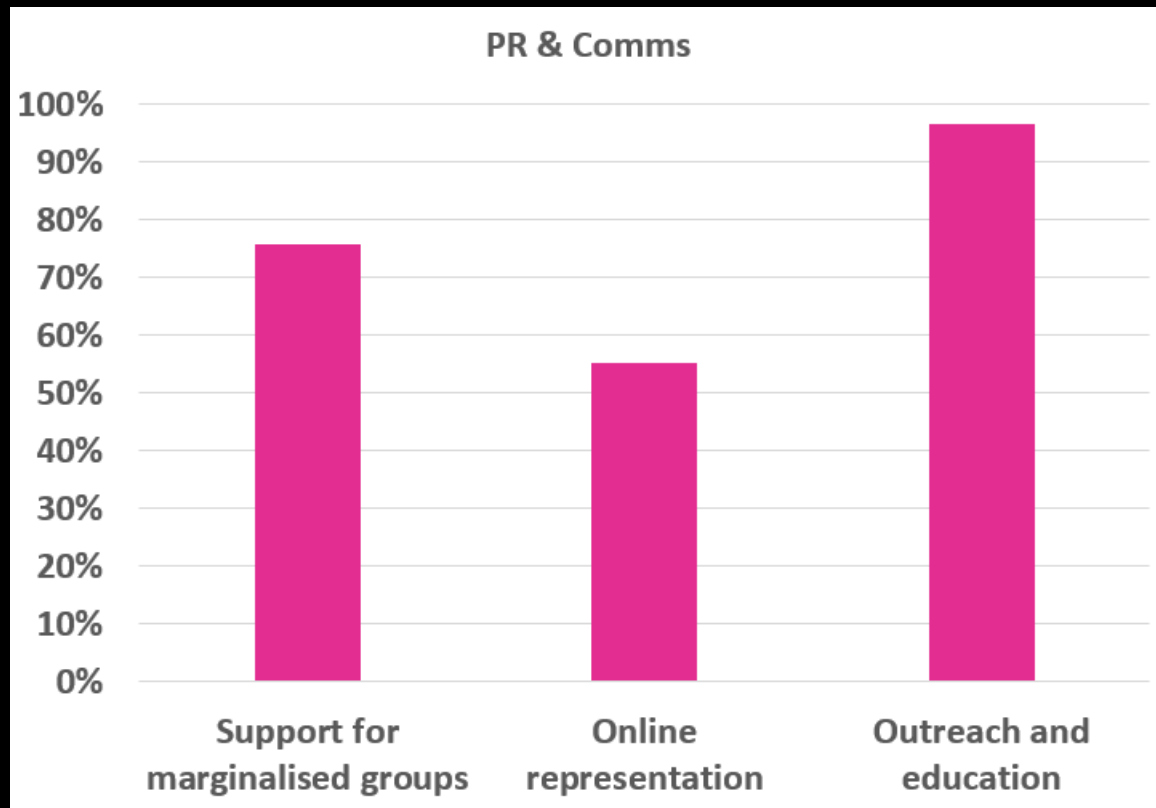
RECRUITMENT MEASURES



When recruiting, does your company:

- Provide gender-blind resumes to recruiting staff?
- Have gender quotas/targets?
- Consciously use inclusive language in job adverts?
- Ensure diversity of participants in the review panel?
- Provide unconscious bias training for recruiting staff?
- Provide salary range in the job description

PR AND COMMUNICATIONS



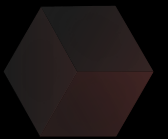
Has your company ever actively supported (on social media, with internal events, on your website etc) awareness days focussed on marginalised groups?

Considering your company's online presence (Website, social media, online press) is there an active effort to represent minorities?

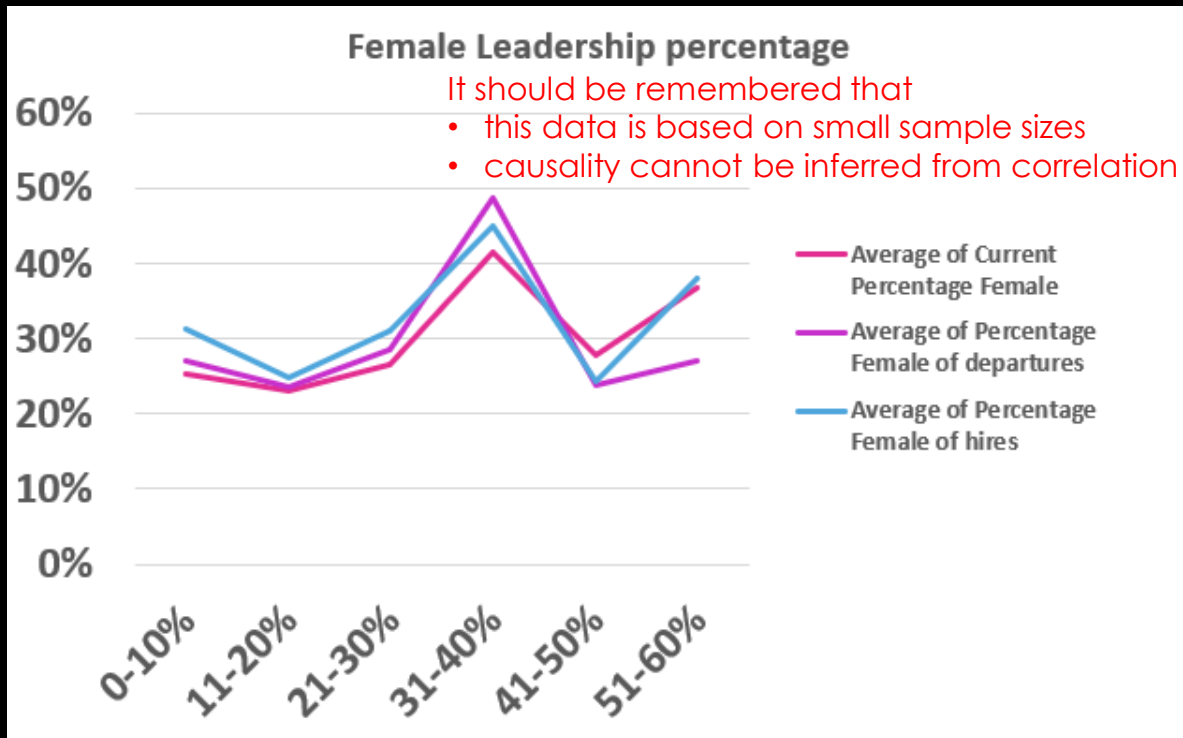
Does your company support your employees taking part in outreach and educational events for students and/or the general public (during company time)?

SO WHAT MEASURES CORRELATE TO IMPROVED GENDER BALANCE ?

The following charts compare gender balance percentage elevation for those companies that implement this policy against those that do not.

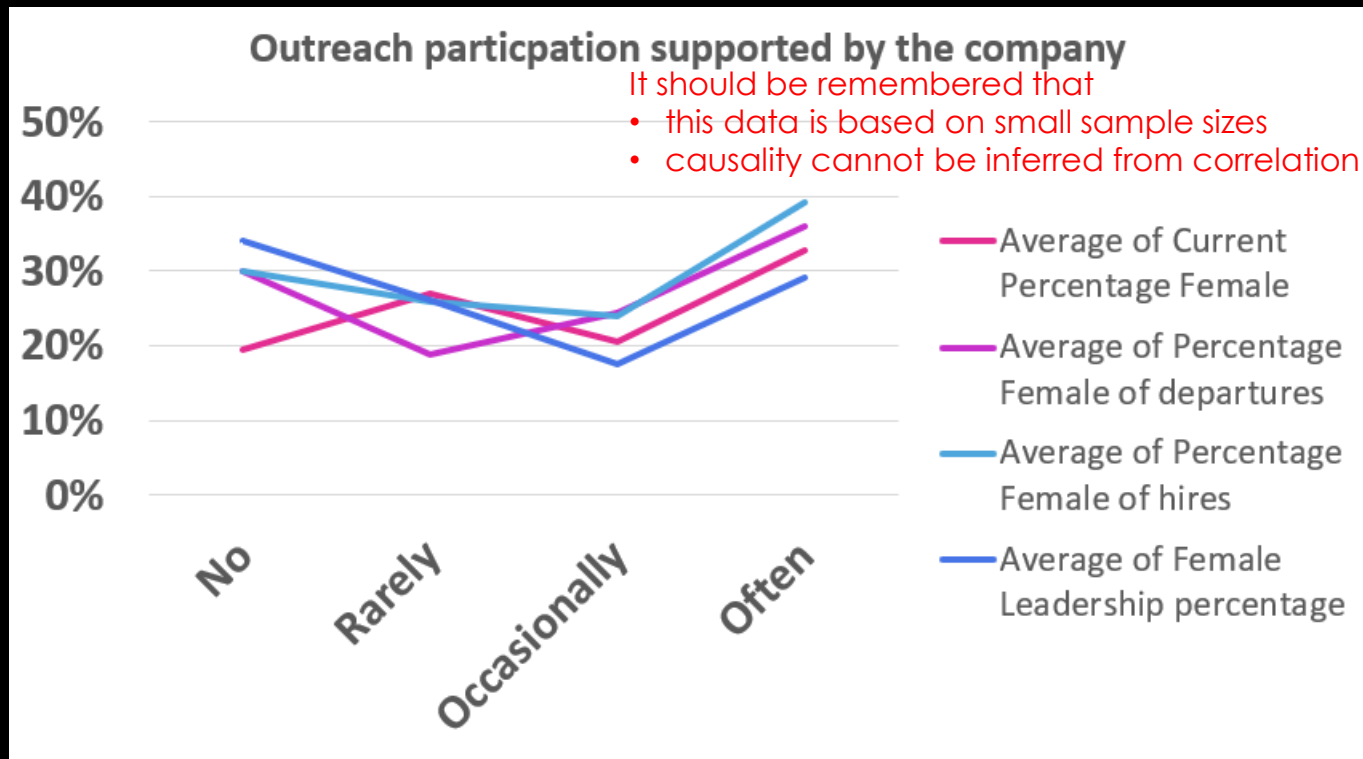


WHAT MEASURES CORRELATE TO INCREASED GENDER BALANCE?



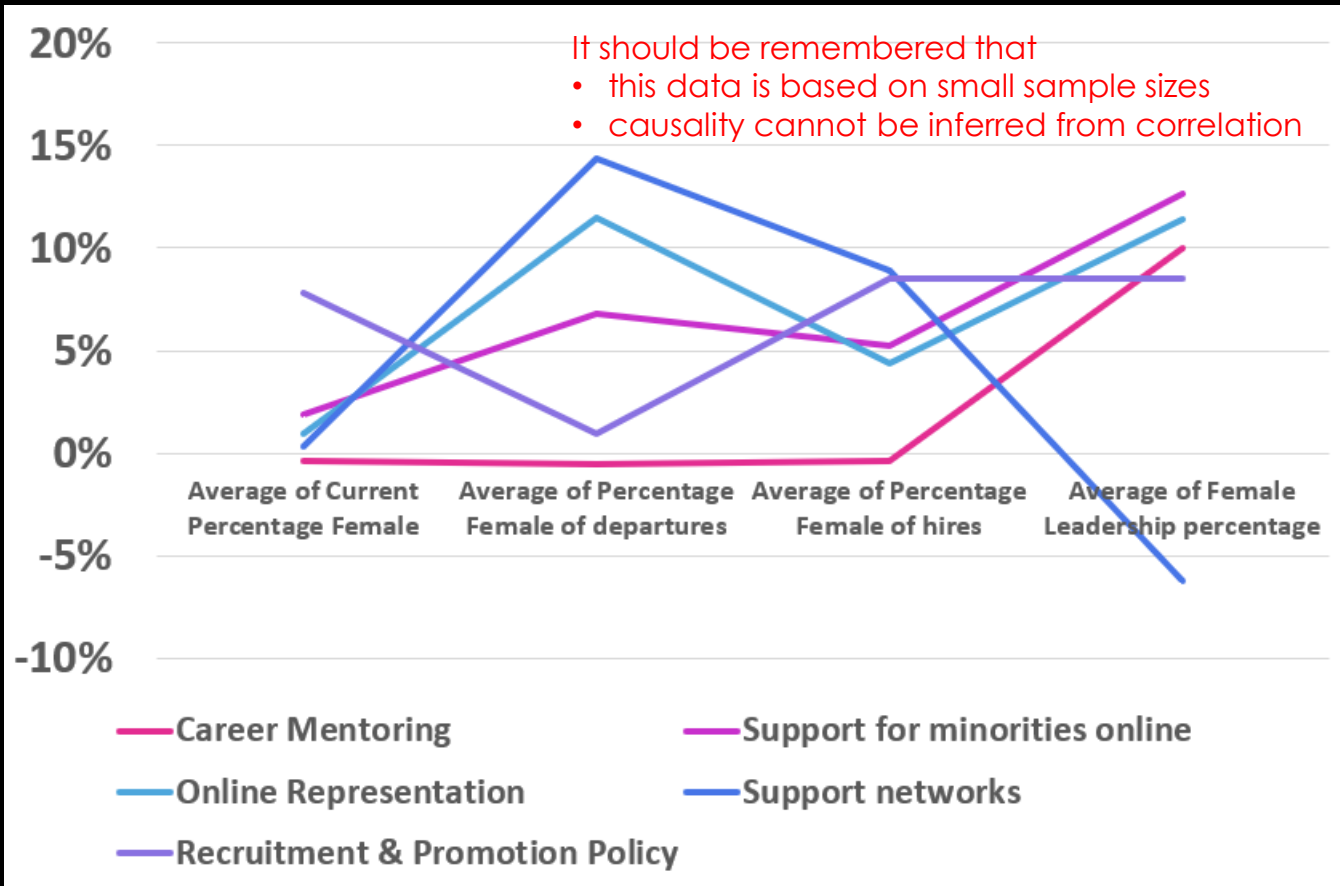
- As proportion of female leadership increases, gender balance across other metrics also increases, up to around 40% female leadership.
- For those organisations with more than 40% female leadership, the other gender balance metrics fall back to average values
- NB: The types of organisations with leadership close to gender balance tend to differ from those with lower female leadership (more agencies and institutions, less commercial engineering companies)

WHAT MEASURES CORRELATE TO INCREASED GENDER BALANCE?



- Nearly all space companies participate in some degree of outreach, so there is not a statistically useful sample size for those that do not.
- Very few organisations self-declare as “rarely” supporting outreach so this is a likewise small sample.
- Companies that “often” rather than “occasionally” support their employees in participating in outreach, have better gender balance across all metrics

WHAT MEASURES CORRELATE TO INCREASED GENDER BALANCE?



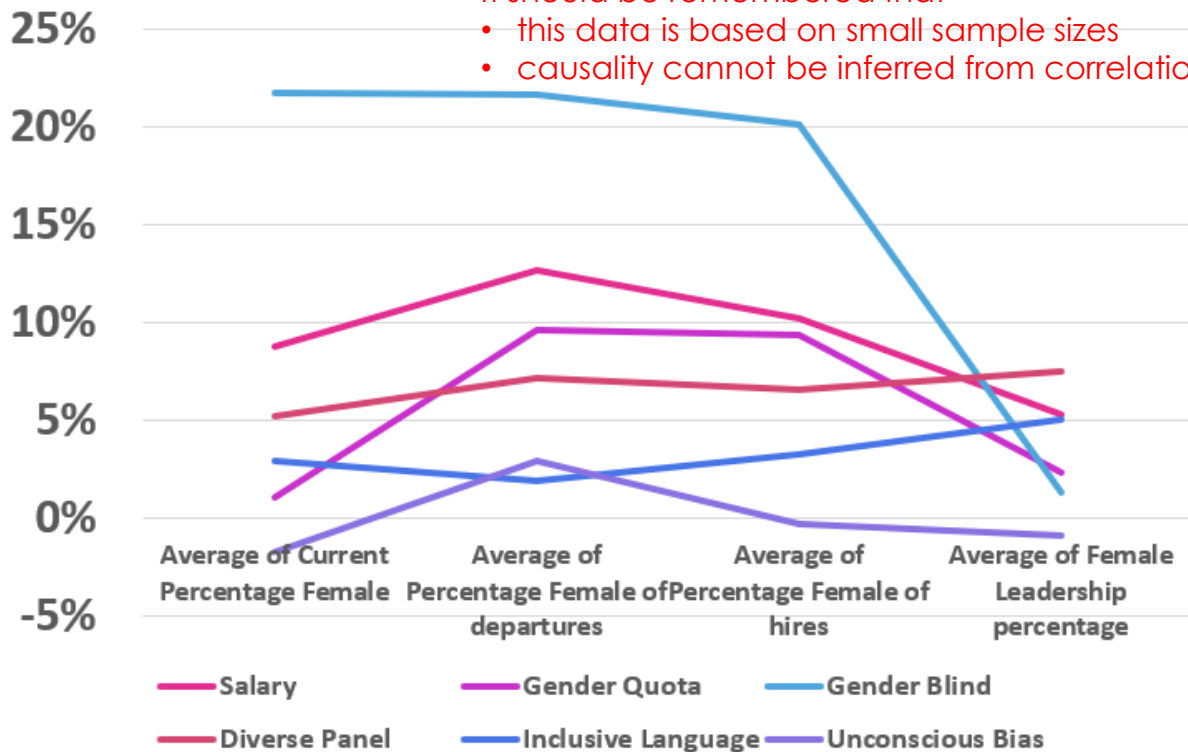
- Career mentoring has no measurable effect on workforce gender balance or turnover, but links to a 10% higher female leadership percentage
- Online representation of women and public support for minorities online correlate to ~5% higher female hires and ~13% higher female leadership
- Having a recruitment and promotion policy links to ~8% higher female workforce, hires and leadership, and proportionally lower female departures
- Support networks are offered in companies that have surprisingly higher female departures (14%) and lower female leadership (-6%), although it also correlate with a 9% increase in female hiring

WHAT MEASURES CORRELATE TO INCREASED GENDER BALANCE? - RECRUITMENT

Recruitment Measures

It should be remembered that

- this data is based on small sample sizes
- causality cannot be inferred from correlation



- Companies using gender blind CVs have significantly higher female percentages and hires (22%, 20%) than those that do not. This trend does not extend to women in leadership.
- Publicising salary range for the role correlates with higher gender balance across all metrics (8%, 13%, 10%, 5%)
- Diverse panels correlates with improved gender balance, (~5-8%) especially for women in leadership
- Inclusive language correlates with improved gender balance, especially in female hiring (~3-5%)
- Gender quotas correlate companies with higher female hiring, but also similarly high female departures.
- Unconscious bias training shows a small (~2%) drop in gender balance parameters, and increased female departures, than companies that do not employ this.

WHAT MEASURES CORRELATE TO INCREASED GENDER BALANCE?

Many possible hypotheses exist to explain these trends, here I try to illustrate why we should not jump to conclusions about the causality of these correlations:

Companies using gender blind CVs have significantly higher female percentages and than those that do not. This trend does not extend to leadership	For leadership positions, candidates are already known to the hiring panel, so gender blinding CVs is redundant	Gender blinding CVs is an uncommon policy and unlikely to be implemented unless proposed by female leadership
Publicising salary range for the role correlates with higher gender balance across all metrics	A gender pay gap persists, and publicising salaries makes it more likely that women will achieve comparable remuneration	The types of organisations likely to publicise salaries (institutions, government bodies like space agencies) have higher existing gender balance
Diverse panels correlates with improved gender balance, especially for women in leadership	Diverse panels are less intrinsically biased and are more likely to advocate for candidates from other minorities	Diverse hiring managers are likely to be available to participate in interviews in companies with better existing gender balance
Gender quotas correlate companies with higher female hiring, but also similarly high female departures.	Where quotas exist, more women may be hired in total, but they may be placed in unsuitable roles to fulfil them, which they may not enjoy or perform well in	Where the workforce knows that gender quotas are in place, female leaders are not afforded the respect due to their rank as they can be viewed as “undeserving” of their position



SUMMARY

Improving diversity, especially with regard to gender balance, is seen as a priority across industry, and many initiatives exist to improve this.

In order to balance business interests against the pursuit of gender balance, companies must prioritise which activities they will implement.

From initial inspection, some easy and cheap to implement measures correlate more strongly with improved figures than other costly and complex policies.

More research into this topic, including increased survey participation, would improve the reliability of data and any trends identified.

THANK YOU

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