

INCLUSIVE IT - GENDER

A definitive series of evidence reports from BCS exploring equality and diversity within the IT workforce

A report by the British Computer Society (BCS)

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Established in 1957, the British Computer Society (BCS) is the leading body for those working in IT. With a worldwide membership now of more than 55,000 members in over 100 countries, BCS is the qualifying body for Chartered IT Professionals (CITP).

BCS was incorporated by Royal Charter in 1984. Its objectives are to promote the study and practice of computing and to advance knowledge of, and education in, IT for the benefit of the public. BCS is also a registered charity.

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1 SUMMARY OF KEY FINDINGS

- Women accounted for 50% of the working age population in 2018 (those aged 16-64), 47% of those in work and 46% of the unemployed.
- There were 226,000 female IT specialists in the UK workforce during 2018 - 16% of the total at that time
- The level of female representation in IT varies by job type - from around one in twenty IT Engineers and Telecoms engineers (5% and 3% respectively) - to around one in three IT Project/programme managers (30%).
- The unemployment rate for female IT specialists over the 2017/2018 period was just 2.0% - lower than that for male IT specialists (2.2%) and less than half the overall rate for the UK labour market (4.3%).
- Female IT specialists were less likely to be working in micro-business sites (those with up to 10 staff) than their male counterparts (i.e. 10% of female IT specialists and 14% of males).
- The gender balance for IT specialists was worse within the manufacturing, construction and IT sectors (within which women accounted for just 12%, 12% and 13% of IT specialists).
- Female IT specialists were almost five times more likely to be working part-time than males (i.e. 14% versus 3%) – most often as they did not want full-time work.
- At £18 per hour, the median hourly earnings for female IT specialists in 2017 was 11% less than that recorded for males working in IT positions.
- Female IT specialists appear just as likely to be in 'responsible positions' (i.e. those with managerial/supervisory responsibilities).
- Female IT specialists are marginally more highly qualified than their male counterparts and in 2018, six in ten (60%) held a degree or equivalent level qualification.
- Female IT specialists were nearly three times less likely than males to hold an IT degree (5% compared with 14%).
- Female IT specialists are notably less likely to obtain employment through the use of agencies or in-company contacts.

2 BACKGROUND

Over the past three years, the British Computer Society, as part of its aim to make IT good for society, has been tracking and reporting upon levels of female representation within the IT labour market, highlighting areas of particular concern for the industry and supporting infrastructure and providing supporting evidence for those seeking to improve the gender balance within our industry.

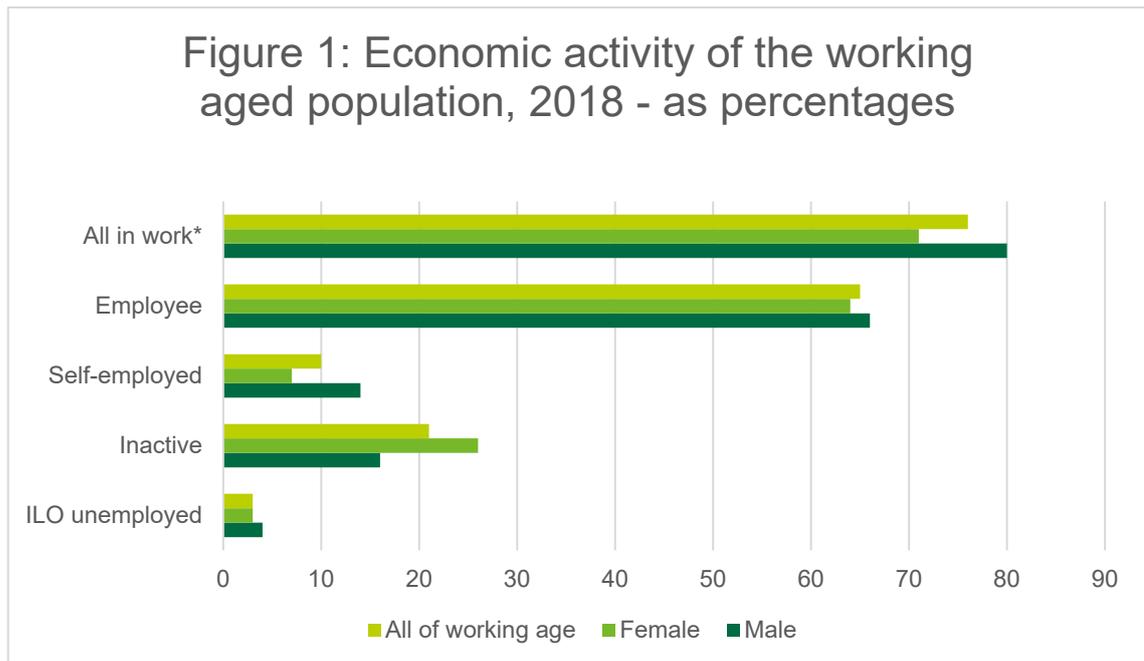
In 2017, we expanded the reach of our analysis to cover other 'minority groups' – namely, the disabled, ethnic minorities and older workers, and following positive feedback/comment from the IT community, this year have elected to continue with this broader analysis of diversity in IT.

This input allows us for the first time to not only identify the key issues in question, but also potential/preferred resolution mechanisms as suggested by our membership base. In summary then, these reports aim to:

1. Provide a definitive source of information concerning the levels of 'minority' representation amongst the IT professions.
2. Identify and explore the extent to which the market is failing those from minority groups, as demonstrated by below-average levels of representation and compensation amongst these groups.

3 GENDER IN CONTEXT, LABOUR MARKET OVERVIEW

There were 20.7m women aged between 16 and 64 in the UK during 2018 representing 50% of the total working age population at that time. Of these, 71% were in work, 26% were classed as ‘inactive’ and 3% were unemployed (compared with figures of 80%, 16% and 4% respectively for working age males).



Source: Analysis of ONS Quarterly Labour Force Survey by BCS

* INCLUDES A SMALL NUMBER OF INDIVIDUALS IN WORK BUT NOT AS EMPLOYEES/SELF-EMPLOYED (I.E. <1% OF THE TOTAL)

“WOMEN ACCOUNTED FOR 50% OF THE WORKING AGED POPULATION IN 2018”

Overall in 2018, the level of female representation within the workforce was slightly lower than would be expected (i.e. accounting for 47% of those in work compared with 50% of the population), and this was also the case when considering representation amongst the unemployed at that time – women in this case accounting for 46% of the total. By contrast in 2018, women were seen to account for a higher proportion of the inactive population (62%).

4 GENDER AND IT EMPLOYMENT

4.1 Overview

There were 226,000 female IT specialists in the UK workforce during 2018 - 16% of the total at that time. As illustrated in the chart below, the level of female representation in IT was down slightly on the previous year (1 percentage point) though over the past 5 years it has consistently remained well below the level observed within the workforce as a whole (47%).

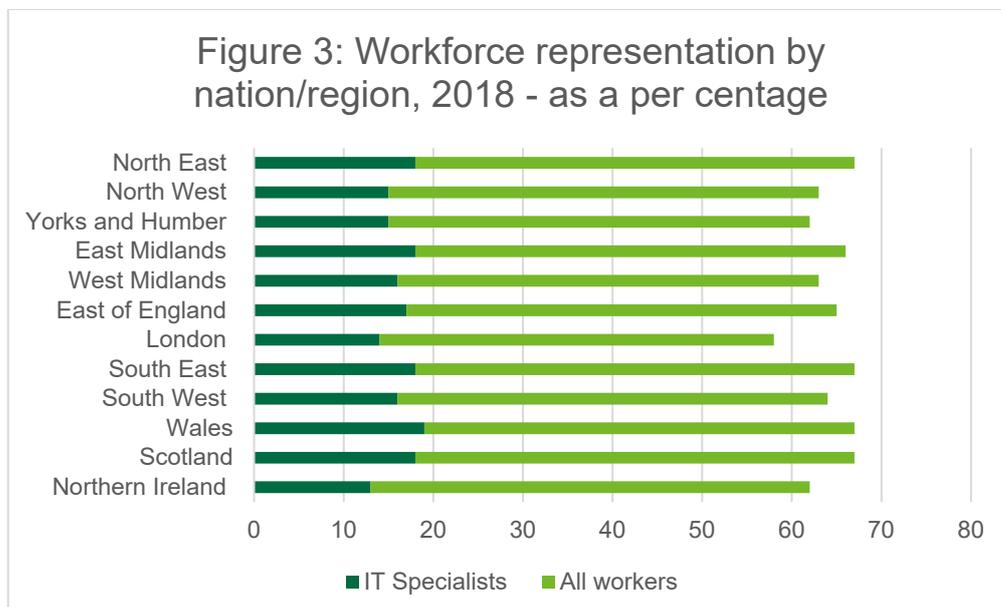
“IN 2018, JUST 16% OF IT SPECIALISTS WERE WOMEN”

4.2 Representation across the UK

Amongst the English regions, London was associated with the lowest level of female representation amongst IT specialists in 2018 and at that time, just 14% of IT specialists working in the capital were women. The capital was also seen to have the lowest level of female participation within the workforce as a whole however, and just 44% of London workers in 2018 were women compared with 47% amongst workers across the UK as a whole.

“IN 2018, ONLY 14% OF IT SPECIALISTS IN LONDON WERE WOMEN”

Aside from London, the gender balance in IT appears to be particularly poor in Northern Ireland, where, over the 2014-18 period, just 13% of IT specialists on average were women.



5 NATURE OF EMPLOYMENT

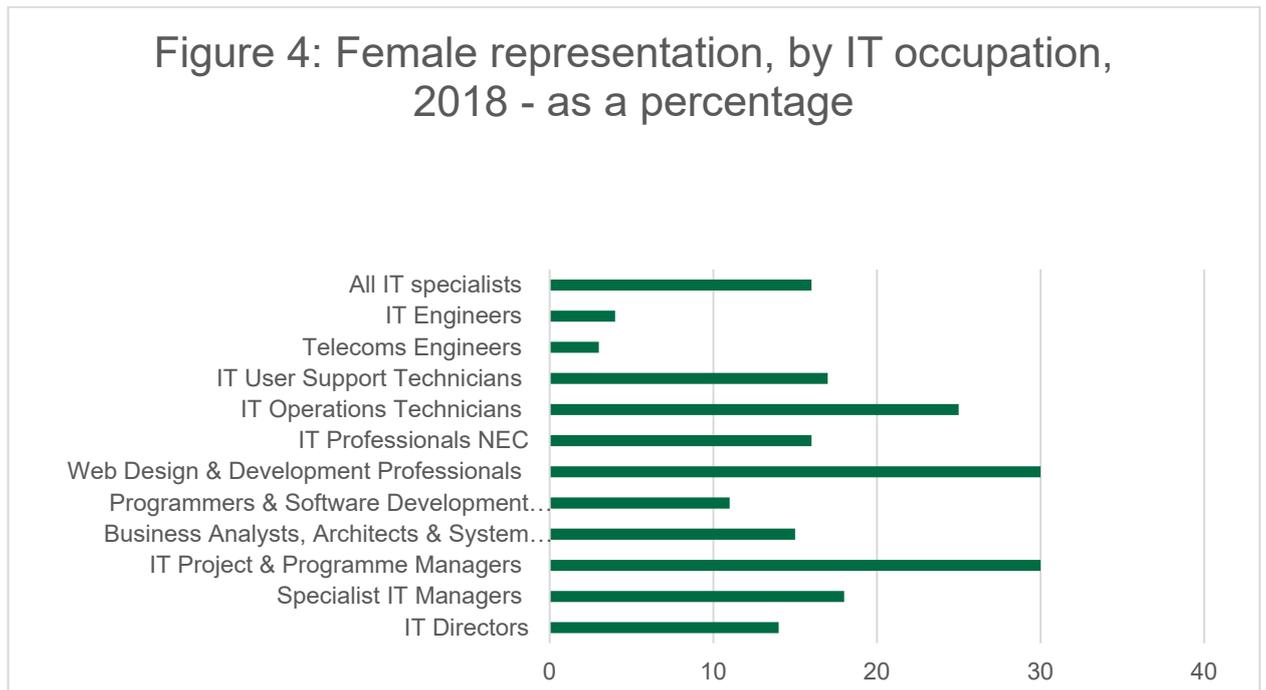
5.1 Occupation

Further analysis of the gender balance for specific IT roles shows female representation within the IT professions varying from around one in twenty for IT Engineers and Telecoms engineers (5% and 3% respectively over the 2014-18 period), to around one in three IT Project/programme managers (30%).

“LESS THAN ONE IN TWENTY TELECOMS ENGINEERS ARE WOMEN”

Women are also more poorly represented amongst IT Directors (just 14% of which in 2018w, ere female) and Programmers/Software developers (11%).

Figure 4: Female representation, by IT occupation, 2018 - as a percentage



5.2 Permanency of employment

Female IT specialists are marginally more likely to be working on a non-permanent basis than their male counterparts (4% of women compared with 3% of men during 2018) though the proportion working in temporary positions was slightly lower than amongst women in the workforce as a whole (6%).

5.3 Gender and unemployment

Over the course of 2017/18 there were, on average, approximately 5,000 female IT specialists in the UK that were unemployed i.e. 15% of all unemployed IT specialists in the UK over this period.

At 2.0% the associated unemployment rate¹ for female IT specialists was lower than that for males normally working in the IT field (2.2%) and well below the overall unemployment rate in the UK (4.3% over the 2017/18 period).

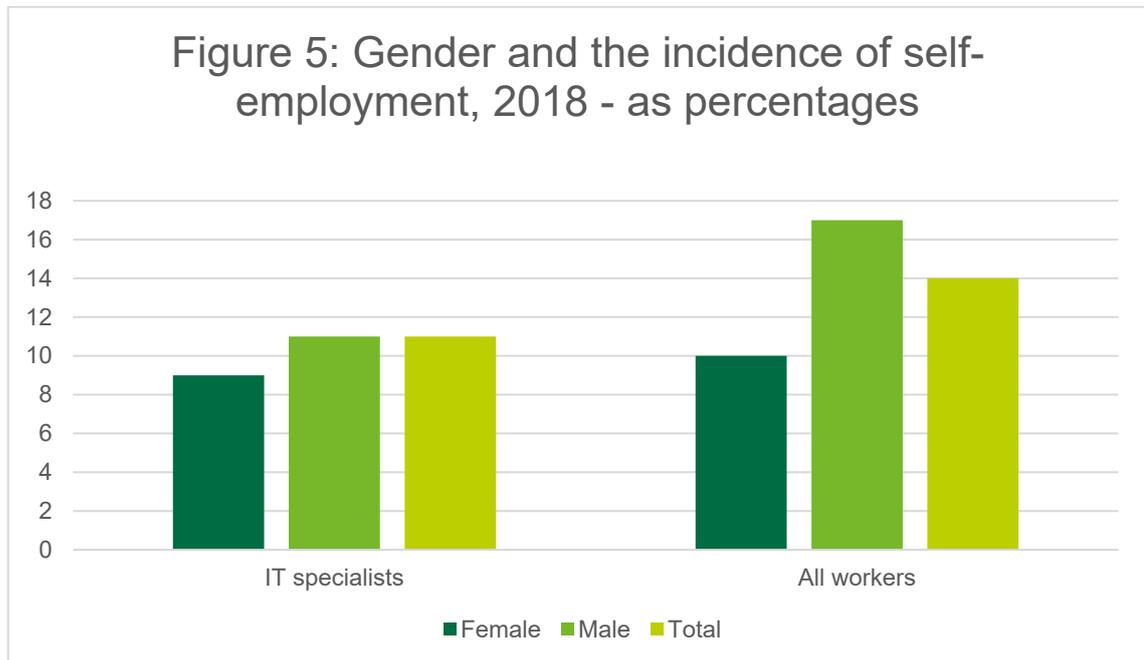
6 EMPLOYMENT CHARACTERISTICS

6.1 Self-employment

The incidence of self-employment has risen dramatically over the past 5 years - for both IT specialists and workers more generally- and in 2018 it is estimated that 14% of all UK workers and 11% of IT specialists (156,000) were working on a self-employed basis.

“FEMALE IT SPECIALISTS ARE LESS LIKELY TO BE SELF-EMPLOYED THAN MALES WORKING IN IT POSITIONS”

For both groups of workers, the incidence of self-employment was found to be higher amongst males than females, though the difference was less notable amongst individuals working in IT positions than within the workforce as a whole (i.e. a difference of 2 percentage points in this case compared with 7 percentage points for all workers).



Source: Analysis of ONS Quarterly Labour Force Survey by BCS

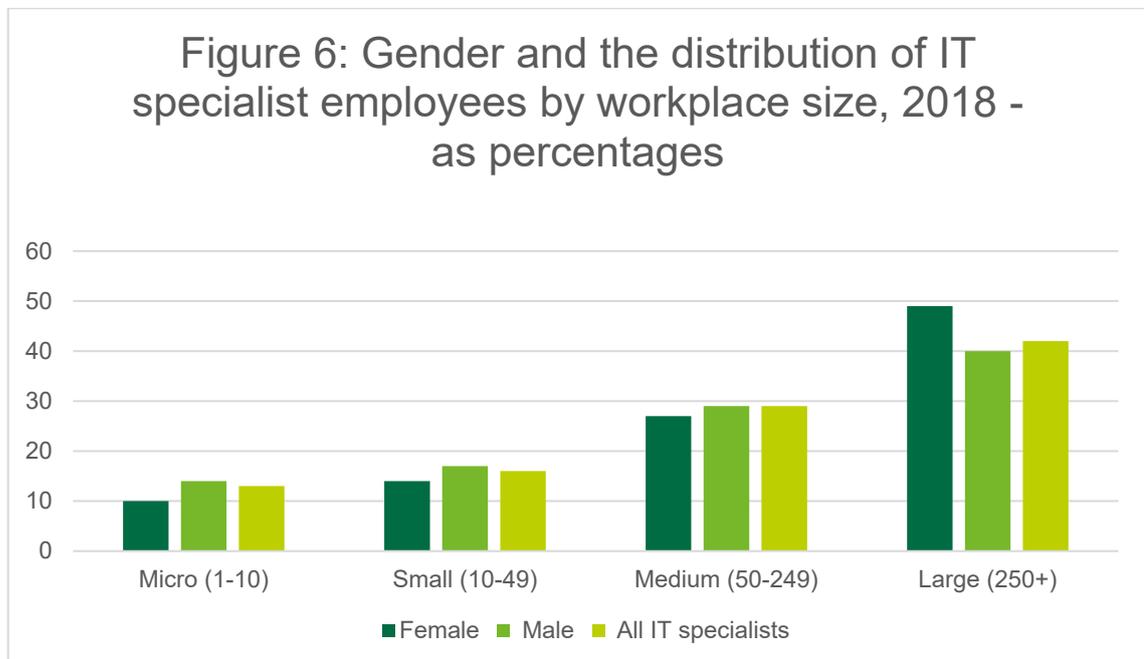
6.2 Employees and size of workplace

IT specialists working as employees are, perhaps understandably, more likely than others to be employed within larger workplacesⁱⁱ (i.e. as micro/small sites are less likely to have an in-house

function) and whilst just 28% of UK employees as a whole were working in larger sites during 2018 (those with 250 or more staff), a figure of 42% was recorded for IT specialist employees.

“FEMALE IT SPECIALISTS MORE LIKELY TO WORK IN LARGER WORKPLACES”

This observation was still more pronounced for female IT specialist employees – 49% of which were working in larger workplaces during 2018.



Source: Analysis of ONS Quarterly Labour Force Survey by BCS

Female IT specialists were also much less likely than their male counterparts to be working in micro business sites with comparison figure in this case of 10% and 14% respectively.

6.3 Industry of employment

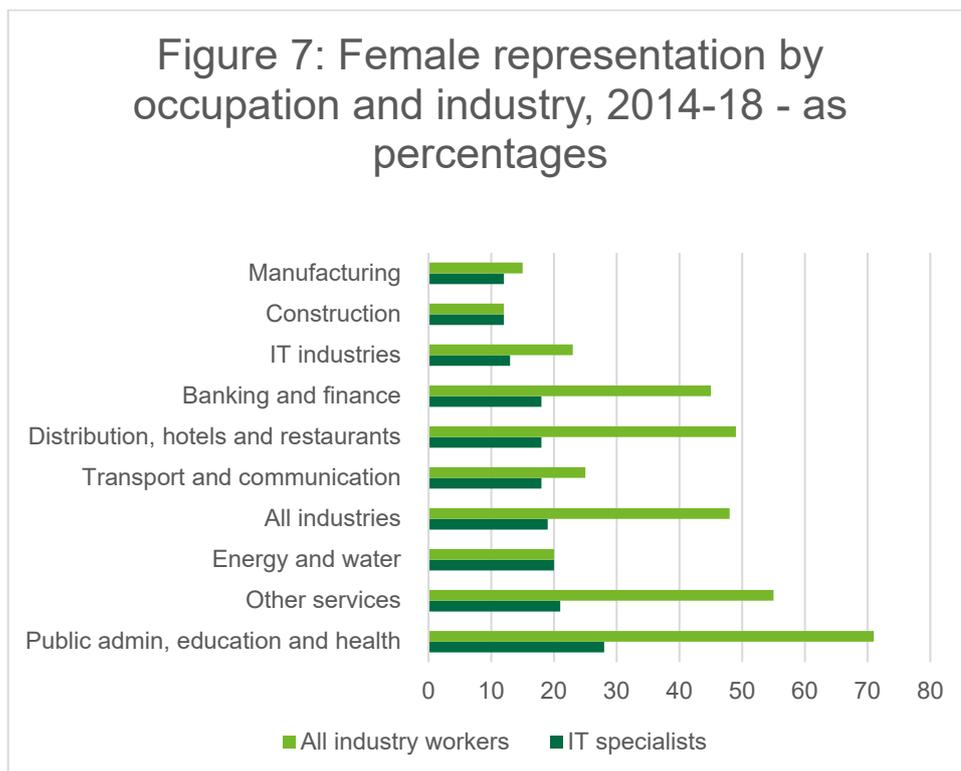
Just under four in ten female IT specialists (39%) were working in IT businesses in 2018 – a notably lower proportion than that recorded for male IT specialists at that time (45%).

After IT, the next largest employer of IT specialists (male or female) were Banking/Finance (22% of female IT specialists and 21% of IT specialists as a whole), and the public sector (20% and 13% respectively).

“JUST UNDER FOUR IN TEN FEMALE IT SPECIALISTS WORK WITHIN THE IT SECTOR”

Looking in more detail at the levels of representation for female IT specialists in different industries it can be seen that representation was highest in the, public sector and other services during the 2014-2018 period, during which figures of 28% and 21% respectively were recorded.

Conversely, manufacturing, construction and the IT industries were shown to have the worst gender balance with regards IT specialists – in this case the levels of representation for women in IT positions being 12%, 12% and 13% respectively.



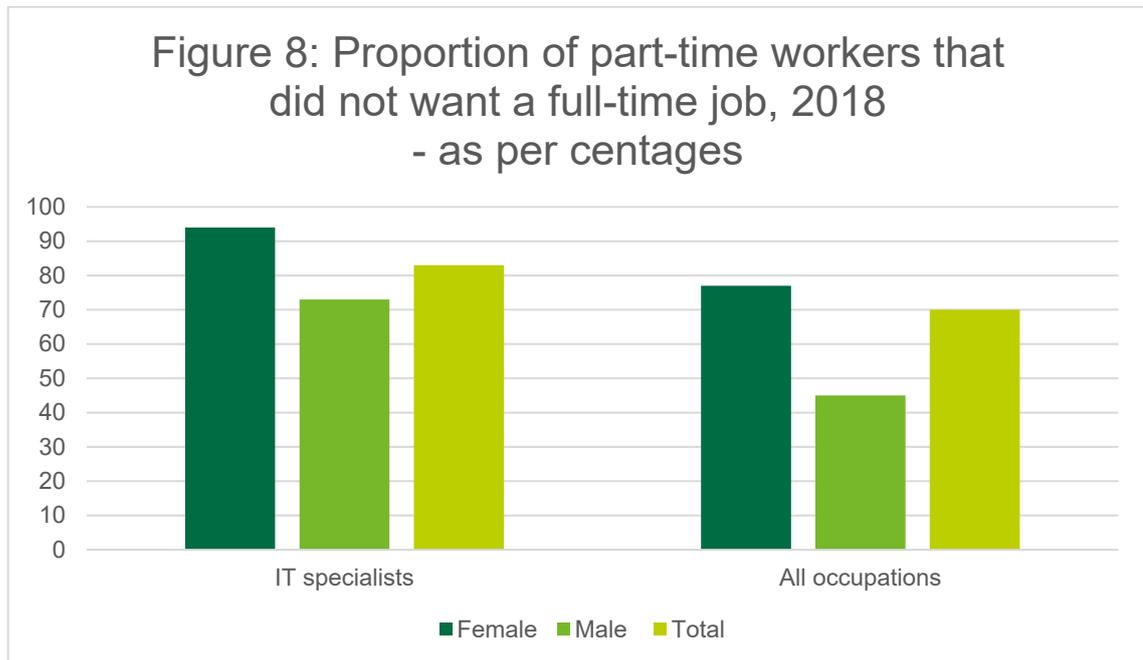
7 WORKING HOURS AND BENEFITS

7.1 Full-time and part-time work

IT specialists in the UK are much less likely to work part-time than other workers, and in 2018, just 5% were working part-time hours compared with 25% of workers as a whole. Female IT specialists were much more likely to be working part-time than males however – 14% of women in IT positions stating this to be the case (compared with just 3% of men).

“FEMALE IT SPECIALISTS MORE THAN FIVE TIMES MORE LIKELY TO WORK PART-TIME THAN MALES IN IT ROLES”

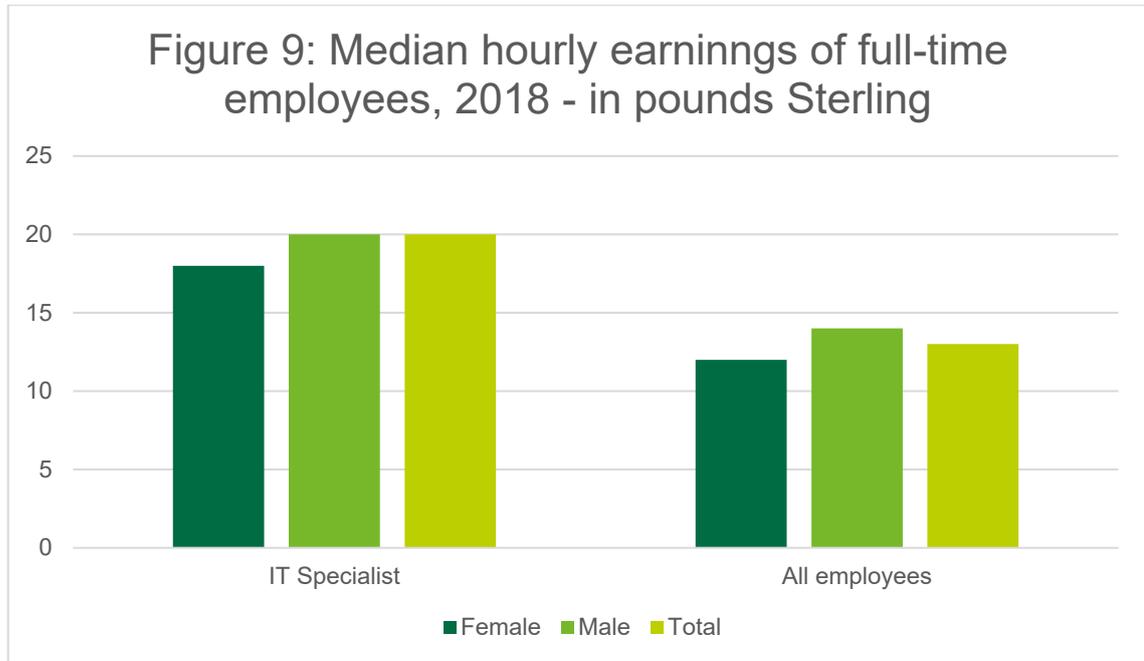
As with other IT specialists/workers more generally, when asked why they were working part-time, the vast majority of women working in IT positions (94%) stated that they were doing so as they did not want a full-time job.



7.2 Remuneration

In 2018, the median hourly earnings recorded for female IT specialists working as employees and on a full-time basis was £18 per hour – a figure 11% lower than the male equivalent at that time.

Women working in IT positions do however earn substantially more than those employed in other jobs however, and in 2017 the comparison figure for all female employees in full-time work was just £12 per hourⁱⁱⁱ.



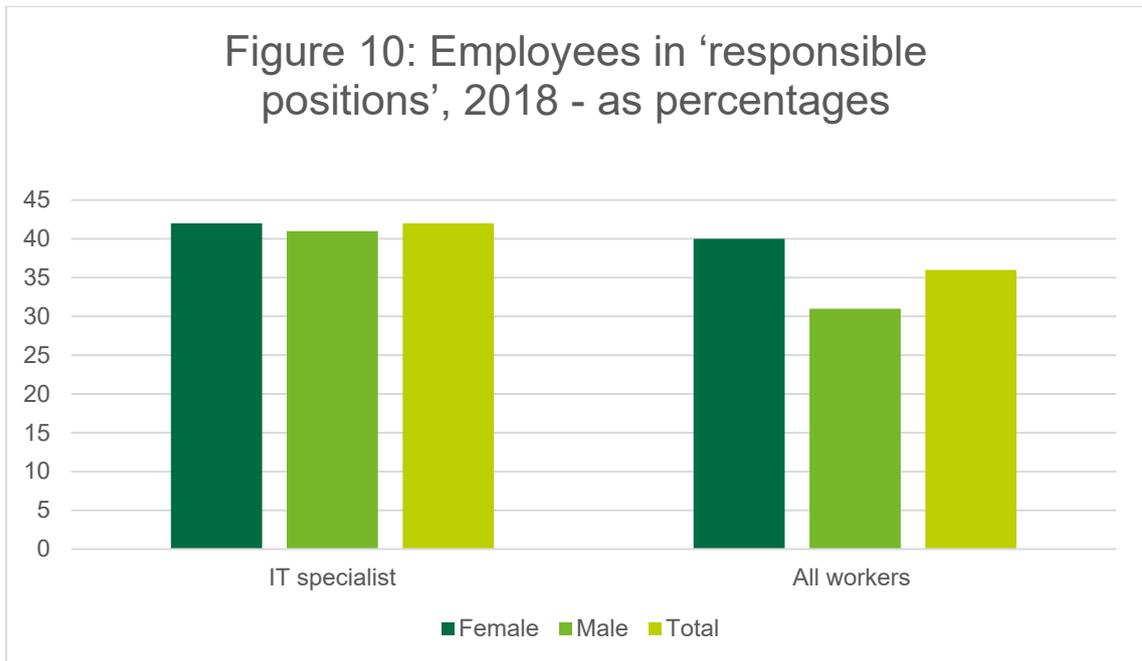
Source: Analysis of ONS Quarterly Labour Force Survey by BCS

7.3 Responsibility

Using Managerial/supervisory status as a proxy for the likelihood that individuals are given responsibility within their work, it appears that during 2018, female IT specialists (that were employees) were marginally more likely than males to be in ‘positions with responsibility’ (comparison figures of 42% and 41% respectively).

“FEMALE IT SPECIALISTS JUST AS LIKELY AS MALES TO BE IN ‘RESPONSIBLE POSITIONS’”

By contrast, within the workforce as a whole, women appeared notably more likely to be in ‘responsible positions’ than their male counterparts (i.e. with comparison figures of 40% and 31% respectively stating this to be the case).



Source: Analysis of ONS Quarterly Labour Force Survey by BCS

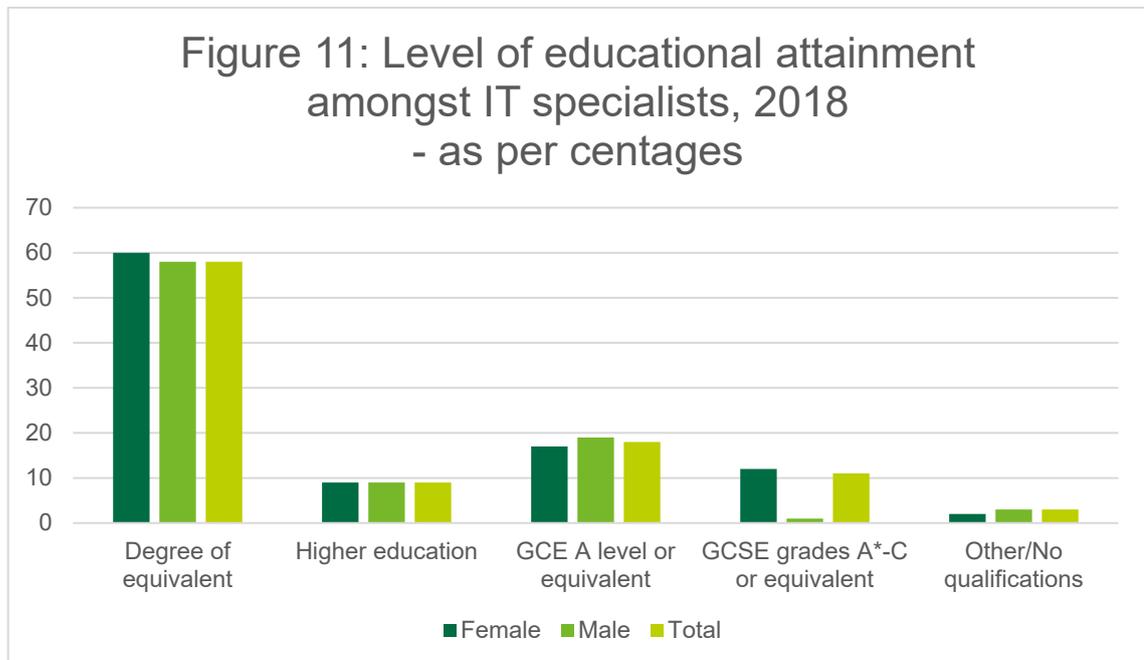
8 SKILLS

8.1 Qualifications held

Female IT specialists appear to be more highly qualified than their male counterparts and in 2018 six in ten (60%) held a degree or equivalent level qualification (compared with 58% of men working in such roles).

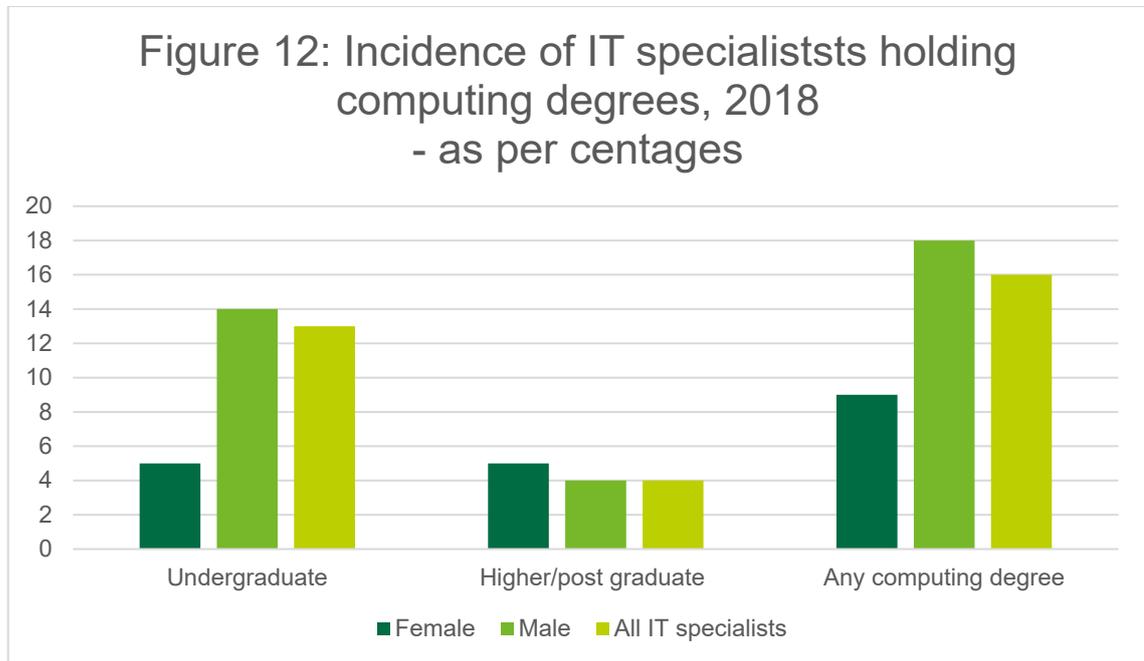
“FEMALE IT SPECIALISTS MORE HIGHLY QUALIFIED THAN MALES”

This contrasts with the situation within the workforce as a whole where 29% of women and 37% of men were found to have qualifications at this level.



Though more likely to have a degree level qualification, female IT specialists are much less likely than males to have a degree in an IT related discipline – just 5% of female IT specialists stating that they held a qualification of this nature in 2018 compared with 14% for males working in IT roles.

“FEMALE IT SPECIALISTS MUCH LESS LIKELY TO HAVE AN IT DEGREE”

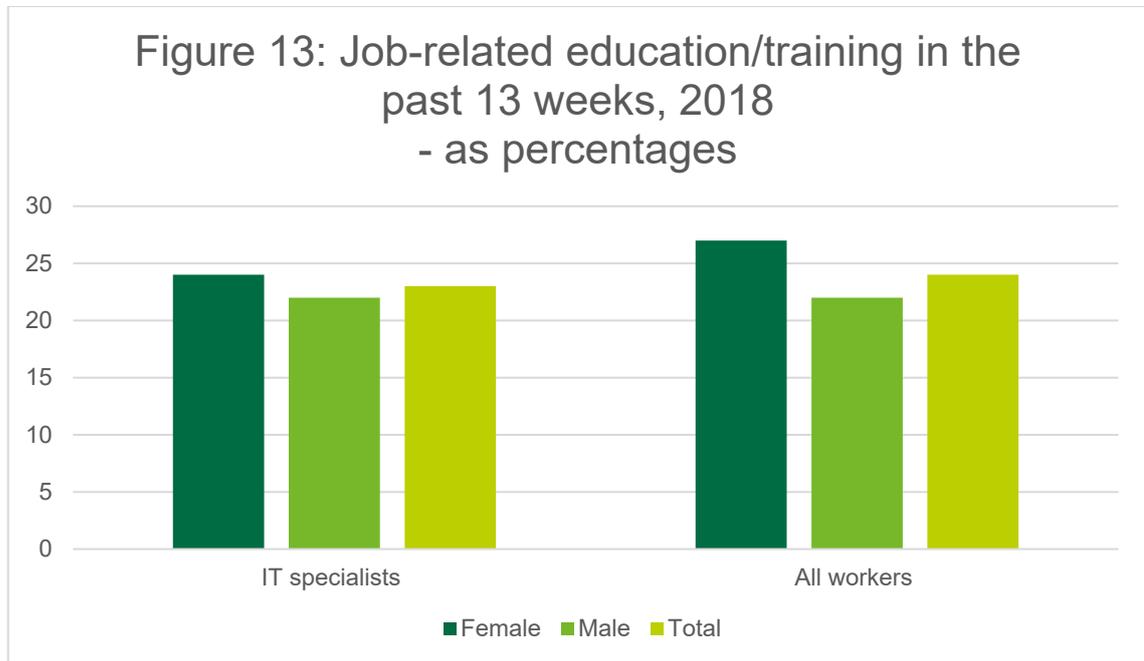


Source: BCS analysis of ONS Quarterly Labour Force Survey data

8.2 Skills development

In general, female workers are more likely to receive job-related education/ training than males (27% and 22% respectively stating that they had received education/training during the previous 13 weeks when surveyed in 2018) and this is also true (though less pronounced) amongst IT specialists – comparison figures for 2018 being 24% for women and 22% for men working in IT roles.

“FEMALE IT SPECIALISTS MORE LIKELY TO RECEIVE JOB-RELATED EDUCATION/ TRAINING”



Source: BCS analysis of ONS Quarterly Labour Force Survey data

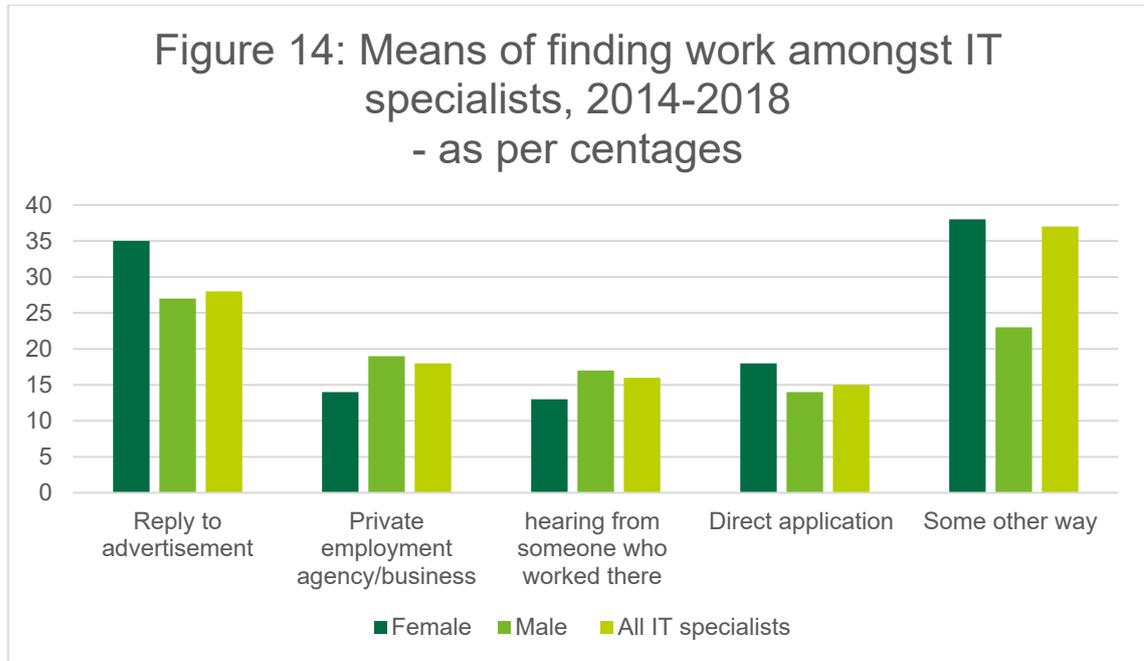
8.3 Skills sourcing

As with other UK employees, the most common identifiable means of IT specialists^{iv} securing a job (where stated) during the 2014-18 period (to compensate for the small number of responses to these questions in the LFS) was by ‘replying to an advertisement’ (28% of those that had been with their employer for less than 1 year stating they had secured work in this manner), and this was true for both female and male IT specialists - this said, the proportion of female IT specialists finding work in this way was much greater than for males (35% and 27% respectively stating this to have been the case).

**“FEMALE IT SPECIALISTS
NOTABLY LESS LIKELY TO
OBTAIN EMPLOYMENT THROUGH
CONTACTS IN COMPANY”**

The next most common means of female IT specialists finding work was through a recruitment agency (18%), then via someone already working with their employer (16%) followed by direct applications (15%).

As illustrated below, the likelihood that female IT specialists have obtained work through an agency or in-work contact is notably lower than amongst male IT workers (five and six percentage points respectively).



Source: BCS analysis of ONS Quarterly Labour Force Survey data

DATA NOTES

ⁱ This report contains statistical data from ONS which is Crown Copyright. The use of the ONS statistical data in this work does not imply the endorsement of the ONS in relation to the interpretation or analysis of the statistical data, and research datasets employed may not exactly reproduce National Statistics aggregates.

Annual figures presented are derived from the ONS Labour Force Survey (LFS) and have been produced by averaging results for the four quarters of any given year/years. Further details of the LFS can be obtained direct from the ONS website:

<https://www.ons.gov.uk/surveys/informationforhouseholdsandindividuals/householdandindividualsurveys/labourforcesurvey/lfs>

ⁱⁱ For this report a generic age filter has been applied (16-64 inclusive) for all analysis presented unless specifically stated otherwise.

ⁱⁱⁱ In cases where estimates span multiple years, this amalgamation has been undertaken to overcome issues of small sample sizes which otherwise render estimates unreliable and/or potentially disclosive.

^{iv} Numerical estimates are rounded to the nearest 1,000, percentages (normally) to the nearest whole number, and rates of pay to the nearest £1 (hourly), as such totals given may not equal the sum of related subsidiary figures.