Equality Monitoring in DSA

V1.0

In House Analytical Consultancy

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Department for **Transport**

GORS
GOVERNMENT OPERATIONAL RESEARCH SERVICE

Contents

Chapter 1: Management Summary

1.1 Introduction

This report is an analysis of staff diversity, for staff in post between 1st April 2010 and 31st March 2011.

The analysis looks at staff in post, cessations, grievances and discipline, and training, and considers whether there were significant differences with respect to sex, race, disability, pay band, age, sexual orientation, religion / belief, job type and working pattern.

Where possible, comparisons have been made against the previous year.

The inequalities and differences identified have been described in non-statistical terms throughout this report. However, where differences have been found to be statistical significant, this has been highlighted. By statistically significant, we mean that the difference is unlikely to have occurred by chance. Where results are not specifically discussed, this generally means that no statistically significant inequalities were found.

1.2 DSA Structure and Organisation

The Driving Standards Agency (DSA) is an executive agency of the Department for Transport. Along with the delivery of practical and theory driving tests, the DSA has a statutory responsibility for setting the standards of these tests. It is also responsible for the regulation of driving instructors and trainers, and the promotion of voluntary registers and non-statutory activities to improve driving standards.

On the 1st April 2011, DSA employed 2,533 staff (excluding employees on long-term leave.[1]) 1,791 were driving examiners, 707 were 'admin' staff and 35 were 'support' staff. Support staff are DSA's cleaners and postal messengers. Admin employees include staff in the 'back office' (working in HR, regulation, forecasting etc.) as well as those that work in the call centre providing phone cover and keeping records up to date. Driving examiners are those that are on the front line dealing with driving tests.

The biggest single grouping of employees was in the Nottingham Head Office (the Axis building) where 350 staff were based; the next biggest grouping of staff was at the Newcastle Area Office, where 270 staff were based. The other location considered within the equality monitoring was Cardiff Area Office, where 83 employees worked.

The majority of employees at Nottingham Head Office and Cardiff Area Office were admin, with a small number of middle to higher graded driving examiners working there, and three support employees (in Nottingham). All employees working at Newcastle Area Office were admin. The vast majority of driving examiners and support staff worked at test centres throughout Great Britain.

1.3 Key Findings: Year on year

There was a slight decrease in staff numbers from 2,612 to 2,533 between 2009/10 and 2010/11. Whilst the average age of the workforce increased by 0.7 years, there was little other change in the diversity profile of the agency.

There was an increase in the numbers of employees in pay band AO and a decrease in the number of AA

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[1] Long term leave includes employees who were off on long-term sickness absence.

employees, due to a large regarding exercise in the DSA contact centre (in Newcastle).

1.4   Key Findings: Sex

70% of DSA employees were male. This reflects the fact that approximately three quarters of DSA staff were driving examiners; over 80% of whom were male. In contrast, just over half of admin staff and over 90% of support staff were female.

Within the DSA Head Office at Nottingham and the Cardiff and Newcastle Area Offices, the male to female ratio was not significantly different from their local working-age populations.

There were disproportionately high numbers of males in the higher admin pay bands.

Female driving examiners were, on average, significantly younger than their male counterparts; the average age of a female driving examiner was 48, in contrast with 52 for male driving examiners.

1.5   Key Findings: Race

Of those who declared their race, 4.6% of DSA employees were from an ethnic-minority. The proportion of Black and Minority Ethnic (BME) staff was similar for driving examiners and admin staff (4.7% and 4.6% respectively).

The proportion of ethnic-minority employees in the Nottingham and Newcastle offices was not significantly different from the proportions in their local working-age populations. (Cardiff numbers were too small for testing).

There were a disproportionate number of BME admin employees in pay band AA.

The average age of a BME driving examiner was 47, five years younger than their white counterparts.

A disproportionate number of ethnic-minority driving examiners left during 2010/11.

1.6   Key Findings: Disability

Of those employees that had declared their disability status, 9.2% (215) were disabled (compared with 20.0% of the GB working-age population).

This proportion was much higher for admin staff (14%) and lower for driving examiners (7%).

Driving examiners in the DE and SDE grades had significantly lower declared levels of disability than the GB working-age population. However, examiners in the SE and ACDE grades had higher levels of declared disability than these lower grades and were not significantly different from the local population.

Newcastle Area Office had lower proportions of disabled staff than in the local working-age population.

There were more than expected disabled driving examiners in the middle to higher examiner pay bands.

A disproportionate number of discipline cases involved disabled employees.

1.7   Key Findings: Age

More than three quarters of DSA staff were over 40 – a pattern largely driven by driving examiners, almost 90% of whom were aged 40 and over. In addition, all but one of the 35 support employees were aged 40 or over. Admin staff on the other hand had an age profile comparatively more representative of the GB age profile.

Overall, Nottingham Head Office staff had an older age profile than the working-age population in the local area: in particular there were very few staff aged under 25. The age profile of employees in the Cardiff Area Office was very similar.

In contrast, staff in Newcastle were younger than expected, when compared with the local working-age population. In this office, almost 60% of staff were under 40 – most likely because the majority of Newcastle Area Office staff were AAs to EOs.

1.8 Key Findings: Working pattern

Disproportionately high numbers of part-time employees were in the lower pay bands, and disproportionately high numbers of part-time workers were female; this was true for both driving examiners and admin employees.

Part-time driving examiners were significantly older than their full-time counterparts (due in large part to a number of partially retired part-time driving examiners).

1.9 Key Findings: Recruitment

The majority of job applications to the DSA in 2010/11 were for externally advertised entry-level driving examiner posts; this campaign attracted over 2,000 applications.

A significantly high proportion of applications were made by male candidates, BME candidates and non-disabled candidates (when compared with the GB working-age population.)

Analysis of the recruitment stages within this campaign found that females were more successful than males in the sift

and non-disabled candidates were also more likely to have passed through the sift. BME candidates were less successful at assessment centre, and white candidates were more successful at interview. However, overall, there were no diversity differences between candidates offered a job and those unsuccessful in the process.

The DSA ran two other recruitment campaigns in 2010/11. The first was a cross-civil service campaign to recruit AA posts for the Newcastle Area Office. Where tests were possible, the diversity profile of applicants was not significantly different from that of the local working-age population

The final, internally advertised, campaign aimed to recruit driving examiners to the SE grade. Applicants in this campaign were broadly representative of employees in post.

1.10 Key findings: Learning and development

For both admin staff and driving examiners, younger employees and staff in lower pay bands were more likely to have participated in training.

Part-time examiners were also less likely to have done training.

Of the examiners who had done training, those who had some sickness absence had done fewer days.

1.11 Key findings: Sickness Absence

Younger staff were more likely to have had sickness absence. However, considering only staff who had sickness absence, older driving examiners had more days absent due to sickness.

Females were more likely to have been absent due to sickness, and had more days' absence on average.

Disabled employees were more likely than other employees to have had some sickness absence. Analysing only staff who had some sickness absence, disabled employees had had a higher number of days sickness absence than other staff with sickness absence.

Employees in lower pay bands, in particular AO, DE, SDE were most likely to have been absent due to sickness at some point in 2010/11. Considering only employees who had been absent due to sickness, admin staff in AA and AO had significantly more days of absence than employees in higher pay bands.

1.12 Key findings: Performance management

Employees from an ethnic-minority background were less likely to have achieved the highest performance mark – consistently achieves all requirements - than their white and unknown race colleagues. This was true for both driving examiners and admin employees.

Admin employees in the AO pay band were also less likely to have received the highest performance mark. Conversely, driving examiners in the lowest pay band – DE – were more likely to have achieved it.

Finally, admin employees who had had sickness absence were less likely to have got the highest performance mark.

1.13 Information Recommendations

DSA provided each dataset requested in plenty of time to meet the equality monitoring timetable / deadlines. The quality of the data overall was excellent, as was the assistance and additional information provided in order to help process and analyse the data.

There has been a significant increase in the sexual orientation declaration rate since last year's report. However, as the declaration rates for this and religion / belief are still below 50%, further improvements are needed before we can do a robust analysis using this information.

Chapter 2: Introduction

2.1 Equality Monitoring

This report contains an analysis of the diversity of DSA staff for 2010-11.

The aim of the analysis was to:

- identify differences between diversity groups within DSA;

- compare the diversity of DSA staff with the diversity of the local working-age population; and

- highlight any changes since previous years.

2.2 Analysis and reporting

This analysis has considered the following areas of diversity:

- Sex

- Race

- Disability

- Sexual orientation

- Religion / belief

- Age

- Working pattern

And for the following datasets:

- Staff in post

- Recruitment

- Cessations

- Performance management reports

- Learning and development

- Disciplinary cases

- Grievance cases

- Sickness absence

Results described in this report are based on the outcomes of statistical tests. These tests are used to identify statistically significant differences between groups – that is, differences larger than the likely range of natural variation.

Data for this report was provided by DSA HR, and has been summarised in the annex tables provided with this analysis.

Recruitment data was also provided by DSA.

2.3 Data coverage and quality

Data related to staff in post at the end of 31st March 2011, and cessations between 1st April 2010 and 31st March 2011.

For the purpose of this report, Senior Civil Service (SCS) staff in DfT(C)'s Agencies have been included along with the SCS in DfT(C).

Staff on long-term leave (for instance maternity leave, sickness absence and career breaks) are not included in the analysis, and nor are staff who are not civil servants (e.g. consultants, temporary administrators etc).

Data on staff sex, age and pay band are held for each member of staff, but data on disability, race, sexual orientation and religion / belief are voluntarily provided. As a result, and because staff may be unwilling to provide this information, these data often have significant numbers of unknowns or undeclared statuses and subsequently analysis was not always possible (in particular for sexual orientation and religion / belief).

Throughout this report any references to declaration rates or staff who had declared their [e.g. disability] status apply to staff who have identified with a particular diversity category – such as "disabled", or "White British". In other words, for the purposes of this report,

staff who have declared that they prefer not to say have been grouped with those for whom no information is available and described as unknown/undeclared. So, if 10% of staff had chosen not to specify their race, and information was not available for a further 20%, we would quote 70% as the declaration rate, even though technically 80% had made a declaration.

As well as the diversity groups listed above, DSA employees were also considered in three main groups by job type; driving examiners (often referred to in this report as simply 'examiners'), administrative staff (largely referred to as 'admin') and support staff.

Chapter 3: Staff in post and geographical distribution of staff

This chapter considers the diversity mix of DSA staff by job role and geographical location.

It investigates the diversity of three staff groupings by job type: driving examiners; admin staff and support staff.

It separately also compares diversity in the three largest offices: Nottingham Head Office, Newcastle Area Office and Cardiff Area Office, with the local working-age populations.

The vast majority of staff in 'Other' locations were Driving Examiners, so results for these two groupings are mostly interchangeable.

Key findings

DSA's main job types and locations have different diversity characteristics:-

- **Driving examiners** – mostly based in 'Other' locations throughout Great Britain - were predominantly male, and both older and reporting lower levels of disability than the GB working-age population.

- **Support staff** – mostly based in 'Other' locations – were predominantly female, white and had not declared themselves disabled. All but one of the 35 support staff were aged 40 and over.

- **Admin staff** – mostly based in the Nottingham, Newcastle and Cardiff offices were more representative of their local working-age populations.

- Diversity of staff in **Nottingham, Cardiff and Newcastle offices** was broadly comparable with the working-age population of the local areas, except:

- The **Nottingham Head Office and Cardiff Office** employee age profile was older than the local working-age population.

- The **Newcastle Area Office** employee age profile was younger than the local working-age population, and also had a lower level of reported disability.

3.1 Geographical distribution of DSA staff

On 1st April 2011, DSA had 2,533 staff based in offices and test centres around the country. The largest single grouping of staff was in the Nottingham Head office (the Axis building) the next largest grouping was Newcastle Area Office and the third was Cardiff Area Office.
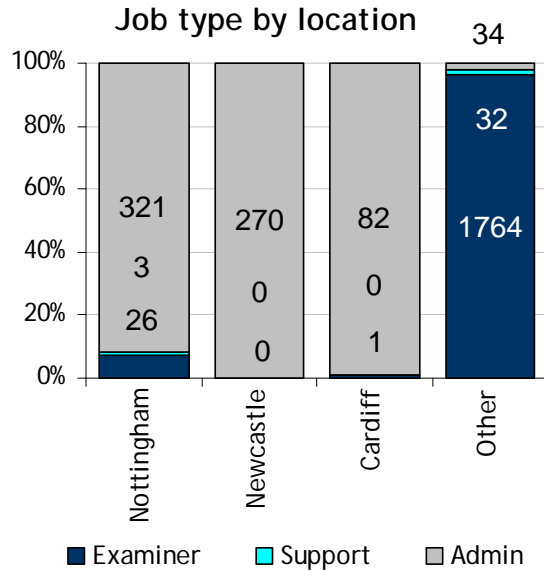
Staff by Location
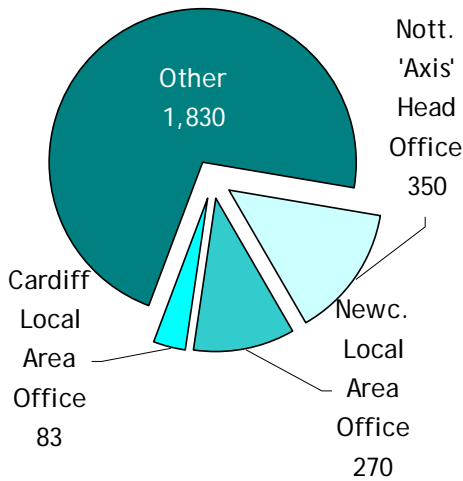
3.2 Job roles of DSA staff

The majority – 71% - of DSA employees were driving examiners based in test centres across the country, with just a few staff in middle to high Driving Examiner pay bands based in the Nottingham and Cardiff offices (26 and 1 respectively).

A further 28% of DSA staff were admin - mostly based in the Nottingham and Newcastle offices, but also in Cardington and Cardiff offices and some test centre locations. Admin staff include those in the 'back office' (working in HR, regulation, forecasting etc.) as well as those that work in the call centre, providing phone cover and keeping records up to date.

The remaining 35 employees were support staff mostly based at individual test centres. Support staff are DSA's cleaners and postal messengers.

Job type by location

3.3 Diversity profile of DSA staff by job role and location

For all diversity categories, comparisons have been drawn with local working-age populations.

For the Nottingham, Newcastle and Cardiff offices, local working-age populations have been drawn from Nottingham, Newcastle and Cardiff and their respective surrounding local authority areas. Diversity in Other locations, and of driving examiners as a group have been compared with the GB working-age population.

3.3.1 Sex

Overall, 70% (1,766) of DSA employees were male.

### 3.3.1.1 Sex by location

Nottingham, Newcastle and Cardiff

The male to female ratio in the Nottingham office was not significantly

different from the local working-age population. Of the 350 employees in The Axis Building, 53% (185) were female. The same was true for Cardiff where 53% (44) of 83 were female.

Although, there were a higher proportion of females in the Newcastle Area Office - 59% (158) of the 270 employees – this was also not significantly different from the local working-age population.

Other

Approximately 80% of employees in Other locations (1,450 out of 1,830) were male. This was clearly significantly different from the proportion of males in the GB working-age population.

Male vs. female, by location
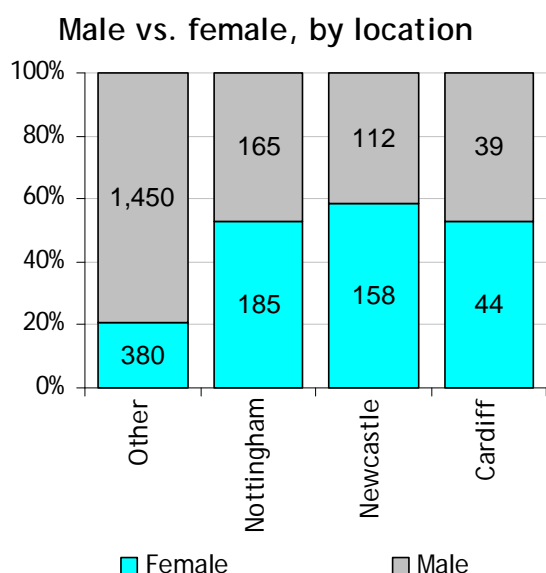
3.3.1.2 Sex by job type

Driving Examiners

Most driving examiners were male: just 19% of the 1,791 driving examiners were female.

Female driving examiners were, on average, significantly younger than their male counterparts; the average age of a female driving examiner was 48, in contrast with 52 for male examiners.

Admin Staff

Admin staff were fairly evenly split, with 57% female across the agency. This split was broadly consistent between Newcastle, Nottingham, Cardiff and Other Locations.

Support Staff

Most support staff were female – all 32 of those outside the Nottingham Head Office were female, and the remaining three, based in Head Office, were male.

3.3.2 Race

DSA as a whole

108 DSA staff had identified themselves as black or minority ethnic (BME) i.e. from an ethnic minority group. This was 4.6% of those who declared. A further 181 staff were of unknown or undeclared race, which meant there were more staff with unknown race than had declared themselves BME. This may affect the quality of the results.

Race of Staff in Post
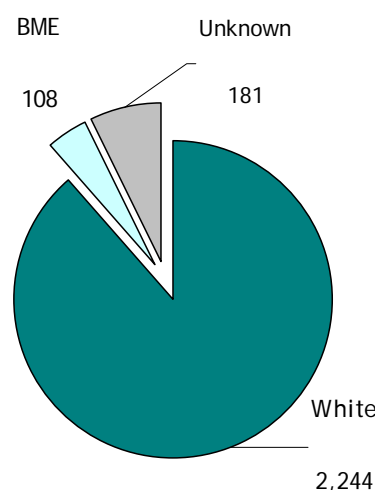
3.3.2.1 Race by location

Nottingham and Newcastle

The proportion of ethnic minority staff in the Nottingham and Newcastle offices

was not significantly different from the proportions in their local working-age populations.

Of those who had declared their race, 6.1% of Head Office staff had declared themselves to be from an ethnic minority group.

3.1% of Newcastle Area Office employees had identified themselves as from an ethnic minority group.

Cardiff

Only 1 of the 74 Cardiff Area Office employees who had declared their race identified themselves as from an ethnic minority group. Numbers were too small for statistical testing.

Other

The racial profile of employees in Other Locations was significantly different from that of the GB working-age population (4.7% ethnic minority for those that had declared, compared with 11.6% in the GB working-age population).

Race by Location

3.3.2.2 Race by job type

Driving Examiners

Of those declaring their race, 4.7% of driving examiners had declared themselves to be BME. This was significantly lower than the BME proportion within the GB working-age population.

The average age of a BME driving examiner was 47, five years younger than their white counterparts.

Admin Staff

The proportion of BME admin staff tended to be representative of local areas, with 6.6% of Nottingham Head Office admin staff and 3.1% of Newcastle Area Office admin staff declaring themselves ethnic minority. [Percentages based on those who had declared their race only].

Only 1 of the 73 Cardiff Area Office admin employees (who had declared their race) identified themselves as from an ethnic minority group. Numbers were too small for statistical testing.

Support Staff

The 35 support staff were mainly based in Other Locations. All 32 who had declared their race were white – a significantly low proportion of BME staff (when compared with the GB working-age population).

3.3.3 Disability

DSA as a whole

215 of DSA's 2,533 employees had declared themselves to be disabled, with a further 185 having an unknown or undeclared disability status. 9.2% of those who declared were disabled.
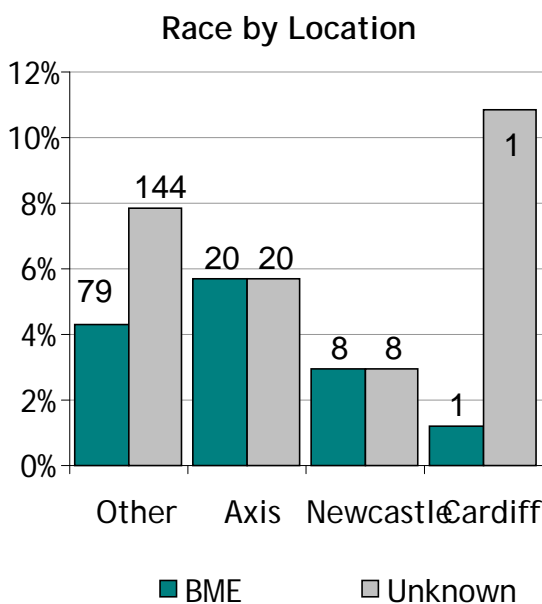
Across Great Britain, the proportion of disabled people in the working-age population was 20.0%[2].

3.3.3.1 Disability by location

Nottingham Head Office

Within the Nottingham Head Office, the proportion of staff declaring themselves disabled (16.7%) was higher than for DSA as a whole and was not significantly different from the proportion of disabled people in the local working-age population (21.6%).

Newcastle Area Office

The Newcastle Area Office had a significantly lower proportion of staff declaring themselves disabled than the local working-age population. (9.8% of all those who had declared their status, compared with 23.6% of the local working-age population).

Cardiff Area Office

13.6% of the 81 employees in the Cardiff Area Office declared themselves disabled (this percentage excludes unknowns). This was not significantly different from the local working-age population.

Other Locations

There were significantly fewer staff declaring themselves disabled in Other locations than in the GB working-age population. 7.4% of those who had declared their disability status had identified themselves as disabled, compared with 20.0% in the GB working-age population.

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[2] For the disability status of the working-age populations, the definition of disabled includes both those with a disability covered by the Disability Discrimination Act and those with a work-limiting disability.

3.3.3.2 Disability by job type

Driving Examiners

Overall 7.4% of driving examiners had declared themselves disabled significantly lower than the GB working-age population.

Admin Staff

Overall, 14.1% of all admin staff who had declared, were disabled (compared with 20,0% in the GB working-age population).

Support Staff

All but one of the 35 support staff had declared their disability, and none of those had declared themselves disabled. The proportion declaring themselves disabled was therefore significantly low.

Proportion of disabled employees, by job type
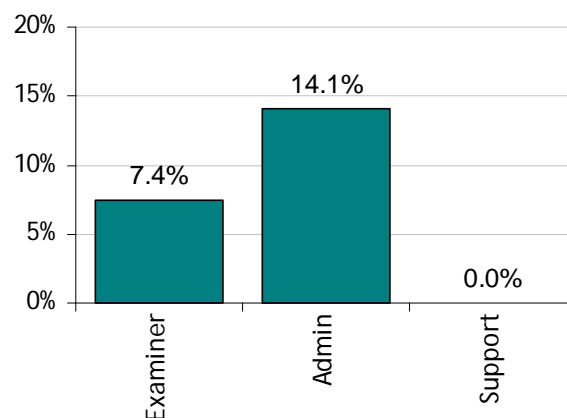
3.3.4 Age

DSA as a whole

Almost 80% of DSA staff were over 40. This was largely the presence of driving examiners – almost 90% of whom were over 40. Admin staff had an age profile comparatively more representative of the GB age profile.

All but one of the 35 support employees were aged over 40; over a third (16) were aged over 60.

DSA age profile, by job type
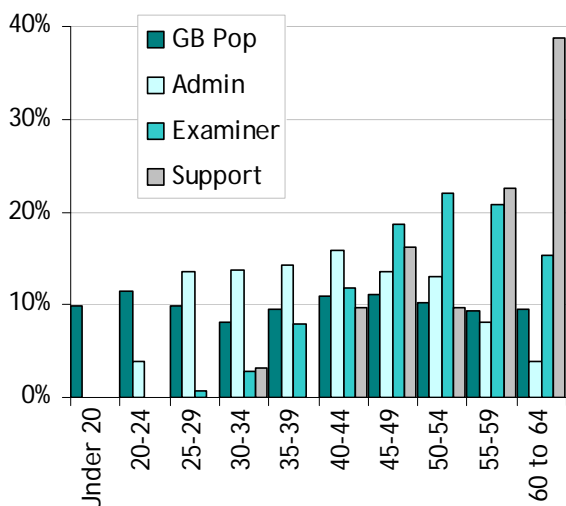
3.3.4.1 Age by location

Nottingham Head Office

Overall, Head Office staff had an older age profile than the working-age population in the local area: in particular there were very few staff under 25.

There were significant peaks for HEOs between 40 and 44 and SEOs between 45 and 49. (A quarter of HEOs were 40-44 and just under a third of SEOs were aged 45-49). These were significantly different from the proportions of each age-group in the local working-age populations.

Newcastle Area Office

In contrast, staff in Newcastle had a younger age profile than the local working-age population. In particular, there were more staff aged 25-34 than expected, although there were no staff aged under 20 which was also significant. In this office, almost 60% of staff were under 40 – likely to be

because the majority of Newcastle Area Office staff were AAs to EOs.

Cardiff Area Office

The age profile of Cardiff employees was more similar to that of Nottingham, being older than that of the local working-age population; in particular there were low numbers of employees aged under 25, with high numbers of employees aged 35-44. The same was true of pay bands AA-EO; numbers in other pay bands were too small for testing.

Other Locations

There were significantly more staff aged 45 and over and fewer staff aged under 35 than expected when compared with the GB working-age population. This was explained further by the driving examiners and support staff analysis below.

3.3.4.2 Age by job type

Driving Examiners

The age profile of driving examiners was significantly different from the GB working-age population, with fewer younger and more older examiners. Almost 90% of driving examiners were over 40, 58% were 50 and over.

Support Staff

No statistical testing was possible for support staff, but they tended to be older; all but one of these 35 employees were 40 or over.
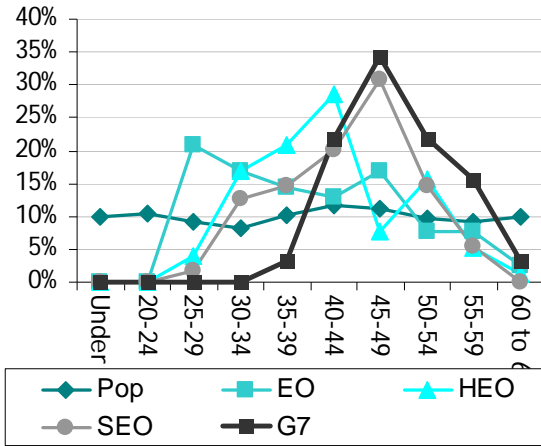
Admin Staff

The 34 admin staff in Other locations i.e. not Nottingham, Newcastle or Cardiff, were not significantly different from their local working-age population.

In the Nottingham head office, pay bands had different age profiles from each other, and EO, HEO and SEO had significantly different age profiles from

the local working–age population (as shown in the chart below).

Nottingham admin age profile, by pay band

All staff in the Newcastle area office were admin staff. They tended to be significantly younger compared with the local working-age populations; in particular, in the AA and AO pay bands.

Newcastle admin age profile, by pay band
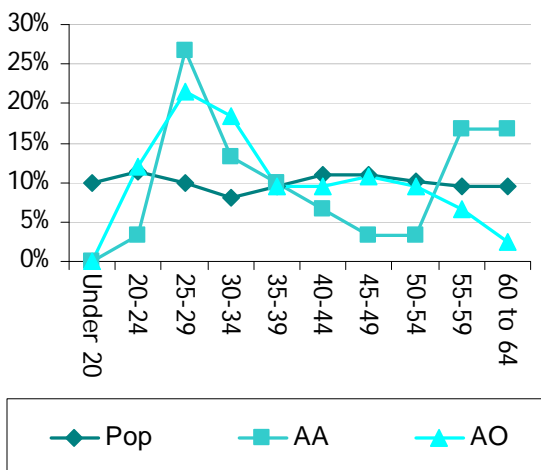
3.3.5 Sexual orientation

DSA as a whole

41.8% (1,060) of DSA employees had declared their sexual orientation, 2.7%

(29) of whom had declared themselves either lesbian, gay or bisexual.

3.4   Religion and belief

DSA as a whole

37.2% (943) of employees had declared their religion / belief, 80.3% (757) of whom had declared a religious belief (the remainder declaring atheism / agnosticism or no religious belief).

3.5   Maternity leave

There were 15 DSA employees on paid or unpaid maternity leave. 13 employees returned from maternity leave into the agency during the year.

Chapter 4: Staff in post across pay bands

This chapter considers how the minority groups are distributed across the pay bands.

Driving Examiners and Admin staff have been considered as two independent groups. The support staff group is not considered as it is very small and all but one of these 35 staff are in the AA pay band.

Within these two staff groupings, the analysis takes each pay band in turn and compares it with all the others.

In this section, "significantly more females than expected" would mean that there were significantly more females compared with the other pay bands (rather than the local working-age population).

Key findings

Driving examiners:

- No differences in pay band distribution by sex or race.

- There were fewer than expected disabled employees in the lower driving examiner pay bands.

- Part-time driving examiners were more likely to be female than full-time driving examiners.

- Part-time driving examiners were significantly older as a group than their full-time colleagues.

- Part-time driving examiners were over-represented in the DE pay band (the lowest examiner pay band).

Admin staff

- More males and more older employees than expected in the higher pay bands.

- More BME employees in pay band AA.

- Part-time admin employees were significantly more likely to be female.

4.1   Distribution of staff by diversity group

The following sections describe how diversity characteristics varied by pay band among driving examiners and admin staff.

4.1.1 Distribution by sex

Driving examiners

There was no significant difference in the distribution of males and females across the pay bands.

Admin staff

There were significantly fewer females than expected in the higher pay bands; in particular Grade 7 and Grade 6.

Proportion of Female Admin Staff by Pay Band
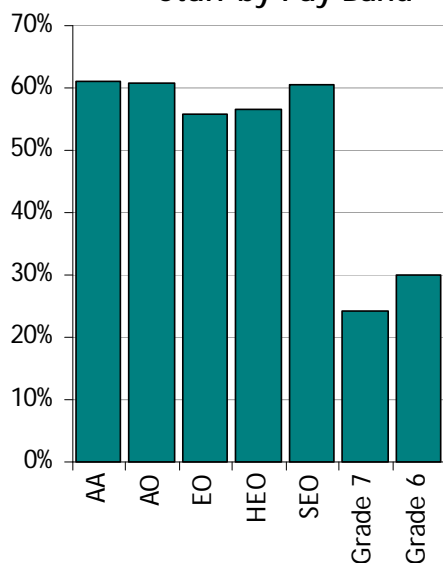
4.1.2 Race distribution

Driving examiners

There was no significant difference in the distribution of white and ethnic minority driving examiners across the pay bands.

Admin staff

There were more ethnic-minority employees in pay band AA than expected.

Proportion of BME admin employees in post
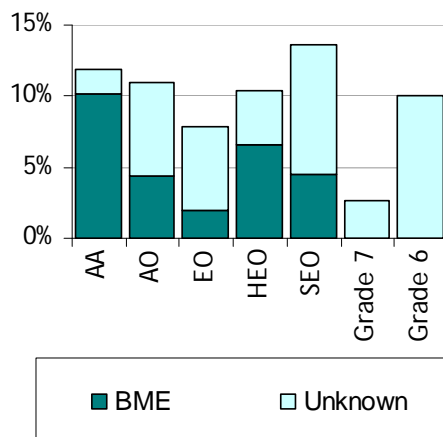
4.1.3 Disability distribution

Driving examiners

There were fewer disabled driving examiners in the lower (DE / SDE) pay bands, and more in the middle (SE / ACDE) pay bands.

Proportion of disabled examiners, by pay band

These findings were largely due to the number of partially retired driving examiners who continued to work on a part-time basis. Currently, if an examiner wishes to partially retire and continue working part-time, then their post is graded at the DE level to fit with the requirements of the job.

A disproportionate number of part-time driving examiners were also female.

Admin staff

Part-time admin employees tended to be disproportionately based in the lower admin pay bands; in particular AA-EO.

Part-time admin employees were predominantly female.

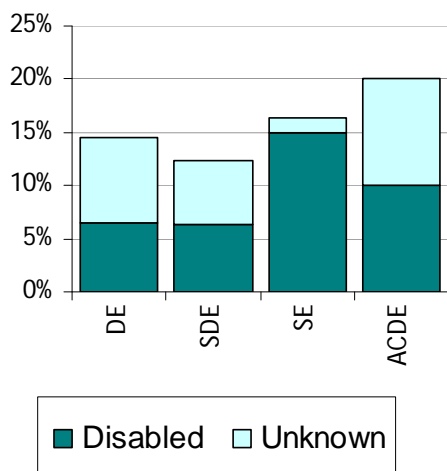### Admin staff

There was no significant difference in the distribution of disabled and non-disabled admin employees across the pay bands.

4.1.4 Age distribution

Driving examiners

SDEs / DEs were significantly younger, and SEs / ACDEs were significantly older than the rest of the examiner group.

Admin staff

In general, the higher the pay band the more likely the employee was to be older. The exception was pay band AA where admin staff were also significantly older.

4.1.5 Working pattern

Driving examiners

Part-time driving examiners were significantly more likely to be in the DE pay band, whilst their full-time counterparts were significantly more likely to be in SDE / SE. Part-time examiners also tended to be older.

Chapter 5: Year on year comparisons

This chapter looks at how DSA has changed in terms of diversity in the year since the last Equality Monitoring report.

> ## Key findings
>
> - Very little change in diversity profile since 2010/11, although the age of the workforce increased.
>
> - As a result of a regarding exercise, there were fewer AA employees, and more AO employees.
>
> - The declaration rate of sexual orientation increased significantly.

5.1   Year on year comparison

5.1.1 Staff numbers

There were a small number of changes made to last year's (2009/10) staff-in-post / leaver's figures as a result of updates to management information after the data had been provided. The net result of these changes was 1 less employee in the staff-in-post figures, and 3 extra leavers.

Therefore, on the 1st April 2010, DSA employed 2,612 staff, while on the 1st April 2010 it employed 2,533 staff – a net decrease of 79 (or 3.0%).

All three groups of staff decreased in number. Driving examiners decreased by 44 to 1,791, whilst support staff decreased 5 to 35. Admin staff decreased 30 in number, to 707.

5.1.2 Change in diversity profile

This year (2010/11) the DSA workforce was older by 0.7 years on average. This was significant, but not highly unlikely given the smaller than usual turnover of staff.

There were also disproportionately fewer employees in the AA pay band and more AO employees. In 2009/10, AA employees represented 7.7% of all employees in post, compared with only 3.7% in 2010/11. In contrast, AO employees made up 10.9% of employees in 2010/11 – more than the 7.5% in 2009/10. This was due to a large re-grading exercise in DSA's contact centre, where the AA job was re-evaluated and found to be at AO rather than AA level. As a result the majority of AAs were re-graded to AO. There were no interviews or assessment centres involved.

The declaration rate for sexual orientation also increased significantly from 38% in 2009/10 to 42% in 2010/11.

Chapter 6: Recruitment

This chapter considers the equality mix of candidates applying to join DSA in 2010/11.

Recruitment analysis has been split into three sections:

- The first section examines campaigns within the agency – that is, posts advertised only within DSA. The analysis compares the diversity profile of candidates with the profile of staff in the corresponding pay band and the pay band below.

- The following section examines campaigns outside the agency, and compares candidates with local working-age populations.

- The final section looks at the success of all candidates through the various stages of recruitment – sift, assessment centre, interview and the special driving test – and finally whether they were offered a post or not.

Data was collected by DSA for the three recruitment campaigns launched during 2010/11. These were:-

- **DE campaign:** an externally advertised campaign to recruit entry-level driving examiners (2,494 applications);

- **SE campaign**: an internally advertised campaign to promote driving examiners to the SE level (102);

- **AA campaign:** a civil-service wide campaign to recruit for AA admin posts at Newcastle Area Office (54).

As all three were very different campaigns, they have largely been analysed separately. However, overall, of those for whom we knew a sex / race / disability status, 19.1% of applications were made by females, 16.2% were made by ethnic-minority candidates, and 4.3% were made by disabled candidates.

Key findings

Diversity of applicants

- The diversity profile of internal applicants for the SE driving examiner posts was similar to that of examiners in post.

- A significantly high proportion of external applications for DE driving examiner posts were from male candidates, BME candidates and non-disabled candidates (when compared with the GB working-age population.)

- Where tests were possible, the diversity profile of applicants to the AA posts in Newcastle was not significantly different from that of the local working-age population.

Success rates through the recruitment process

In the external campaign for DE driving examiner posts:-

- Females and non-disabled candidates did better in the sift.

- BME candidates were less successful at assessment centre and white candidates were more successful at interview.

- Overall there was no significant diversity differences between those who were offered a job and those who were unsuccessful in the recruitment process.

6.1 Diversity of applicants for campaigns within DSA

This section looks at candidates who applied for posts that were advertised within DSA. The analysis looks at their profile and how it compares to the profile of staff within that pay band, and the pay band immediately below.

There were 102 applications for posts advertised within the DSA – all from internal driving examiners for SE graded examiner posts.

There were no significant differences between the diversity profile of internal applicants and that of internal driving examiners.

Diversity profile of internal examiners and internal applicants
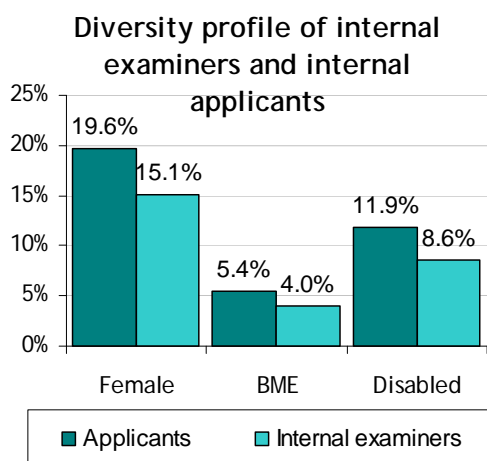
6.2 Diversity of applicants for campaigns outside DSA

This section looks at applicants who applied for posts that were advertised outside DSA (even if they were already an employee within the agency). This includes posts that were advertised across the DfT family, across the civil service and external to the civil service. The analysis compares the profile of these applicants with that of the local working-age population.

This section therefore includes the externally advertised driver examiner recruitment campaign, and the Newcastle Area Office AA campaign.

6.2.1 DE campaign

There were 2,494 applications to become a driving examiner, all of which were to the DE grade. As the preferred locations of applicants were to test-centres throughout Great Britain, the diversity profile of applicants has been compared with that of the GB working-age population.

Sex

81.4% (2,030) of applications were from male candidates. This proportion was significantly different from the roughly equal male / female split in the GB working-age population.
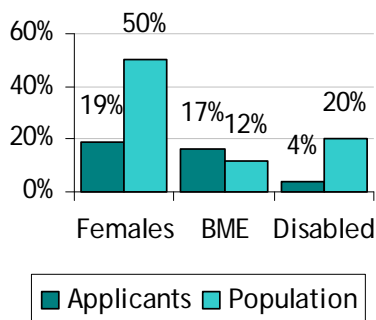
Race

16.5% (401) of applicants who had identified a race were from an ethnic-minority group. This was a significantly higher proportion than in the GB working-age population (11.6%).

Disability

4.0% (95) of candidates declared themselves disabled. This was a significantly low proportion when compared with the 20.0% of disabled people in the GB working-age population.

Diversity profile of DE applicants vs. GB working-age population

6.2.2 AA campaign

54 candidates applied for the AA level admin posts at the Newcastle Area Office.

Sex

57.4% (31) of the applications were from male candidates. This was not significantly different from the local working-age population.

Race

Due to admin problems, the race was only recorded for four applicants. Therefore numbers were too small for statistical testing.

Disability

6.5% (3) of the applicants declared themselves to be disabled. This was not significantly different from the local working-age population.

6.3   Sift to Appointment Analysis

This analysis compares the profile of applicants who were successful at sift, assessment centre, interview and in the special driving test with those who were unsuccessful. Finally, it compares all applicants who were offered a job with those who were not.

Due to the different requirements of the jobs being advertised, the three campaigns as described at the beginning of the chapter have been analysed separately.

6.3.1 SE Campaign

The numbers of female, BME and disabled candidates within the campaign (102) were generally too small for statistical testing. Where testing was possible, there were no significant differences between equality groups.

6.3.2 DE Campaign

6.3.2.1 Sift

22.3% (474) of candidates were successful in the sift.

Sex

Females were more likely to have been successful in the sift. 27.9% (114) of females were successful, compared with 20.9% (360) of male candidates.
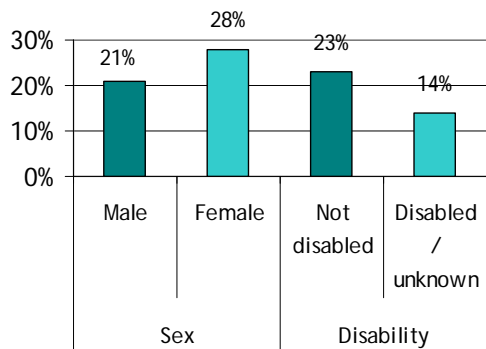
Disability

Candidates who declared themselves disabled were less successful in the sift. 14.3% (11) of disabled candidates were successful, compared with 22.6% (463) of candidates who were either not disabled (1,970) or had not declared (82).
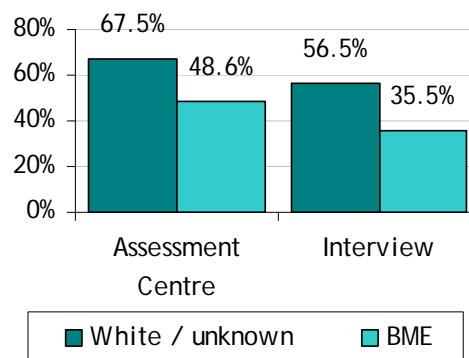
Race

Proportionately fewer applicants with an unknown race were successful in the sift.

Success rates at sift by sex / disability

Success rates within DE campaign, by race

6.3.2.2 Assessment centre

63.7% (228) of candidates were successful at assessment centre.

Race

BME candidates were significantly less likely to pass the assessment centre. 67.5% (193) of white or unknown race candidates passed compared with 48.6% (35) of BME candidates.

6.3.2.3 Interview

Roughly half (52.7% - 89) of remaining candidates were successful at interview.

Race

Disproportionately more white applicants (78 – 56.5%) were successful at interview, when compared with BME candidates (11 – 35.5%). (By this stage all candidates had a known race.)

Note: at interview, all applicants had a known race.

6.3.2.4 Special driving test

79.8% (71) of candidates passed the special driving test.

Religion / belief

Proportionately fewer applicants with an undeclared religion / belief were successful in the special driving test. This may be because further diversity information was collected on applicants who were appointed (and thus obviously successful in this final stage.)

6.3.2.5 Appointed (Offered a job)

If we exclude candidates who withdrew from the process or had unknown results at any of the recruitment stages, just under one in 50 initial applicants was offered a post.

Overall there was no significant diversity differences between those who were offered a job and those who were unsuccessful in the recruitment process.

6.3.3 AA campaign

There were 54 applications for an AA admin post at Newcastle Area Office.

56.1% (23) were sifted out. Of the candidates who were successful at sift, 61.1% (11) made it through an assessment centre, before 63.6% (7) of the remaining candidates were successful at interview and were offered a job.

There were no significant differences between the profile of those who were successful or unsuccessful at any of the recruitment stages or overall.

Chapter 7: Ceased employment

This chapter compares the profile of staff who left DSA during 2010/2011 with that of staff in post at the end of the reporting year.

Key findings

- Examiners who left during 2010/11 tended to be older than those remaining in post.

- A disproportionate number of examiners who left were from an ethnic-minority group.

- There were more admin leavers from the AA pay band than expected (given the number in that pay band).

- A higher than expected proportion of leavers (both examiner and admin) had an unknown / undeclared disability status.

7.1   Ceased Employment

151 DSA employees left during the year, 5.8% of those in post at the beginning of the year. 107 leavers were driving examiners, 40 were admin staff and 4 were support staff.

7.1.1 Driving examiners

Age

Age was the most important characteristic in explaining the pattern of driving examiners who left. Leavers had an average age of 57, significantly older than 51, the average age of driving examiners remaining in post.

This was because over half of examiners who left were retiring.

Disability

A disproportionate number of driving examiners who left had an undeclared or unknown disability status. 15.0% (16) of examiners who left during the year had an unknown disability, compared with 7.5% (135) of remaining staff-in-post.

Race

6.5% (7) of leavers were from an ethnic-minority group (as opposed to white or of undeclared race). This was significantly higher than the corresponding proportion - 4.3% (77) - of BME examiners in post.

For information: 7.7% (138) of driving examiners in post did not identify their race, similar to the 7.5% (8) proportion of leavers.

7.1.2 Admin

Disability

More admin employees with an undeclared or unknown disability status left DSA than expected. Almost 40% (15) of the 40 admin staff had an unknown disability status, compared with only 7% of those remaining in post.

Pay band

A disproportionate number of leavers were from the AA pay band.

40% (16) of admin leavers were from the AA pay band, compared with under 10% of the admin employees who remained in post.

Religion / belief

Fewer than expected admin leavers had declared their religion / belief status (i.e. whether or not they had a religion / belief).

Chapter 8: Performance Assessment

At the end of each reporting year, DSA employees were each awarded a performance assessment mark, based on their end-of-year reports. Employees were awarded any one of three marks:-

- Consistently achieves all requirements.

- Consistently achieves some requirements and is working towards meeting all others.

- Persistently fails to meet one or more requirements, despite development.

This section examines whether there was a significant difference between the profile of those achieving the highest performance mark ('consistently achieves all requirements'), and those who did not receive that mark. As such a high proportion (~90%) achieved the highest mark, there is less likelihood of identifying a significant difference between the profile of employees who did and did not achieve it. However, any significant differences that were observed have been highlighted below.

The information here relates to the reporting year which ended on the 31/01/2011. (the DSA reporting year runs from February to January). Although there is not a specific deadline, staff are encouraged to submit their end-of-year statements as soon as possible after this date. The analysis here was based on all submissions up to the 01/08/2011.

Key findings

- BME employees were less likely to receive the highest performance mark – consistently achieves all requirements.

- Employees in the lower admin pay bands - AA, AO - were also less likely to receive the highest performance mark.

- In contrast, examiners in the lowest pay band (DE) were more likely to have achieved the highest performance mark.

- Employees who had taken some sickness absence were less likely to have received the highest performance mark.

8.1   Headline results

88.7% of DSA employees received the top performance mark – 'consistently achieves all requirements' - and 10.6% received 'consistently achieves some requirements'. Only 16 employees (0.7%) received 'persistently fails'.

88.8% of driving examiners received the top box mark 'consistently achieves all', very similar to the proportion of admin staff who received that mark - 88.5%.

Only three performance marks were awarded to support staff, so these marks are not analysed or reported on here.

8.1.1 Driving examiners

For driving examiners, race and pay band were the employee characteristics associated with the likelihood of receiving the highest performance mark.

No other diversity characteristics were significant.

Race

BME examiners were significantly less likely to have received the top performance mark - 'consistently achieves all requirements' – than their white counterparts. This was the most important characteristic in explaining the distribution of performance marks amongst driving examiners.

76.1% (51) of BME examiners received 'consistently achieves all requirements' compared with 89.4% (1,326) of white examiners and examiners of undeclared race.

% consistently achieves all requirements, by race (examiners)
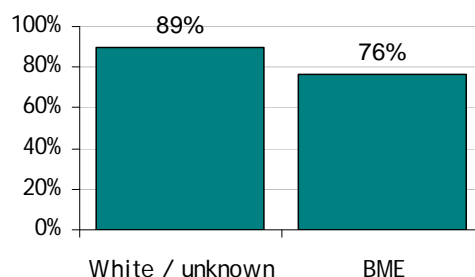
This was also true in the DE grade where 90.4% (1,032) of white / unknown race staff received the top performance mark, compared with 74.6% (41) of ethnic-minority examiners.

Pay band

The next most important indicator for driving examiners was pay band. 89.7% (1,113) of examiners in the DE grade received the top performance mark, compared with 85.4% (264) of examiners in other grades.

8.1.2 Admin

For admin staff, pay band, sickness absence, sexual orientation and race were the employee characteristics found to be associated with the likelihood of receiving 'consistently achieves all requirements'.

Pay band

Pay band was the primary indicator of performance mark for admin employees. 78.0% (198) of admin staff in the AO pay band, and (slightly less significantly) 87.0% (47) in the AA pay band, received 'consistently achieves all requirements'. This was significantly lower than the 96.7% (326) of all remaining admin employees.

% consistently achieves all requirements, by pay band (admin employees)
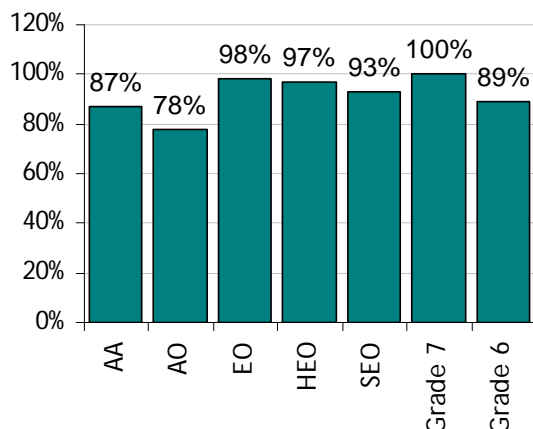
Sickness absence

Admin employees who did not take any sickness absence were significantly more likely to have received 'consistently achieves all requirements; 92.3% (167) of admin staff with no sickness absence achieved the top performance mark compared with 87.1% (404) of those who had some sickness absence.

This finding was also significant within pay bands AA-EO.

Sexual orientation

Heterosexual employees were less likely to have received the top performance mark; 86.3% (265) compared with 90.5% (306) of LGB and unknown sexual orientation employees.

This result should be interpreted with caution due to the high number of employees with an unknown / undeclared sexual orientation.

Race

74.1% (20) of BME admin employees received the top performance mark compared with 89.2% (551) of their white / unknown race colleagues.

White employees were significantly more likely to have an unknown sexual orientation which may help to explain the differences in performance marks by sexual orientation.

Chapter 9: Learning and Development

This chapter considers days of training undertaken by each diversity group.

The training analysed here only includes training booked and recorded through the DSA learning and development team. It is therefore likely that this understates the total amount of training actually undertaken.

Key findings

- For both admin and examiners, older employees and staff in lower pay bands were less likely to have participated in any training.

- Part-time examiners were also less likely to have had training.

- Of the examiners who had taken part in at least some training, those who had some sickness absence had done fewer days.

9.1 Training by diversity group

DSA staff undertook 7,485 days of training in 2010/11 – an average of just under 3 days per employee.

Because the training requirements for driving examiners and admin staff are different, these two groups have been analysed and reported separately for this chapter. (There was no training recorded for support staff).
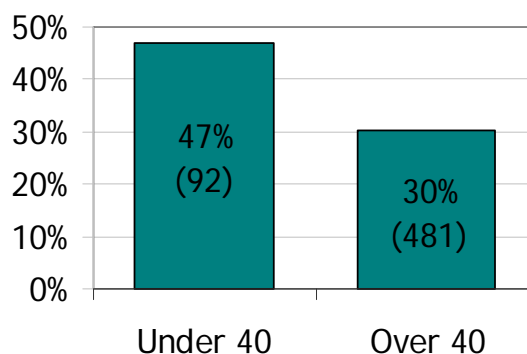
9.1.1 Driving examiners

32% of driving examiners had some training, which equated to 3.7 days of training per person (across all examiners), or 11.7 for those who had had training.

Age

Younger driving examiners were significantly more likely to have had some training, and were also likely to have done more days, on average.

% of driving examiners who had training, by age group

Pay band

Driving examiners in the DE grade were significantly less likely to have taken part in training, whilst the reverse was true for examiners in SE.

% of driving examiners who had training, by pay band
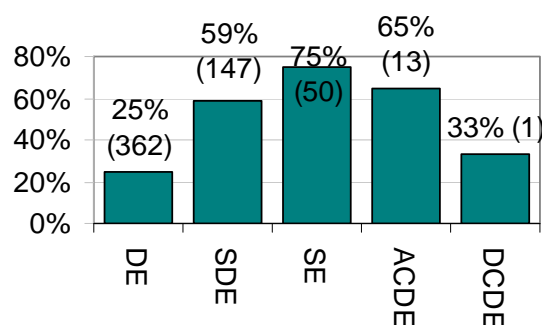
Considering all recorded training activity, DE examiners had also done less days on average. The same was true for ACDE examiners.

Working pattern

A significantly higher proportion of full-time driving examiners had taken part in

training (as compared with part-time examiners).

% of driving examiners who had training, by working pattern

Sickness absence

Considering only the driving examiners who had done some training, those who had been absent due to sickness had participated in significantly fewer training days, on average.

Sexual orientation / religion belief

Heterosexual driving examiners were significantly more likely to have done some training, whilst examiners who had declared a belief / religion were less likely.
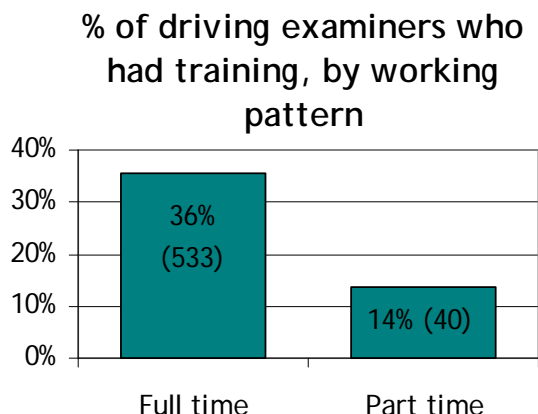
Both these results should be treated with caution due to the high proportion (over half) of employees had not declared a religion / belief or sexual orientation.

9.1.2 Admin employees

Pay band

Pay band explained more of the variation in admin employees' training than any other employee characteristic.

Admin employees in the lowest pay bands – AA and AO – were least likely to have participated in any training.

% of admin staff who had training, by pay band
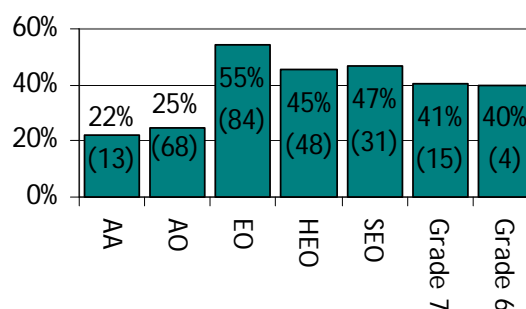
Furthermore, when analysing training undertaken, employees in HEO, SEO and Grade 7 had taken part in a significantly higher number of days.

Disability

Admin employees with an unknown / undeclared disability were significantly more likely to have participated in some training and had done significantly more days.

Age

Younger admin employees were more likely to have done training than their older colleagues, as illustrated below:

% of admin staff who had training, by age group

Chapter 10: Grievances and Discipline

This chapter considers grievances and discipline cases by diversity group, looking at how representative they were of staff in DSA.

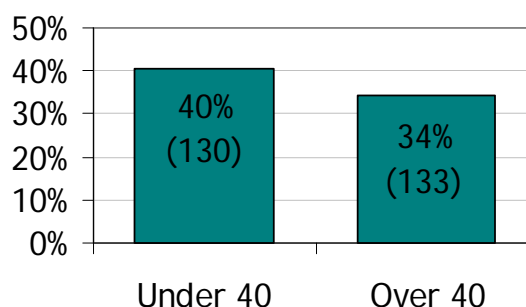The numbers involved for both grievance and discipline cases were too small to carry out statistical testing by pay band. Analysis was only possible for the overall number of grievances and discipline cases.

Key findings

- There were 55 grievances raised in 2010/11 as well as 60 discipline cases.

- A disproportionate number of discipline cases involved disabled employees.

10.1 Grievance cases

There were 55 grievances raised by DSA staff in 2010/11.

20% (22) were raised by female staff.

Three cases were brought by BME staff, and four were by staff of undeclared/unknown race.

13 of the grievances were raised by staff who had declared themselves disabled, and nine were by staff of an undeclared disability.

Seven of the grievances were brought by part-time staff.

There were no significant differences in grievances cases by equality group.

10.2 Discipline cases

There were 60 discipline cases in 2010/11 (over double the number in 2009/10).

A fifth of all discipline cases involved disabled employees. This was significantly more discipline cases than we would expect to have involved disabled employees given the proportion of disabled employees in post (8.5% including unknown declarations, 9.2% without).

A quarter (15) involved female employees.

Eight were brought against BME employees, plus two against staff of undeclared / unknown race.

These proportions were not significantly different from those of employees in post.

Chapter 11: Sickness Absence

This chapter considers days recorded absent due to sickness by each diversity group. Data on days lost by sickness absence were supplied for all staff that were in post at the end of the reporting year (i.e. not including staff who had left DSA during the year).

Both the likelihood of being absent due to sickness and the number of days recorded were analysed according to key diversity factors (sex, race, disability status, sexual orientation and religion / belief), as well as pay band, age and job type. Analysis on the amount of sickness absence was performed only on those staff who had some sickness absence during the year.

Only the factors that showed significant results are commented upon in this chapter.

The purpose of this analysis was to consider differences in sickness absence by diversity group. Like other analysis in this report, it applies to staff who were in post on 31st March 2011, excluding those on long term leave (except for staff on long term sick, who are included in this analysis). It therefore does not match the official sickness absence figures reported quarterly to the Cabinet Office, which should remain the official source.

The main difference with the Cabinet Office returns is that we have not made adjustments for available working time – e.g. staff who have worked for less than the full year.

Key findings

- DSA employees in post at 31st March 2011 had an average of 9.8 days sickness absence in 2010/11. [Official Cabinet Office figure: 11.1 days]

- For both admin and examiners:-

- **Younger** staff were more likely to have had some sickness absence recorded. However, considering only staff who had some sickness absence, older examiners had recorded more days.

- **Females** were more likely to have had some sickness absence.

- **Disabled** employees were more likely to have had some sickness absence. Of those who had been absent, disabled employees had also lost a higher number of days.

- Employees in **lower pay bands**, in particular **AO, DE, SDE**, were more likely to have been absent due to sickness at some point in 2010/11. Considering all sickness absence, employees in **AA** and **AO** had recorded significantly more days than employees in higher pay bands.

Note: Where part-time staff working shorter than standard days had been absent on one of their working days, a full day was recorded in the data rather than the actual hours they had been expected to work. This means that the days quoted in the report may overstate the amount of sickness absence taken. This issue does not arise for part-time staff working standard-length days.

11.1 Overall Analysis

Cabinet Office Figures

Official Cabinet Office figures for sickness absence in DSA are as follows:

Average days of sickness absence	11.1
% employees	74%

As stated in the introduction to this chapter, the cabinet office figures should remain the official source of sickness absence figures for the DSA. Any figures quoted from here on in are based on staff-in-post on the midnight of 31st March 2011.and do not include employees on long-term leave at this point in time (although those on long-term sickness absence are included) or leavers. Therefore any averages quoted will be different from the official Cabinet Office averages above.

Equality Monitoring Sickness Absence

Within this Equality Monitoring analysis (using the smaller subset of employees i.e. excluding leavers and staff on long term leave other than long term sickness absence) 65% of DSA employees had been absent due to sickness at some point in 2010/11.

On average, DSA had an average of 9.8 days sickness absence per employee. Employees with at least some absence had an average of 15.1 days.

As with the rest of this report, admin and driving examiners were analysed separately (numbers of support staff were too small for statistical testing.) However, as the characteristics associated with sickness absence were similar for the two groups, the results

have been summarised together (to avoid repetition).

These characteristics were age, sex, disability and pay band.

11.2 Age

For both examiners and admin staff, younger employees were significantly more likely to have had some sickness absence during 2010/11. The chart below shows the average age of employees by whether they had or had not been absent due to sickness during the year.

Average age by whether employee had some sickness absence
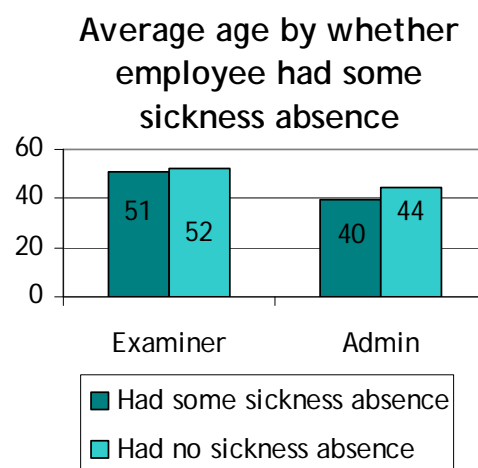
For admin employees, age was the most important characteristic in predicting whether an employee had at least some sickness absence in 2010.

Despite younger driving examiners being more likely to have had sickness absence, considering only those who had at least some sickness absence, older examiners had more days on average. Examiners aged 40 and over had 16 days of sickness absence compared with 12 days for examiners aged under 40.
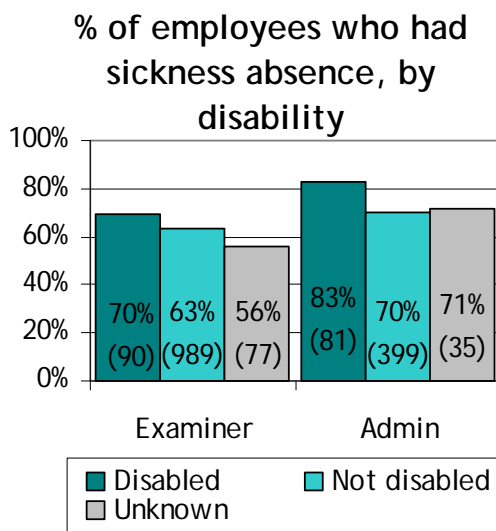
11.3 Sex

For both admin employees and examiners, females were more likely to have been absent due to sickness.

The chart below shows the proportion of employees who had sickness absence, by sex and job type.

% of employees who had sickness absence, by sex

When considering only those who had at least some sickness absence, disabled employees had significantly more days of sickness absence than their non-disabled colleagues. This was true for both examiners and admin staff.

11.5 Pay band

Employees in lower pay bands were significantly more likely to have had sickness absence. This was true of both driving examiners and admin employees. Overall 72% of admin employees had some sickness absence, though this was as high as 80% (224) in pay band AO. When considering only the admin employees who had sickness absence, employees in the AA and AO pay bands had significantly more days.

% of examiners who were absent due to sickness, by pay band
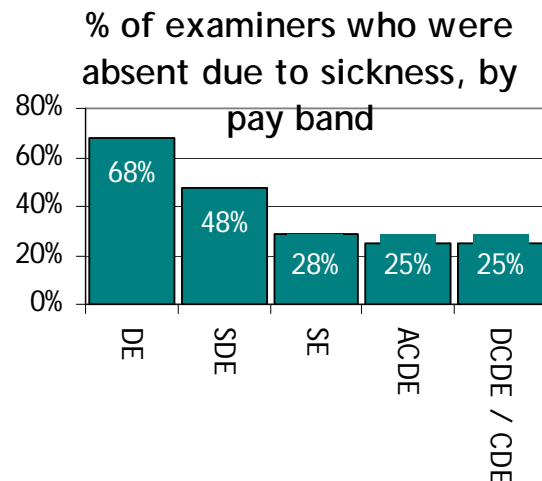

11.4 Disability

Disabled driving examiners and disabled admin employees were significantly more likely to have been absent than their non-disabled or unknown disability counterparts, as illustrated in the following chart:

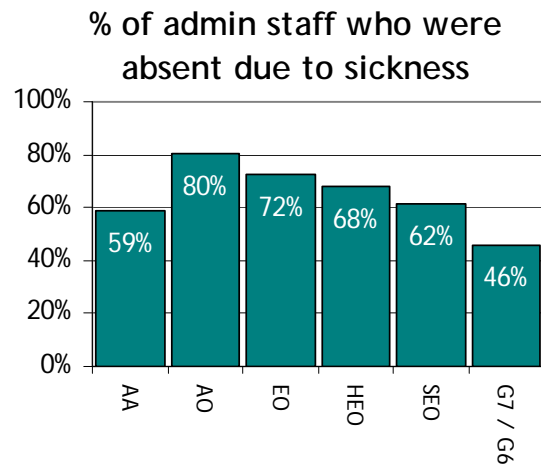**% of employees who had sickness absence, by disability**

68% (1,008) of examiners in the DE grade and 48% (123) of the SDE grade had some sickness absence, significantly higher than the 27% of all remaining examiners.

% of admin staff who were absent due to sickness

Annex A: Notes on Data

A.1   Working-age populations

A.1.1 Reporting locations

To compare the diversity of staff in post with local working-age populations, we attached each building where staff were located to a Reporting Location, e.g. London, Nottingham, etc. This means that if staff were based in London, for example, they would be considered as being in one location, irrespective of which part of London they were located in.

For each Reporting Location we identified a catchment area and generated local working-age population figures based on data for that catchment area.

A catchment area would typically include the relevant Local Authority area for the Reporting Location, plus neighbouring Local Authorities, as agreed with each Agency. For the London Reporting Location, we used the working-age population of all the London boroughs as well as those counties that border them.

A.1.2 Data sources

The UK population data at Local Authority[3] level is from the **Annual Population Survey (APS).** This survey is a combined survey of households in Great Britain, updated quarterly and available at Local Authority level and above. It is a residence-based labour market survey which includes population and economic activity, broken down by sex, age, race, industry and occupation[4] .

The majority of DfT agencies have staff based only in Great Britain, but the Maritime and Coastguard Agency (MCA) also has staff working in Northern Ireland. In previous years, data for Northern Ireland was taken from the **Northern Ireland Labour Force Survey (NI LFS)**; however, this year, this data was also available as a part of the APS dataset.

Where a nationwide population comparison was required, for all agencies other than MCA, the GB working-age population (i.e. not including Northern Ireland) was used. For MCA, the UK working-age population was used.

APS data used in the 2010/11 Equality Monitoring reports was based on the one year period October 2009 - September 2010, and downloaded from www.nomisweb.co.uk ("Nomis") on 23rd May 2011.

A.1.3 Population

Population data at local authority level from the APS was combined with **mid-year** (30 June) **population estimates** for 2009 – the most recent year available. These were also available at Local Authority level and were based upon results from the 2001 Census with allowance for under-enumeration. These figures covered the entire population, not

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[3] Local authorities including County Councils rather than District Councils.
[4] Further information on the survey can be found at http://www.ons.gov.uk/about-statistics/user-guidance/lm-guide/sources/household/aps/index.html.

just the working-age population, so to estimate the working-age population we took the number of males and females aged 15-64 years[5] (only five year age bands were available).

A.1.4 Disabled status

The APS asks respondents whether they are currently DDA disabled, work-limiting disabled, both DDA disabled and work-limiting disabled, or not disabled. For this report, we have combined data on DDA disabled, work-limiting disabled, and both DDA and work-limiting disabled to calculate proportions of the working-age populations that are disabled.

Northern Ireland disability statistics from the NI LFS were obtained via Nomis.

A.1.5 Race

APS data was available for the following ethnic groups:

- Mixed;

- Indian;

- Pakistani/Bangladeshi;

- Black/Black British; and

- Other.

For our analysis we have combined all the above into a single BME category.

A.1.6 Sickness absence data

For DfT(C) and all Agencies, data was available on the number of days of recorded sickness absence for each member of staff, with one record per incidence.

Working pattern

No adjustment has been made to absene records for part-time staff. The analysis has been performed on the number of days absent (i.e. how many days of work were recorded as missed).

If the analysis suggests that part-time staff had significantly more sickness absence, then we can be confident that this finding is correct. i.e. we are saying that they were absent for more actual calendar days than other staff- not making any allowance for the fact that they may have been due to work fewer calendar days in the first place.

Conversely all being equal, we might expect part-time staff, say, working three days a week to have a lower chance of being ill on any given standard work day than full time staff, so the reverse result (part-time staff having significantly less absence) may not be relevant.

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[5] Please note that as of August 2010, the official definition of "working age" expanded to include both males and females aged 16-64 years old; this reflects a planned change in the female state pension age. All have been included in our working-age populations.

Annex B: Analytical Approach

Two statistical approaches have been used to test for differences in the data: univariate methods such as chi-squared and proportions tests and multivariate methods such as multiple regression and logistic regression.

B.1   Univariate methods Chi-squared and Proportions tests

These tests were employed to test whether the proportion of staff by each diversity grouping was significantly different from that found within the local working-age population. For example, in considering whether the sex split of the staff based in a location would have been expected - all things being equal. They were also used to investigate recruitments to check if the proportion of candidates by each diversity grouping was significantly different from that of the local working-age population.

The results of these statistical tests give an indication of whether the pattern observed in the data was "significantly different from what would have been expected" or conversely whether any difference in proportions could be explained by natural variation.

For example, in the case of the working-age population, if there had been 100 staff, and 40 of them were male, and the local working-age population was split 50:50, the tests would tell you whether your group was statistically different from any random sample of 100 from the working-age population.

For these tests we used the 95% confidence level. This means that if we have reported a difference as being significant there was only a 5% chance that the difference could have occurred by chance. We have also reported on differences that were significant at the 99% level – i.e. a 1% chance that the differences would have occurred randomly.

A certain amount of variation is expected, even with completely random samples, and so it should not be assumed that something that is statistically significant indicates that there is a bias – the significance only indicates the likelihood of something occurring given the level of significance being used. For example, a significant result at the 99% level would indicate something which is more unusual than something that is only significant at the 95% level.

One of the drawbacks of multiple univariate testing is that the more tests that are undertaken the higher the probability of finding false significant results. To reduce this risk, we have used the Bonferroni adjustment to the significance levels.

A further drawback with univariate approaches is that they do not take into account all of the other factors simultaneously. In practice an individual staff member has several characteristics: their sex, race, grade etc. In comparing just one of these characteristics with an outcome, the effect of another characteristic is not taken into account and results can be misleading. It is possible to use multi-dimensional contingency tables for chi-squared tests, but the interpretation of the results can be difficult.

It is still, however, an appropriate approach in many circumstances – particularly when the group of staff should be reasonably comparable with the rest of the population (e.g. staff ages compared with working-age population; or the sex split across pay bands).

B.2   Multiple Regression and Logistic Regression

Two techniques were used to analyse data taking into account several factors simultaneously: multiple regression and logistic regression.

Multiple regression attempts to predict a dependent variable (such as amount of sickness absence taken) using one or more independent variables (such as sex, age etc). The basic principle is to find the 'line of best fit' by minimising the sum of the squared distance from the fitted line to each observation. (This approach is sometimes referred to as ordinary least squares regression). The aim is to find independent variables that have a statistically significant relationship with the dependent variable.

Much of the data that was analysed had a simple binary output, for example, was in a pay band or not; obtained the top performance rating or did not; was selected for interview or was not etc. The staff data had descriptors such as sex, age, pay band etc. This type of data more easily lends itself to being analysed using logistic regression.

Logistic regression is analogous to ordinary least squares regression, with the exception that the dependent variable is binary (or can be made binary). In both approaches, the first step of the process, is for each characteristic to be tested in turn to see if it is significant against the outcome (e.g. passed a recruitment stage or not). By significant, we mean that a staff characteristic accounted for an unusually high proportion of the variation seen in the dependent variable. For example, if sex appeared to have a significant relationship with whether people had passed their interviews.

In this case we would say something was successful or significant in "explaining the variation", to mean that if you knew the characteristic of the staff member, you would have a better chance of predicting the outcome (for example if you knew the sex, you would also know something about the likely interview outcome). The starting assumption, of course, was that prior knowledge of someone's sex; race; age etc should not enable the model to predict whether they were more likely to have received the highest performance rating or were interviewed etc. Again, as with the univariate approach, significance does not necessarily equate to bias but gives the relative likelihood of it occurring.

The next step in the modelling process was to include the characteristic that explained the majority of the remaining variation after taking account of the first variable. This step was repeated until the variables outside the model could explain no further variation.

Generally an outcome could not simply be explained by a single characteristic. Often, it was several characteristics together that were important. For example, age, sex and race were quite often found to be a powerful combination in explaining variation. A major advantage of the multivariate approach, compared with univariate, is that it is easier to see the relative importance of the characteristics.

There was an element of judgment involved in deciding which variables to include. In some cases variables were highly correlated, e.g. sex and full time equivalence: females were more likely to be part time than males. Where both were statistically significant and improved the amount of variation that could be explained, both were included.

Annex C: Tables and charts

C.1   Year on year comparison

C.1.1 Diversity groups and declaration rates

The following chart shows a yearly comparison of the proportion of both the minority groups, by sex, race and disability status, as well as the proportion of unknown / undeclared. It shows that most proportions have remained similar, although there was, between 2008/09 and 2009/10, a rise in the level of undeclared disability.

Year on Year Comparison of Diversity Results
Diversity Groups as a Proportion of all Staff in Post, by Year
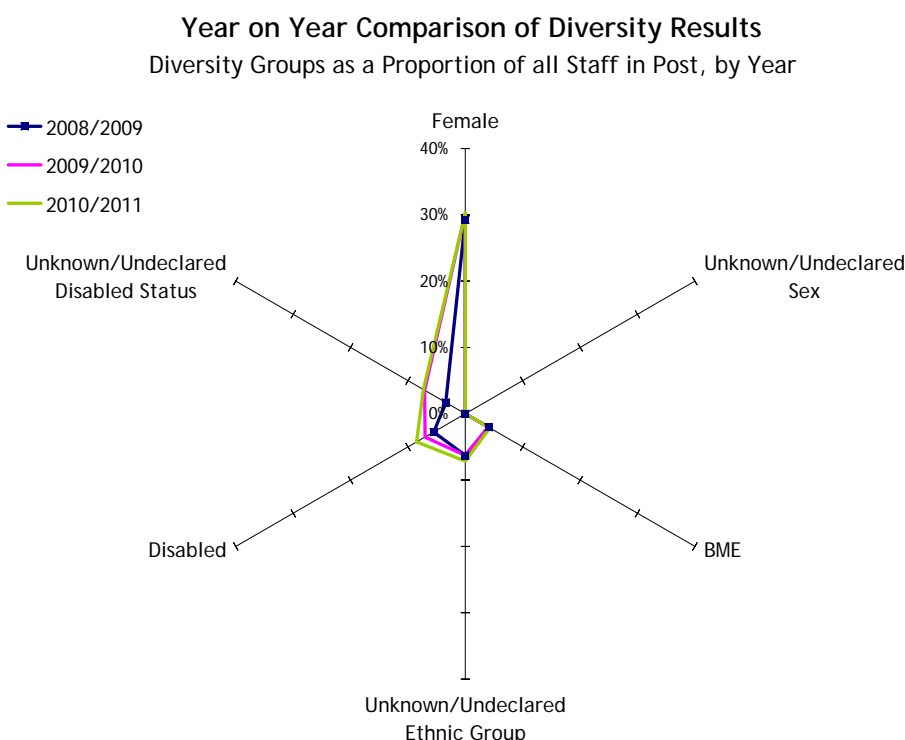
C.1.2 Year on year comparison – all staff

Staff Type	March 31st 2010			March 31st 2011			Percentage point change	% change from 2010
	2009/2010	% of total	% of total that declared	2010/2011	% of total	% of total that declared		
All staff	2612			2533				
Males	1822	69.8%	69.8%	1766	69.7%	69.7%	-0.0	-3.1%
Females	790	30.2%	30.2%	767	30.3%	30.3%	+0.0	-2.9%
White	2344	89.7%	95.8%	2244	88.6%	95.4%	-1.1	-4.3%
BME	104	4.0%	4.2%	108	4.3%	4.6%	+0.3	+3.8%
Unknown Race	164	6.3%	-	181	7.1%	-	+0.9	+10.4%
Non-disabled	2243	85.9%	92.5%	2133	84.2%	90.8%	-1.7	-4.9%
Disabled	183	7.0%	7.5%	215	8.5%	9.2%	+1.5	+17.5%
Unknown disability	186	7.1%	-	185	7.3%	-	+0.2	-0.5%
Full Time	2171	83.1%	83.1%	2073	81.8%	81.8%	-1.3	-4.5%
Part Time	441	16.9%	16.9%	460	18.2%	18.2%	+1.3	+4.3%
Average age	47.8			48.5				