



Leading education and social research Institute of Education University of London

Working Together: Volume 1 Secondary analysis of the Labour Force Survey to map the numbers and characteristics of the occupations working within Social Care, Childcare, Nursing and Education

> Antonia Simon, Charlie Owen, Peter Moss, Pat Petrie, Claire Cameron, Patricia Potts and Valerie Wigfall

Thomas Coram Research Unit, Institute of Education, University of London

Contents

Acknowledgements	ii
Executive Summary	iii
Key findings	<u>iii</u>
Background	<u>iv</u>
Methodology	<u>iv</u>
Findings for England	<u>v</u>
Findings for Scotland	viii
Conclusions	viii
Chapter One: Introduction	1
1.1 Situating this report	<u>1</u>
1.2 Why and who? Rationale and readership	<u>2</u>
1.3 The structure of the report	<u>3</u>
Chapter Two: Occupations in the care workforce	<u>5</u>
2.1 The Labour Force Survey	<u>5</u>
Chapter Three: Findings for England	<u>8</u>
3.1 Numbers in the workforce	<u>8</u>
3.2 Social care workers	9
3.3 Childcare workers	<u>14</u>
3.4 Nursing workers	<u>18</u>
3.5 Education Workers	<u>21</u>
3.6 Workers in high percentage female jobs	<u>24</u>
3.7 All women workers	27
3.8 Comparative data	<u>28</u>
3.9 Cluster analysis	<u>33</u>
Chapter Four: Findings for Scotland	<u>37</u>
4.1 Numbers in the workforce	<u>37</u>
4.2 Social care workers	<u>38</u>
4.3 Childcare workers	<u>39</u>
4.4 Nursing workers	<u>40</u>
4.5 Education workers	<u>41</u>
4.6 Workers in high percentage female jobs	42
4.7 All women workers	43
Chapter Five: Conclusions	<u>45</u>
References	48
Appendix	<u>50</u>

Acknowledgements

This research was supported by the Department for Education and Skills and subsequently by the Department for Children, Schools and Families. However, the views expressed are those of the authors and do not necessarily reflect those of the former DfES nor of the DCSF.

Material from the Labour Force Survey is Crown Copyright; has been made available by the Office for National Statistics through the UK Data Archive and has been used with permission. Neither the ONS nor the Data Archive bears any responsibility for the analysis or interpretation of the data reported here.

Executive Summary

Introduction

This report maps some of the key features of the 'care workforce' – defined as Social care and Childcare workers. They are contrasted with four other occupational groups: Nursing workers; Education workers; occupations with high levels of female workers; and all women workers. Education and Nursing workers, with the 'care workforce', constitute the 'human services' workforce. The mapping exercise is based on secondary analysis of the Labour Force Survey (LFS), combining data over five years (from 2001-2005). It separately covers England and Scotland. The report covers three broad areas:

- Estimates of the *numbers* employed in the care workforce and the other four groups outlined above.
- The *characteristics* of each occupational group, including gender, age, ethnicity, parental status, education and qualifications.
- Job status and conditions of employment for the six occupational groups, including the sector in which workers are employed, contractual status, hours and pay.

Key findings

- The care workforce in England and Scotland consists of 1.1 million workers; the 'human services' workforce comprises just over 3 million workers.
- The 'human services' workforce in England increased from 2.46 million in 1997-99 to 2.74 million in 2001-05. This increase of 11 percent is mainly accounted for by an increase in the number of Education workers, in particular a large rise in the number of *Educational assistants*. The proportion of women in the workforce increased by 6 percent: the increase in the 'human services' workforce is equivalent to nearly half the overall growth in women's employment.
- The occupations studied were combined into three main groups or clusters.

Cluster 1 (Education): better qualified and better paid than the other groups; they work longer hours, have the lowest percentage of female and the highest percentage of white employees, and are slightly older.

Cluster 2 (Welfare/ Health): intermediate on qualifications, pay, hours, age and percentage female; they are the most likely to work outside the private sector and have the lowest percentage of white employees.

Cluster 3 (Childcare/Assistants): occupations have the lowest levels of qualifications and pay; they are more likely to work part-time; they are the

youngest group, with the highest percentage of female employees and are the least likely to work outside of the private sector.

- There is a strong relationship between qualification levels, pay, employment sector and gender; occupations with the highest proportions of women workers mostly have low qualifications and pay and a high likelihood of employment in the for-profit sector.
- There is some evidence of improving qualifications and work-related training amongst the care workforce, while pay has improved across the board.
- The LFS is the largest and most comprehensive survey of the workforce, but other surveys also include workforce data. Comparison of the LFS with these other sources produce similar results; discrepancies can be explained by the different methodologies. These findings give extra confidence in the results from the LFS.

Background

The report updates an earlier mapping of the English care workforce (Simon *et al.*, 2003), using LFS data for 1997-1999, providing some indication of change over a period of rapid policy development. It also includes, unlike the earlier mapping, a section on the Scottish workforce.

This latest analysis takes place at a time when a clear policy agenda – *Every Child Matters* - has emerged that presumes social care, childcare, education and health services and their workforces should be working together in an integrated way to achieve common outcomes for children and young people. This presumption is given force by a range of measures including the development of a Children's Workforce Strategy, a Common Core of Skills and Knowledge for the Children's Workforce, team working and multi-purpose children's settings. As it becomes normal to think and develop policy for 'the children's workforce', it becomes more important to look across the diverse occupations that constitute that workforce, including those working in schools.

The report provides material for anyone or any organisation wishing to think strategically about the way work with children, young people and adults is structured and what may be the issues of common interest and concern, their origins and possible solutions going forward.

Methodology

The mapping reported here is based on secondary analysis of a large-scale and regularly updated data set, the LFS, combining data over five years (from 2001-2005) and covering England and Scotland. The LFS is a national survey of private households in the United Kingdom and is the largest of the government's regular household surveys; data is collected from approximately 60,000 households per quarter.

The LFS provides information about occupations using the Standard Occupational Classification (SOC). The SOC is a detailed classification of occupations: *unit groups* are sets of specific occupations, grouped together on the basis of tasks performed and the qualifications, training, skills and experience commonly associated with those tasks. This study has focussed on 17 of these *unit groups*, organised into four occupational groupings: 1) 'Social Care workers', 2) 'Childcare workers', 3) 'Nursing workers', and 4) 'Education workers'. The first two constitute the 'care workforce'; all four make up the 'human services' workforce. Only those involved in the *direct* provision and delivery of care or education for adults or children and young people are included in the findings that follow; managers were not included in the analyses.

In addition, two other occupational groupings are included in this analysis, to set the findings of the four 'human services' occupational groupings into context. The first additional group is the 'High percentage female jobs', comprised of Hairdressers, Beauticians, Sales and Clerical staff. Like the care workforce, they have very high percentages of female workers; they are, therefore, occupations that people in the care workforce might have chosen as alternative careers. The final group is 'All women workers': these are included as a contrast because of the high percentage of women in the care workforce.

There are other surveys against which results from the LFS analysis can be compared. Three have been used here: the Annual Survey of Hours and Earnings, the NHS workforce censuses and DfES childcare and early years survey. The results from these different sources are very similar; the discrepancies can be explained by different methodologies.

Findings for England

- Analysis of the Labour Force Survey (LFS) for the years 2001-2005 shows there were 1,012,000 workers in the care workforce, which is comprised of two major occupational groupings: Social care workers and Childcare workers.
- Within this report, the care workforce is compared to Nursing workers and Education workers (which between them accounted for 1,727,000 workers on the basis of 2001-05 LFS data) and a High percentage female job group, which is comprised of occupations known to attract a high proportion of female workers, including: Clerical workers, Beauty and Hair technicians, and Retail staff. This latter group is very similar to the care workforce in terms of gender, and provided a good benchmark for average characteristics. This group accounted for 2,860,000 workers.
- All women workers were included and they accounted for 10,797,000 workers between 2001 and 2005.
- The care workforce, plus Nursing and Education workers, included nearly two and three quarter million workers, an increase of 11 percent since the earlier study, and accounted for 12 percent of the total workforce in England (male and female combined). The four broad groupings (Social care, Childcare, Nursing, Education) make up the 'human services' workforce in England.

Social care workers

• 732,000 persons were classified as Social care workers using the LFS 2001-2005: 68,000 Social workers, 28,000 Houseparents and residential wardens, 67,000 Youth and community workers, 105,000 Housing and welfare officers, and 463,000 Care assistants/home carers.

• Social care workers were mainly female and white; on average, they were aged 41 years, earned £12,338 per annum (£7.59 per hour), and worked 32 hours per week. This profile was very similar to that of all women workers.

• Nearly two-thirds of Social care workers were qualified to NVQ level 2 or above, similar to all women workers. However, there were variations within this group, with *Social workers* being the most qualified, and *Care assistants/home carers* the least qualified.

• Two-fifths worked in the for-profit private sector and nearly a third for local government. Pay is considerably higher in the non-private sector.

Childcare workers

• 280,000 persons were classified as Childcare workers: 128,000 *Nursery Nurses*, 24,000 *Playgroup workers*, 101,000 *Childminders and related occupations*.

• Childcare workers were overwhelmingly female and white; on average, they were aged 35 years, earn £7,963 per annum (£5.72 per hour), and worked 29 hours per week. Childcare workers were younger (especially *Nursery nurses*) and were earning less (especially *Playgroup workers*) than workers in all five other occupational groups included in the study.

• Only five percent of Childcare workers had a degree level qualification. Overall, the *Childminders and related occupations* were the least qualified relative to the *Nursery Nurses* and *Playgroup workers*.

• Two-thirds worked in the private sector, the highest proportion of all the groups; the great majority of childminders worked in this sector, compared to around half for the other two occupations. Pay was considerably higher in the non-private (public and voluntary) sector.

Nursing workers

• 586,000 persons were classified as Nursing workers: 379,000 *Nurses*, 31,000 *Midwives*, and 176,000 *Nursing auxiliaries/assistants*.

• Nursing workers were mainly female and white; on average, they were aged 41 years, earned £16,630 per annum (£9.69 per hour), and worked 34 hours per week. This was very similar to all women workers with the exception of pay and hours, which were both higher for Nursing workers than for all women workers.

• Nearly nine out of ten worked in the non-private sector, mostly in the health service.

Education workers

• 1,141,000 persons were classified as Education workers: 299,000 *Primary/Nursery education teachers*, 308,000 *Secondary education teachers*, 60,000 *Special education teachers*, 281,000 *Educational assistants*, 109,000 *Teaching professionals*, and 84,000 *School mid-day assistants*. Since 1997-99, the number of *Educational assistants* had doubled, and in 2001-05 they constituted a quarter of the workforce.

• Education workers were mostly female (but nearly a quarter of this group were male, making them different to all the other occupation groups) and overwhelmingly white; on average, they were aged 43 years, earned £19,127 per annum (£12.00 per hour), and worked 37 hours per week. Pay per annum for this group of workers was considerably higher than for the Social care workers, the Childcare workers, and all women workers.

• The Education workers can be divided into two parts on working conditions. On the one hand were the teachers (*Primary/Nursery*, *Secondary* and *Special education*), who clustered together, and on the other hand were the other education workers (the *Teaching professionals*, *Educational assistants* and *School mid-day assistants*) who were much less qualified, earned less and worked shorter hours.

• The great majority worked in the non-private sector, with most employed within local government.

High percentage female jobs

- The High percentage female jobs group were overwhelmingly white; on average, they were aged 37 years, earned £6,698 per annum (£7.29 per hour), and worked 29 hours per week. This was very similar to the other occupation groups except for hourly pay (which was slightly higher for these workers than for the Childcare workers, and lower for these workers than for the Nursing or Education workers), and hours worked (which was lower for these workers than for all the other occupation groups, with the exception of the Childcare workers).
- They had low levels of qualifications and high levels of employment in the private sector.

All women workers

All women workers were overwhelmingly white; on average, they were aged 39 years, earned £13,894 per annum (£9.98 per hour), and worked 31 hours per week. This was very similar to the other occupation groups except for pay (lower for all women compared with the Nursing and Education workers) and hours (more for all women compared with the Childcare workers and the High percentage female job group). Qualification levels for all women workers were most similar to the Social care workers, with the Childcare workers having

rather lower qualifications, and the Nursing and Education workers having higher qualifications.

Cluster analysis

• An analysis of all occupations included in this study suggests that they could be assigned to one of three clusters. Cluster 1 (Education) occupations were on average better qualified and better paid than the others; they worked longer hours, had a lower percentage of female and a higher percentage of white employees, and were slightly older. Cluster 2 (Welfare/Health) occupations were intermediate on qualifications, pay, hours, age and percentage female; they were the most likely to work outside the private sector and had the lowest percentage of white employees. Cluster 3 (Childcare/Assistants) occupations had the lowest levels of qualifications and pay; they were more likely to work part-time; they were the youngest group, with the highest percentage of female employees and were the least likely to work outside of the private sector.

Findings for Scotland

- Analysis was carried out separately for Scotland, but it was not possible to include individual occupations, because of the small numbers; nor was there any data from the 1997-99 LFS as a basis for assessing change over time.
- In Scotland, the care workforce accounted for 122,000 workers (97,100 Social care workers and 25,000 Childcare workers), and in addition, there were: 84,000 Nursing workers and 101,000 Education workers.
- The English and Scottish workforces were broadly similar in characteristics. The main differences were that: across all groups, workers in Scotland were less likely than in England to come from ethnic minority groups; compared with England, the care workforce and Education workers in Scotland had rather higher educational qualifications and rather more workers were in the nonprivate sector; Education and Childcare workers in Scotland were rather more likely to work full time; and Education workers in Scotland earned, on average, 20 percent more than their counterparts in England and Social care workers earned 7 percent more. However, Scotland had proportionately far fewer school mid-day assistants, which, because this group was relatively low paid, may account for some of the pay differential among Education workers.

Conclusions

The care workforce in England and Scotland consisted of 1.1 million workers, while the 'human services' workforce consisted of just over 3 million workers. In England, the 'human services' workforce had increased from 2.46 million in 1997-99 to 2.74 million in 2001-05, an increase of 11 percent mainly accounted for by Education workers, in particular a large rise in *Educational assistants*. By contrast, the increase among All women workers was 6 percent (619,000); overall, therefore, the increase in the 'human services' workforce is equivalent to nearly half the overall growth in women's employment (45 percent). There was some evidence of improving qualifications and work-related training amongst the care workforce, while pay had improved across the board.

- The 'human services' workforce constituted a large and growing proportion of the overall workforce, and even more so of the female workforce: women in the 'human services workforce' accounted for a quarter of all women workers, while women in the 'care workforce' were nearly 10 percent of women workers. The conditions of these workforces will, therefore, play an important role in determining the overall position of women workers in the labour force and in the attainment of gender equality in employment.
- The 'human services' workforce is strikingly hierarchical, and the 'care workforce' was strongly represented in the lowest tier of the three-tier hierarchy described in the cluster analysis of occupations. The renewed emphasis on closer working relationships among the children's workforce takes place within this context, and these structural differences may not facilitate collaboration. There was little indication that the hierarchy is reducing; indeed, quite the contrary, with the marked growth of *Educational assistants* and Childcare workers.
- The hierarchical nature of the workforce suggests that, overall, the occupations included in the human services workforce were not competing to recruit the same kinds of workers. However, there may be the potential for competition within each of the three tiers.
- There was a clear relationship between gender, qualification and pay: the cluster of 'childcare/assistant' occupations had the highest level of women workers and the lowest levels of qualification and pay; the cluster of 'education' occupations have the lowest level of women workers and the highest levels of qualification and pay.
- With the growth of *Educational assistants* and Childcare workers, among which the proportion of female workers was very high, the human services workforce is becoming more gendered.
- Pay and conditions in the 'for profit' sector were mostly lower than in other sectors. The growth of 'for profit' providers, especially in childcare and social care services, has had adverse consequences for the pay and conditions of the care workforce.
- The LFS, used in this analysis, is only one of several large-scale data-sets providing information on all or parts of the 'care' and 'human services' workforces. When interpreting and using reported findings on workforces, it is important to be aware of the data-set used and its coverage, sample source and conventions.

Chapter One: Introduction

1.1 Situating this report

This report maps some of the key features of what might be termed the 'care workforce'. They are contrasted with four other groups in the workforce, all of whom, like the 'care workforce', have high proportions of women workers and two of whom, together with the care workforce, make up much of the workforce in human services. The mapping, covering England and Scotland, is based on secondary analysis of a large-scale and regularly updated data set, the Labour Force Survey (LFS), combining data over five years (from 2001-2005).

The report itself relates to two pieces of research. First, it updates an earlier mapping of the English care workforce (Simon *et al.*, 2003) using LFS data for 1997-1999, providing some indication of change over a period of rapid policy development. It also includes, unlike the earlier mapping exercise, a section on the Scottish workforce. Second, the current mapping exercise forms part of the first stage of a larger research project being undertaken at the Thomas Coram Research Unit, focused on interprofessional working in multi-purpose children's settings such as Children's Centres and Extended Schools. Understanding structural differences among the children's workforce constitutes one part of the context that influences interprofessional working.

The focus of this study, as the previous one, is the situation of two broad groups of care workers – Childcare workers and Social care workers - referred to below as the 'care workforce'. The occupations that constitute these two groupings are discussed later, but for the moment we can note that they constitute a substantial workforce, more than a million workers in England alone and a further 122,000 in Scotland.

We have included information about four other workforce groups: Nursing workers; Education workers; those in occupations with high levels of female workers; and all women workers. As we discuss below, with the introduction of the *Every Child Matters* agenda, there seems less need to justify the inclusion of the first two groups than when we prepared our first report five years ago. The inclusion of the last two groups is relevant because childcare and social care work are both, in large measure, gendered employment (no change here since the earlier report), with very high levels of female workers: mapping the care workforce raises the question of how similar or different its members are to the generality of women workers.

Our mapping exercise, which has been defined by information collected in the LFS, covers three broad areas:

- Estimates of the *numbers* employed in the two occupational groups that constitute the care workforce and the other four broad groups outlined above.
- The *characteristics* of the workforce in each of these six occupational groups, including gender, age, ethnicity, parental status, education and qualifications;

• Job status and conditions of employment for the workforce in the six occupational groups, including the sector in which workers are employed, contractual status, hours and pay.

1.2 Why and who? Rationale and readership

In our earlier report, we felt the need to justify taking a 'joined up' approach to the care workforce, which spanned childcare and social care, both work with children and with adults, and included, as points of reference, Education and Nursing workers. Our rationale rested on three grounds:

- The need to assess to what extent social care, childcare, education and nursing services are seeking to recruit the same kinds of workers, given the increasing demand for workers in all services.
- The potential value of taking a common approach to shared issues across the workforces in what might be broadly termed 'human services', citing as examples the gendered profile of most occupations within the mapping exercise and the low status of a number of occupations across the four human service areas.
- New relations forming between care and other areas of social policy.

All three still seem to us valid reasons for looking broadly across care, education and nursing. But in some respects, the rationale has become stronger and more topical. In just five years, the third reason has acquired very high policy priority. Following the publication in England of the *Every Child Matters* Green Paper in 2003, a clear policy agenda has emerged that presumes close relationships across the whole children's workforce: social care, childcare, education and health services and their workforces should be working together in an integrated way to achieve common outcomes. This presumption is given force by a range of measures including the development of a Children's Workforce Strategy, a Common Assessment Framework for Children and Young People, a Common Core of Skills and Knowledge for the Children's Workforce, joint commissioning, team working and multi-purpose children's settings (in particular children's Centres and Extended Schools).

Another indication of this policy shift has been the transfer, in 2004, of departmental responsibility for children's social care from the Department of Health to the (then) Department for Education and Skills. In 1997, when the LFS data sets we used for our first report began, the Department of Health was responsible for the workforce in three of our four 'human services' groups: social care, childcare and nursing. Today, it is solely responsible only for the nursing workers group, plus that part of the social care workforce working with adults; the rest is within the remit of the Department for Children, Schools and Families.

So, as it becomes normal to think and develop policy for 'the children's workforce', it becomes more important to look across the diverse occupations that constitute that workforce, including those working in schools; this report, and its predecessor, cover much of the same wide field as the recently established Children's Workforce Network. But the case for taking a broad cross-sectoral approach, spanning workers in services for children, young people *and* adults, has

also become more apparent. Cross-sectoral and cross-national research conducted at Thomas Coram Research Unit – *Care Work in Europe: Present Understandings and Future Directions* (Cameron and Moss, 2007) – has emphasised the similarities between workforces in services for people across the life course, whether shared challenges or common competences; it also raises questions about the structuring of what we have termed the human services workforce.

The mapping exercise reported here crosses many borders to give a broad picture spanning many sectors; its findings, therefore, encourage readers to think 'out of the box', and to observe and question broader patterns. Why, as the cluster analysis of occupations reveals (see section 3.8) is the human services workforce structured so hierarchically, and with such a large group in the bottom tier? Why are occupations associated with 'care' - whether 'childcare' or 'social care', with young children or older people - mostly in this tier, lodged at the bottom of the hierarchy? What are the implications for integrated working with children and young people of the marked differences in conditions, qualifications and status between education, health and welfare, and childcare occupations? Are these marked differences justifiable, or indeed sustainable? Why are so many of the occupations covered, irrespective of sector, so strongly gendered, but most notably the 'childcare/assistant' grouping at the bottom of the cluster hierarchy, in which 94 percent are women and earnings average less than £6 an hour?

The report provides information on individual occupations; so it is a valuable resource for anyone interested in a particular occupational group, whether for research, policy, planning or other reasons. But this report positions individual occupations in a wider context - the 'human services' workforce but also women workers overall. Therein, it supports cross-occupational and cross-sectoral comparisons and connections. It provides, hopefully, useful material for anyone or any organisation wishing to think strategically about the way work with children, young people and adults is structured and what may be the issues of common interest and concern, their origins and possible solutions going forward.

One other feature of the report should be mentioned. Although originally focused on a single major source of workforce data – the Labour Force Survey – curiosity and external questioning have led us to compare some results from the LFS with those from some other major government data sets. This in turn has thrown up some interesting discrepancies and a better understanding of their causes and, therefore, of the pros and cons of different sources of information on the workforce. The report, therefore, has some useful material for anyone who uses, or plans to use, national data sets for workforce-related purposes

1.3 The structure of the report

This report begins with a detailed discussion of the occupations included in the analyses that follow, together with a short introduction to our data source, the Labour Force Survey. This section includes a discussion of how classifications of occupations used in the LFS have changed between this report and its predecessor. For this reason, comparisons between the two reports are not straightforward: we are not always comparing like with like. This, for example,

contributes to a fall in the number of 'Childcare workers', which at a time of rising childcare provision might, at first glance, seem surprising.

There then follows a section presenting main findings for each of the six broad occupational groups in England, and a comparison between the LFS and some other national data sets focused on workforces. Then comes a section covering the same occupational groups in Scotland. For each group, we also look in more detail at individual occupations and consider what changes have occurred since our earlier report. A section drawing out some conclusions finishes off the initial part of the report. For those readers requiring more detail, the appendix contains detailed tables for each of the variables used in our analyses. A technical note about some of the variables that have been analysed in this study is presented at the end of the appendix.

Chapter Two: Occupations in the care workforce

2.1 The Labour Force Survey

The LFS is a national survey of private households in the United Kingdom and is the largest of the government's regular household surveys (Owen, 1999). The Office for National Statistics (ONS) conducts the survey and it collects data from approximately 60,000 households per quarter. Full details of the survey methodology are given in the LFS User Guide (Office of National Statistics, 2003). Results are published in the LFS Quarterly Supplement to *Labour Market Trends*. Data are made available through the UK Data Archive.

When people in a household agree to take part in the LFS, they are interviewed five times at quarterly intervals. Most questions are repeated each quarter, but income questions are not asked every quarter. In addition to income, data are collected on a wide range of subjects, including occupation, training, age, qualifications and hours of work.

The LFS provides information about occupations using the Standard Occupational Classification (SOC) (Office of National Statistics, 2000a,b). The SOC is a detailed classification of occupations – with nine major groups¹, which divide into 81 minor groups and hundreds of unit groups. Unit groups are sets of specific occupations, grouped together on the basis of tasks performed, and the qualifications, training, skills and experience commonly associated with those tasks.

Every 10 years the SOC is revised, to take account of changes to job titles, tasks performed and changing qualification levels. The previous mapping study, based on secondary analysis of 1997-99 LFS data sets, used the SOC 1990 system for identifying, quantifying, and characterising the care, nursing and education workforces. In this updated analysis, the SOC 2000 system has been used. The LFS first used this new system in 2000, quarter 1. These changes to the SOC classification system, between SOC 1990 and SOC 2000, as they affect the occupations in which we are interested, are detailed in the text that follows and in table 36 in the appendix.

This study has focussed on those *unit groups* (referred to below as 'individual occupations') that make up four occupational groupings: 1) 'Social Care workers', 2) 'Childcare workers', 3) 'Nursing workers', and 4) 'Education workers'. Only those involved in the *direct* provision and delivery of care or education for adults or children and young people are included in the findings that follow; managers were not included in the analyses.

The first occupational grouping 'Social care workers' consists of the following unit groups or individual occupations: *Social workers, Youth and community workers,*

¹ These nine major groups are: Managers and Senior Officials; Professional Occupations; Associate Professional and Technical Occupations; Administrative and Secretarial Occupations; Skilled Trades Occupations; Personal Service Occupations; Sales and Customer Service Occupations; Process, Plant and Machine Operatives; and Elementary Occupations. See the Standard Occupational Classification (SOC) (Office of National Statistics, 2000a, b).

Housing and welfare officers, Houseparents and residential wardens and Care assistants/home carers. These occupations are broadly the same as those in the earlier study, with four exceptions:

- In the SOC 2000, social workers are no longer grouped together with 'probation officers' (as was the case with the SOC 1990); 'probation officers' are not included in the current study.
- In the SOC 1990 coding, *Housing and welfare officers* and the *Youth and community worker* were coded as one occupation: 'Welfare, Community and Youth workers'. Now, using the SOC 2000, they appear as two separate codes.
- The SOC 1990 coding 'matrons/houseparents' has been replaced in SOC 2000 by *Houseparents and residential wardens*. Information supplied by the occupation information department of the Office for National Statistics (ONS) (occupation.information@ons.gov.uk) indicates that the former group have been reclassified in the SOC 2000, some as *Houseparents and residential wardens* or as *Youth and community workers* (and therefore still included in the Social Care workers grouping), but others as 'residential and day care managers' and therefore (as managers) are no longer counted as Social care workers.
- The category Care assistants/attendants in the SOC 1990 has become Care assistants/home carers in SOC 2000. Little has changed in terms of who these workers are, but the title used in SOC 2000 makes it clearer that this category contains those people working as home helps (or home carers) within people's homes. The SOC 2000 coding system, therefore, simplifies our analysis, because we no longer need to include 'cleaners and domestics working in social work' (who were added as our proxy for home helps in the 1997-1999 analysis).

The second occupational grouping 'Childcare workers' is made up of the following unit groups or individual occupations: *Nursery nurses, Childminders and related occupations,* and *Playgroup workers.* There are two major differences in classification between the earlier SOC 1990 and the SOC 2000 that has been used for this analysis:

• The category *playgroup leaders*, used in the SOC 1990, has been replaced in the SOC 2000 by the broader term *playgroup workers*.

• The category Other Childcare and Related occupations used in the SOC 1990, has been replaced in the SOC 2000 by Childminders and related occupations. Information supplied by the ONS occupation information department indicates that a number of people previously classified as Other Childcare and Related occupations have now been reclassified in the SOC 2000 in two new unit groups: Teaching professionals and School mid-day assistants. Teaching professionals include a rather disparate group of workers: nursery managers, owners of children's day nurseries, private tutors, teachers of English as a foreign language, and teaching examiners (Table 17, in the

appendix). We have included both of these new unit groups in the 'Education workers' group, rather than as 'Childcare workers'. This example highlights an obvious area of overlap between Childcare and Education. These changes in definition probably account for the large decline in the number of people classified as Childcare workers, from 348,000 in 1997-1999 to 280,000 in 2001-2005, despite a substantial increase in the amount of childcare provision over the same period (in 2004, the government (HM Treasury, 2004) estimated an additional net 525,000 childcare places in England since 1997).

The occupational grouping 'Nursing workers' comprises the following individual occupations: *Nurses, Midwives* and *Nursing auxiliaries/assistants*. These are exactly the same as in the previous study - the SOC codes have not changed between 1990 and 2000 - with one exception. In the SOC 2000, the *Hospital ward assistants* are no longer coded as a separate category. They are instead counted within the *Nursing auxiliaries/assistants* code.

The occupational grouping 'Education workers' contains the following individual occupations: *Primary/nursery education teachers*, *Secondary education teachers*, *Special education teachers*, *Teaching professionals*, *Educational Assistants* and *School mid-day assistants*. Most of the occupations making up this group have remained unchanged between the SOC 1990 and the SOC 2000. The only difference is the addition of two new occupations, *Teaching professionals* and *School mid-day assistants*, which as noted above includes workers previously coded as within the *Childcare and related occupations* group.

In addition, two other groups are included in this analysis, and are used to set the findings of the four main occupational groupings into context. The first additional group is the 'High percentage female jobs'. This is comprised of *Hairdressers*, *Beauticians*, *Sales* and *Clerical* staff. These occupations were chosen because, like the care workforce, they have very high percentages of female workers; they are, therefore, occupations that people in the care workforce might have chosen as alternative careers. The final group is the 'All women workers'. This includes all females in employment. Both of these groups were examined in the previous mapping study.

Because of the classificatory changes – arising from replacing the SOC 1990 with the SOC 2000 – comparisons between 1997-99 and 2001-05 LFS data are not exact: the comparison is not of like with like. We have been able to allow for some of these changes, by considering the effect of removing *Probation officers* from the 2001-05 Social care workforce and *School mid-day assistants* from the Childcare workforce. We cannot, however, determine the effect of other changes, in particular the transfer of some workers from the Childcare workforce to form part of a new occupation (Teaching professionals) or some from the Social care workforce into a management category.

Chapter Three: Findings for England

3.1 Numbers in the workforce

Table 1 shows the numbers in each of the six broad occupational groups included in this analysis, as well as for each of the individual occupations that comprise each group. Table 36 in the appendix includes descriptions of each occupation as given in the SOC codes (OPCS, 1990). Overall, the four broad occupational groupings making up the 'human services' workforce in England include nearly two and three quarter million workers, an increase of 11 percent since the earlier study. They constitute about 12 percent of the total workforce.

The care workforce – Social care and Childcare workers - accounts for over one million workers or just over a third of the 'human services' total (36 percent), with Education workers contributing just over two-fifths (42 percent) and Nursing workers the remaining fifth (22 percent).

Occupation	Individual occupations within the	SOC	Population
Group	groups	codes ²	Numbers ³
1. Social Care	Social workers	2442	68,000
Workers⁴	Youth and community workers	3231	67,000
	Housing and welfare officers	3232	105,000
	Houseparents and residential wardens	6114	28,000
	Care assistants/home carers	6115	463,000
	Total		732,000
2. Childcare	Nursery nurses	6121	128,000
Workers	Childminders and related occupations	6122	101,000
	Playgroup workers	6123	51,000
	Total		280,000
Total care workers		1,012,000	
3. Nursing	Nurses	3211	379,000
Workers	Midwives	3212	31,000
	Nursing auxiliaries/assistants	6111	176,000
	Total		586,000

Table 1: The population sizes of the six occupation groups examined in the study (England)

² SOC codes are taken from the Standard Occupational Classification 2000, ONS publications.

³ Numbers taken from LFS population estimates for each occupation group as defined above. Numbers are rounded to the nearest thousand. Data are taken from the spring quarters (Q1) of LFS 2001-2005. See technical appendix for weighting information.

⁴ Within the LFS, managers form a large group of the total workforce, and obviously some are involved in social work activities. However, we have only included people directly involved in the provision of care.

		All workers	23,381,655
Workers	Total	N/A	10,797,000
6. All Women			
	Total		2,860,000
	Sales/retail workers	7111, 7112	
	Hairdressers and Barbers, Beauticians	6221, 6222	
		4150	
		4217, 4141,	
		4215, 4216,	
Female Jobs		4213, 4214,	
percent	Clerical	4211, 4212,	
5. High			
	Total		1,141,000
	School mid-day assistants	9244	84,000
	Educational Assistants	6124	281,000
	Teaching professionals	2319	109,000
	Special ed. Teachers	2316	60,000
Workers	Secondary ed. teachers	2314	308,000
4. Education	Primary/nursery ed. Teachers	2315	299,000

3.2 Social care workers

Key features of social care workers

- This occupational group numbers 732,000 and includes five individual occupations (unit groups): *Social workers; Youth and community workers; Housing and welfare officers; Houseparents and residential wardens; Care assistants and home carers.* Care assistants and home carers account for two-thirds of the overall group.
- Since 1997-99, the number of Social care workers has fallen by three percent (22,000). This fall is due to 'probation workers' being reclassified and no longer included and the number of 'houseparents and residential wardens' more than halving.
- Mean age is 41 with few under 25; 84 percent are female; and 90 percent are of white ethnic origin. Male workers are more common among social workers (which also has the highest proportion from ethnic minorities), youth and community workers and houseparents and residential wardens, least common among care assistants and home carers.
- There is a wide spread of qualification, with a third having qualifications above A-level and a quarter having no qualifications or an O-level equivalent; overall levels of qualification have increased since 1997-99. Social workers have the highest levels of qualifications and recent work-related training, care assistants and home carers the lowest
- Gross pay is below that for all female workers. Social workers earn more than twice as much as care assistants and home carers. Pay is considerably higher in the non-private sector.
- Two-fifths work part time, with highest levels among care assistants and home carers, though the proportion has fallen since 1997-99; houseparents and residential wardens work the longest hours.

- Two-fifths work in the for-profit private sector and nearly a third for local government; there has been a fall in the proportion working in the private sector and a rise in the proportion working for local government.
- Social care workers have the second shortest period of continuous employment with the same employer among the six main occupational groups, with care assistants and home carers having a particularly short period of continuous employment.

There were approximately 732,000 persons classified within the Social care workers occupational group (22,000 fewer than in the previous study covering the period 1997 to 1999, a fall of 3 percent). This group is comprised of five individual occupations. Approximately 68,000 are Social workers (29,000 fewer than between 1997 and 1999, due to the exclusion of probation officers in this new code); 28,000 are Houseparents and residential wardens (33,000 fewer than between 1997 and 1999, due to the reclassification of occupations in the new code); 67,000 are Youth and community workers; 105,000 are Housing and welfare officers (these two groups combined are 28,000 more than the SOC 1990 *Welfare/Community/Youth workers*); and 463,000 are group of Care assistants/home carers (36,000 more than the SOC 1990 groups Care assistants/attendants and Cleaners/domestics in social work industry). Clearly, between the previous study and this one, there have been marked increases and declines within the individual occupations that make up this group, some of which have been caused by changes to occupational coding, and some reflecting real changes in the workforce.

A full list of the jobs related to each of these occupations is supplied in the appendix, in table 17. Youth and community workers and Housing and welfare officers combined form the second largest group in terms of population size after the *Care assistants/home carers*. Youth and community workers "provide support to individuals or groups of individuals through a range of activities or services that aim to encourage participation in social, political and community activities" (Office for National Statistics, 2000a, p.118). They do this through organising social, recreational and educational activities for youth groups and local community centres, and working with the community volunteers. *Housing and Welfare workers* "assess and address housing needs of particular localities and individuals, assist the blind, deaf, sick, elderly, physically handicapped and mentally ill with problems relating to their condition, investigate cases of child neglect or ill treatment and perform other welfare tasks" (p.118).

3.2.1 Social care workers overall: The current situation

The mean age of the group is 41 years - few (12 percent) are aged under 25 years and over a quarter (29 percent) are aged 50 years or over (Table 2). Eighty-four percent of this group are female (Table 3), 90 percent are of white ethnic origin (Table 4), 51 percent are married or living with someone and 29 percent are single (Table 6). Forty percent live with children (Table 5) (see Appendix One, technical note). Women who live with children often choose careers that enable them to combine working with childcare; co-residing with children is, therefore, an important indicator to compare between the different occupation groups examined within this report This group is varied in terms of highest qualifications⁵: 16 percent of the group have a degree, 18 percent have qualifications above A-level (but below degree level), 23 percent have A-levels (or equivalent), 15 percent have O-levels (or equivalent) and 18 percent have some other qualification. Eleven percent had no qualifications at all (Table 7). In NVQ⁶ terms, over half of the Social care workers group is qualified to level 2 or above (63 percent) and a third (43 percent) have level 3 or above (Table 8).

As shown in Table 9, almost half (49 percent) have undertaken work-related training in the past three months⁷, and four percent have a work limiting disability⁸ (Table 10).

The mean gross pay for the group overall is £12,338 per annum (£7.59 per hour⁹): this is just over £1,000 below the average pay for all female workers (Table 11). On average, the group works 32 hours in total per week and has been with their current employer almost 6 years (71 months)¹⁰. The majority of the group (92 percent) are also in a permanent job (Table 12), but the group is almost equally divided between those working full time (58 percent) and part time (42 percent) in their main job (Table 13).

Forty-one percent are working in the private sector and 59 percent are working in the non-private sector (Table 14). Of those working in the non-private sector, most (60 percent) are employed within local government (Table 15)¹¹.

Pay differs for Social care workers according to whether they work in the nonprivate or private sector: Social care workers earn on average £8.54 per hour in the non-private sector and £5.61 per hour in the private sector (Table 19). There is, however, little difference between workers in the two sectors in levels of recent work-related training.

3.2.2 Social care workers overall: changes between 1997-99 and 2001-05 The inclusion of *Probation officers* makes little difference to the profile of Social care workers using 2001-05 data; any changes between the two periods are not,

⁵ This variable has been re-grouped according to LFS guidelines (Appendix One, technical note). In addition, another category, above A-level, was included. These are qualifications that are considered to be higher than A-level but lower than degree level, such as nursing qualifications or GNVQ advanced. See Appendix One for further details.

⁶ This variable was also re-grouped according to LFS guidelines (Appendix One, technical note). It takes into consideration the number of A-levels and O-levels respondents have.

⁷ This applies to all working people and asks if they have taken part in any work related training in the three months prior to the survey.

⁸ This definition is based on only those respondents who say they have a disability that limits their ability to carry out their work duties (Appendix One; Cousins, Jenkins and Laux, 1998).

⁹ Hourly pay was derived for this report from gross annual earnings and hours worked. Refer to technical note in Appendix 1.

¹⁰ This refers to the length of time respondents have been employed continuously with their *current* employer. This is given as a mean figure throughout the report. See Appendix 1, technical note.

¹¹ In the LFS, the 'private' sector is defined as 'A private firm or business or a limited company' and the 'public' sector is defined as everything else. See Technical appendix for a fuller description of this variable, and how it is defined within the LFS.

therefore, due to the SOC reclassification that has led to the removal of this occupation from the Social care workforce.

Between the two studies, the demographic profile of Social care workers is unchanged except for rather more of these workers now being single (29 percent compared with 19 percent in the previous study).

There has been some overall improvement in levels of qualification relative to 1997-1999, when 51 percent were qualified to NVQ level 2 or above, and only 11 percent said they had no qualifications at all. Now, nearly two-thirds of the Social care workers group (63 percent) is qualified to level 2 or above. Also, more Social care workers have undertaken work-related training in the past three months¹² (almost half, 49 percent, compared with 39 percent between 1997 and 1999).

The proportion of Social care workers with a work-limiting disability has decreased by 6 percent between 1997-1999 and 2001-2005.

The mean gross pay for the group overall is £12,338 per annum, an increase of $\pounds 2,597$ from the average pay for these workers in 1997-1999. This may be connected with sector changes in employment, with 41 percent now working in the (lower paid) private sector, compared to 52 percent in the earlier mapping study. We are unclear why this change has occurred among this group of workers.

Within the non-private sector, the proportion working for local government has increased from 39 percent in 1997 and 1999, to 60 percent in 2001-2005. The table (Table 15) showing the proportions working for different non-private employers now offers more categories than in the previous mapping exercise using the SOC 1990; LFS data on the non-private sector using SOC 2000 differentiates between a number of public sector employers, such as local government and central government, and also different non-profit private employers, such as charities and voluntary organisations. Almost a quarter of Social care workers are now employed within the charity and voluntary sector, and there has been an increase of those working within the Health sector (from 6 percent between 1997 and 1999, to 11 percent between 2000 and 2005).

3.2.3 Individual occupations within the social care workers group: The current situation

Although it is possible to present a picture of this occupational group as a whole, it is also necessary to look at the individual occupations that make up this group, since there are some important variations within the group that need consideration. For instance, the *Social workers, Youth and community workers,* and the *Housing and welfare officers* have a younger age profile (a greater proportion of them are aged between 25 and 49 years) than the *Houseparents and residential wardens* (who are mostly aged between 35 and 50 plus years, 83 percent) (Table 2). Also, as shown in Table 3, whilst Social care workers as a whole are largely female (84 percent), *Social workers, Youth and community workers,* and the *Housing and welfare officers* contain more male workers (22 percent, 29 percent and 25 percent respectively).

¹² This applies to all working people and asks if they have taken part in any work related training in the three months prior to the survey.

Whilst 90 percent of the Social care workers group overall are of White ethnic origin, the *Social workers* have the highest ethnic minority proportion (14 percent). The *Social workers* also have the highest proportion (at 59 percent) to have undergone work-related training (Table 9). Differences do exist within this group on some of the other indicators of working conditions, such as months continuously employed with the same employer, and gross annual and hourly pay (Table 11). The *Social Workers* have been continuously working with their current employer for the longest time (for 97 months or 8 years) and the *Care assistants/home carers* for the least amount of time (for 64 months or 5 years).

The group also roughly divides into three in terms of pay. Social workers are the highest paid (with an average gross annual income of £21,866). Youth and community workers and Housing and welfare officers earn very similar annual gross incomes (£15,692 and £16,632 respectively), with Houseparents and residential wardens earning considerably less (£13,678). The difference in hourly pay rates is greater because Houseparents and residential wardens (£6.96 ph) work the longest hours, 45 per week on average, followed by the Social workers at 36 hours per week on average work (£12.35 ph), and then Youth and community workers (£9.71 ph) and Housing and welfare officers (£10.16 ph), averaging 32 and 33 hours per week respectively. Care assistants/home carers work the least number of hours, 31 per week on average, and have the lowest hourly pay (£6.02 ph)¹³.

Along with income, the largest divide to be noted here is that associated with qualifications (Tables 7 and 8). *Social Workers* are the most qualified within the group (50 percent have a degree as their highest qualification), and *Care assistants/home carers* are the least qualified, with 4 percent having a degree, and 15 percent no qualification. In addition, the proportions working in the non-private sector are much higher for the *Social Workers* (92 percent), the *Youth and community workers* (91 percent) and the *Housing and welfare workers* (86 percent) compared with *Houseparents and residential wardens* (56 percent) and the *Care assistants/home carers* (43 percent) (Table 14).

3.2.4 Individual occupations within the social care workers group: changes between 1997-99 and 2001-05

¹³ The hourly pay rates for care assistants (and also nurses) in this report are below those quoted for the same occupations in a recent report on care for older people (Wanless, 2006). The Wanless report used data for earnings from the Annual Survey of Hours and Earnings (ASHE) and from the New Earnings Survey (NES), which ASHE has replaced. ASHE and LFS calculate hourly pay in different ways (Daffin, 2004). For example, LFS data on pay and hours are supplied by employees, whilst ASHE collects data from employers; ASHE also excludes people not registered for PAYE and has a lower response rate amongst those with higher earnings. It is recognised that ASHE tends to give higher estimates of gross hourly pay than LFS, though ASHE estimates are considered to be more accurate and are generally to be preferred. However, relativities from comparisons within the LFS are thought to be reliable: this was the conclusion of the Low Pay Commission (2005) who also used LFS earnings data when insufficient data were available from the ASHE. Earnings for care assistants, using LFS or ASHE, are relatively low.

More of the Houseparents and residential wardens, Youth and community workers and Housing and welfare officers are single, compared with 1997-1999.

In the 2003 mapping report (using the 1997-1999 data), clear differences were noted between the different occupations that make up the Social care workforce group in terms of work-related training undertaken in the past 3 months. However, examination of the data between 2001 and 2005 reveals that this difference is much less pronounced, and there appears to have been an increase in the proportions of *Care assistants/home carers* that have received work-related training (from 33 percent to 46 percent). However, the *Social workers* still have the highest proportions (at 59 percent) to have undergone such training (Table 9).

Previously, in the analysis of the 1997-99 LFS data, more *Social workers/ probation officers*, *Matrons/houseparents* and *Welfare/community/youth workers* worked full time relative to the *Care assistants/attendants* and *Cleaners/domestics* (Table 21; Simon *et al*, 2003). Examination of the current data shows that this difference between the occupations has reduced, to the extent that at least 50 percent of all of the individual occupations that make up this group work full time; compared with 1997-99, six percent more of the *Care assistants/home carers* now work full time.

3.3 Childcare workers

Key features of childcare workers

- This occupational group numbers 280,000 and includes three individual occupations: *Nursery nurses; Playgroup workers; Childminders and related occupations*. *Nursery nurses* make up nearly half the overall group.
- Since 1997-99, the number of Childcare workers has fallen by 20 percent (68,000). This fall is due to a number of nursery staff (especially owners and managers) and *School mid-day assistants* being reclassified and moved into Education workers. The number of *Nursery nurses* has increased by 36 percent, and the 'playgroup workers' group in the SOC 2000 is more than double the 'playgroup leaders' group used in the SOC 1990.
- Mean age is 35, with just over a quarter under 25, and 98 percent are female

 both high proportions compared to other care workers; 95 percent are of white ethnic origin. *Nursery nurses* are the youngest of any individual occupations included in the study, with more than a third being under 25. They are less likely than the two other occupations in this group to be married and to live with children, especially compared to childminders. The proportion of male playgroup workers has risen to 7 percent from 1 percent in 1997-99.
- Few have a degree-level qualification, at five percent a third or less than the other occupational groups. Only two-fifths have had recent work-related training. There has, however, been some improvement in qualifications and work-related training since 1997-99. *Childminders and related occupations* have particularly low levels of qualification and the lowest recent attendance at work-related training of any individual occupations included in the study.
- Pay is low, just over the minimum wage, and lower than for all other occupational groups. Pay is considerably higher in the non-private sector;

workers here are also rather more likely to have had recent work-related training. Although all three occupations are low paid, nursery nurses earn more than the other two occupations.

- Half work part time, the highest level of all groups. *Playgroup workers* mostly work part time, the other two occupations mostly full time.
- Childcare workers have the shortest period of continuous employment with the same employer of all six main occupational groups.
- Two-thirds work in the private sector, the highest proportion of all the groups. The great majority of childminders work in the private sector, compared to around half for the other two occupations.

Approximately 280,000 persons were classified within the Childcare workers occupational group (68,000 fewer than were classified as Childcare workers in the last mapping report using 1997-99 LFS data). This group is comprised of three individual occupations: approximately 128,000 are *Nursery nurses* (34,000 more than last time), 51,000 are *Playgroup workers* and 101,000 are *Childminders and related occupations* (last time there were 129,000 more classified within the group 'Other Childcare Occupations'). This last group is made up of a range of childcare occupations that includes nannies, childminders, and out-of-school staff (but no longer playgroup workers who are included within the *Playgroup workers* code).

As discussed earlier, the *Childminders and related* occupations have been redefined, and this probably accounts for the seemingly different population sizes between 1997-99 and 2001-05. Many workers who would have been coded here using the SOC 1990, are now coded within two other SOC 2000 codes: *Teaching professionals*, and *School mid-day assistants*. For this study, we have included these two unit groups as Education workers.

3.3.1 Childcare workers overall: The current situation

The mean age of the group is 35 years. Just over a quarter (28 percent) is aged 25 years or younger and 59 percent is aged between 25 and 49 years (Table 2). The group is overwhelmingly female (98 percent, Table 3) and mostly white (95 percent, Table 4). In addition, 50 percent are currently co-residing with children (Table 5), over half (52 percent) are married or living with a partner (Table 6), and 38 percent are single (Table 6).

In terms of qualifications, only 5 percent have a degree, 25 percent 'A levels or above' (but lower than degree level) and 6 percent have no qualifications at all (Table 7).

Childcare workers are poorly paid, especially relative to the Social care, Nursing and Education workers. Childcare workers as a group earn $\pounds7,963$ gross per annum, and work for 29 hours per week on average, which equates to $\pounds5.72$ per hour (Table 11). Hourly pay is considerably higher for the Childcare workers in the non-private sector ($\pounds6.24$ per hour compared with $\pounds4.88$ per hour in the private sector, Table 16), and they are rather more likely to have had work-related training in the preceding 3 months (47 percent compared to 35 percent of private sector workers).

Ninety percent of Childcare workers have permanent jobs (Table 12) and 50 percent are working full time (Table 13). Thirty-five percent of Childcare workers are now working in the non-private sector (Table 14), and of those, most (62 percent) are working for local government (Table 15). In addition, Childcare workers have been continuously working with their current employer for 63 months (or approximately 5 years, Table 11).

3.3.2 Childcare workers overall: changes between 1997-99 and 2001-05

As already noted, a large group of workers included in this grouping in the earlier study have been moved into the Education workers grouping for this study, and classified as *School mid-day assistants*; this occupational group is equivalent to 30 percent of the 2001-05 Childcare workers grouping. *School mid-day assistants* are older than the average for Childcare workers; and more likely to be married and have co-resident children, have lower qualifications, have less recent work-related training, work shorter hours and are more likely to work in the non-private sector. Their removal since 1997-99, therefore, has contributed to the changes observed between 1997-99 and 2001-05. We have, therefore, included in square brackets figures for 2001-05 if *School-mid-day assistants* are included and not noted any changes that are only marked if *School mid-day assistants* are excluded.

Thus, for example, compared with the 1997-1999 LFS data, fewer Childcare workers in 2001-05 are married/living with a partner (52 percent, Table 6, compared with 62 percent between 1997 and 1999). But once *School mid-day assistants* are added back in to Childcare workers, the 2001-05 figure rises to 60 percent, leaving little difference. Similarly the difference in the proportions corresiding with children (50 percent in 2001-05, Table 5, compared with 58 percent between 1997 and 1999) also nearly disappears once *school mid-day assistants* are included, bringing up the 2001-05 figure to 55 percent.

Highest level of qualification has improved since the previous mapping study: 30 percent [23 percent] now have a qualification above A level compared to 15 percent in 1997-99. Sixty-four percent [55 percent] now have a qualification at NVQ level 2 or above, compared to only 44 percent in 1997-99. In addition, the proportion undertaking work-related training in the previous three months has also increased from a quarter in 1997-1999, to 40 percent [34 percent].

There has been little change in working hours once *School mid-day assistants* are included back in for 2001-05. On the same basis, though, more Childcare workers are employed in the private sector in 2001-05 (65 percent) [50 percent], Table 14, compared with 43 percent for 1997-99.

Finally, average annual gross earnings have increased since 1997-99, from $\pounds 4,423$ per annum to $\pounds 7,963$ gross per annum. However, the increase is substantially lower once *school mid-day assistants* are added back into Childcare workers, since their annual pay is very low; the 2001-05 figure for childcare workers drops to $\pounds 6,403$. Childcare workers continue to have the lowest pay – whether calculated as an annual or hourly rate – among the six occupational groupings considered in this study.

3.3.3 Individual occupations within the Childcare workers group: The current situation

There are variations between the occupations within the Childcare workers group. The *Nursery nurses* are considerably younger than either the *Playgroup workers* or the *Childminders and related occupations*. Thirty-seven percent of the *Nursery nurses* are aged 25 years or younger (Table 2). Also, their age distribution is unique within the care workforce, with two peaks – under 25 and 35-49 – whereas in the other occupational groups (with the exception of the High proportion female jobs), there is one peak – usually 35-49. This suggests that the Childcare workers and the High proportion female workers both share a propensity for women to leave the labour market when they have younger children, returning as their children get older.

Although there are no differences between the individual occupations that make up this group in terms of ethnicity, there are a few variations in terms of their demographic characteristics. Firstly, the *Playgroup workers* and the *Childminders and related occupations* are more likely to be living with children (Table 5: 66 percent and 50 percent respectively) compared with just under half of the *Nursery nurses* (43 percent, Table 5). Secondly, slightly more *Playgroup workers* are male (6 percent compared with 2 percent of the *Childminders and related occupations*, and 1 percent of the *Nursery nurses*: Table 3). Thirdly, more of the *Playgroup workers* and the *Childminders and related occupations* are married relative to the *Nursery nurses* (68 percent of *Playgroup workers* and 54 percent of the *Childminders and related occupations*, compared with only 45 percent of the *Nursery nurses*, Table 6).

The group is also divergent in terms of qualifications gained. The *Childminders* and related occupations are the least qualified, with nine percent having no qualifications compared with three percent of the *Nursery nurses* and six percent of the *Playgroup workers* (Table 7). The *Playgroup workers* are the highest qualified in this group (Table 7). The *Playgroup workers* are also the most likely to have taken up work-related training in the past three months (Table 9: 51 percent compared with 26 percent of the *Childminders and related occupations* and 46 percent of the *Nursery Nurses*).

There is a noticeable divide within the group for working hours. The *Playgroup workers* are mostly in part-time jobs (Table 13: 83 percent) and work on average for only 19 hours a week (Table 11), whereas the *Nursery Nurses* and *Childminders and related occupations* are mostly in full-time jobs (Table 13: 63 percent and 51 percent respectively) and work for longer hours (Table 11: 31 and 32 hours per week on average respectively).

The *Playgroup workers* earn the least (\pounds 5,544 gross per annum compared to \pounds 9,197 earned by the *Nursery nurses* or \pounds 7,824 earned by the *Childminders and related occupations*). The differences are no so great in terms of hourly pay: *Nursery nurses* earn \pounds 5.95 per hour, *Playgroup workers* \pounds 5.72 and the *Childminders and related occupations* \pounds 5.00.

The group as a whole is mostly working in the private sector (Table 14) but this is particularly true of the *Childminders and related occupations* – 88 percent are employed within the private sector compared to 54 percent of the *Nursery nurses* and 44 percent of the *Playgroup workers*. Of those working in the non-private sector, *Nursery nurses* and the *Childminders and related occupations* are mostly employed within local government (Table 15: 74 percent and 53 percent respectively) but the *Playgroup workers* are equally divided between local government (Table 15: 42 percent) and charity or voluntary organisations (Table 15: 46 percent).

Earnings within the private sector are very similar for this group as a whole (Table 16). However, within the non-private sector, there are some variations, with *Nursery nurses* earning the most (at £6.72 per hour) and the *Childminders and related occupations* the least (at £4.92 per hour). Also, whilst the *Childminders and related occupations* earn almost identical amounts between the non-private and private sectors, the *Nursery nurses* and the *Playgroup workers* earn more by working in the non-private sector (Table 16).

3.3.4 Individual occupations within the Childcare workers group: Changes between 1997-99 and 2001-05

More *Playgroup workers* are male in the current data for 2001-2005, than noted for the 1997-1999 data (6 percent now compared with fewer than 1 percent previously).

The proportion of *Playgroup workers* with a degree has increased from 7 to 11 percent between 1997-1999 and 2001-2005.

Forty-four percent of the *Playgroup workers* are now working in the private sector (Table 14) which represents a shift from the last mapping study where 83 percent of the *Playgroup leaders* were working in the private sector. It is unclear why this change has taken place.

3.4 Nursing workers

Key features of nursing workers

- This occupational group numbers 586,000 and includes three individual occupations: *Nurses*; *Midwives*; and *Nursing auxiliaries/assistants*. Nurses account for nearly two-thirds of the overall group
- Since 1997-99, the number of Nursing workers has increased by two percent (10,000). The number of *Nurses* has fallen by six percent while *Nursing auxiliaries and assistants* have increased by 22 percent.
- Mean age is 41; 89 percent are female and 87 percent are of white ethnic origin, the lowest proportion of any occupational group. Nurses, along with social workers, have the highest proportion of non-white workers, while midwives have very low male representation.
- While the proportion with a degree is not particularly high, a very large proportion has a non-degree qualification above A level (NVQ level 4). Nursing auxiliaries/assistants have much lower qualification levels than the other two occupations and are less likely to have had recent work-related training.

- Pay on average is higher than for Social care and Childcare workers, and close to the average for all women workers, with higher pay in the non-private sector. *Nurses* and *Midwives* earn substantially more than nursing auxiliaries/assistants, though substantially less than teachers.
- Two-fifths work part time.
- Nearly nine out of ten work in the non-private sector, mostly in the health service.

There were approximately 586,000 persons classified within the Nursing workers occupational group (10,000 less than the last mapping study). There has been a growth in *Midwives* and *Nursing assistants*, but a decline in *Nurses*.

This group is comprised of three individual occupations. The large majority of these (379,000, 25,000 less than the previous study) are *Nurses*. There are also 31,000 *Midwives* (3,000 more than last time); and 176,000 *Nursing auxiliaries/assistants* (counting in the *Hospital ward assistants,* which were a single category in the SOC 1990 but are counted within this group in the SOC 2000, there are 32,000 more *Nursing auxiliaries/assistants* than last time).

3.4.1 Nursing workers overall: The current situation

The mean age of the Nursing workers group is 41 years. Almost half (47 percent) are aged between 35 and 49 years, 22 percent are aged between 25 and 34 years, 23 percent are aged 50 years or over and eight percent are aged 25 years or younger (Table 2). The great majority (89 percent, Table 3) of this group are female and of white ethnic origin (87 percent, Table 4), though this is fewer than the average for all female workers (93 percent). The majority of the Nursing workers are married or living with a partner (60 percent, Table 6), and almost half (47 percent, Table 5) are living with children.

This group are well qualified compared with some of the other workers examined in this report (Tables 7 and 8), with 15 percent having a degree, and 59 percent a qualification above A levels (but below degree level). Combined this represents 70 percent qualified to NVQ level 4 or higher (Table 8). In addition, 59 percent have undergone some form of work-related training in the three months prior to the survey (Table 9).

Ninety-five percent are in permanent jobs (Table 12), with just over half (60 percent) working full time in their main job (Table 13). Nursing workers have been continuously working for the same employer for 9 years on average (Table 11).

The majority of this group (86 percent, Table 14) works in the non-private sector, and of these, the majority (93 percent), are employed within the health service (Table 15). Gross annual earnings are £16,630 on average (Table 11), with Nursing workers having slightly higher earnings, on average, in the non-private sector compared with the private sector (Table 16): £9.56 per hour compared to £8.69.

The proportion with a work-limiting disability is 3 percent (Table 10).

3.4.2 Nursing workers overall: changes between 1997-99 and 2001-05 There have been few changes among this group of workers since the last mapping study. However, the proportion with a work-limiting disability is lower than observed last time (3 percent compared with 7 percent in the 1997-1999 data (Table 10).

3.4.3 Individual occupations within the nursing workers group: the current situation This group has a largely homogeneous age and ethnicity profile, although there are fewer young *Nurses* and *Midwives* than *Nursing auxiliaries/assistants*. In addition, *Midwives* have the highest proportion of co-residing children (Table 5) and are most likely to be married or living with a partner compared with the other workers in this group (71 percent, Table 6).

Fewer males were working as *Midwives* (less than one percent) compared with *Nurses* and *Nursing auxiliaries/assistants* (14 and 11 percent respectively, Table 3). Also, *Nurses* have a higher proportion of ethnic minority workers (14 percent) compared with the other two groups (10 percent each, Table 4).

There are some important variations within the group when it comes to qualifications and income. Taking the level of qualifications first, the high level of qualifications noted for the group as a whole is largely associated with *Nurses* and, particularly, *Midwives*, who were much better qualified than the *Nursing auxiliaries/assistants*. Whilst 93 percent of *Nurses* and 98 percent of *Midwives* hold qualifications that were at degree or above A level (Table 7), only 32 percent of *Nurses* and *Midwives* have the highest proportions within the group that have undergone some form of work-related training (Table 9).

The majority of all workers within this group work full time (Table 13), have permanent jobs (Table 12), and work similar hours per week (between 32 and 35, Table 11). However, the *Nurses* and *Midwives* earn almost double the gross annual earnings of the *Nursing auxiliaries/assistants* (Table 11). *Midwives* earn, on average, £19,906 gross per annum or £12.48 per hour, and *Nurses*, on average, £10.66 per hour. This is between £4 and £5 per hour more than the *Nursing auxiliaries/assistants* (£7.07 per hour, Table 11).

More than three-quarters (86 percent) of these workers overall are employed in the non-private sector, with the proportion particularly high for *Midwives* (Table 14: 98 percent compared with 85 percent of the *Nurses* and 86 percent of the *Nursing auxiliaries/assistants*). Whilst the *Nurses* and the *Nursing auxiliaries/assistants* have higher earnings in the non-private sector, the *Midwives* earn more on average per hour in the private sector (Table 16).

3.4.4 Individual occupations within the nursing workers group: changes between 1997-1999 and 2001-2005

There are no notable changes to mention for the individual occupations within the Nursing workers occupation group between the analysis findings reported here, and those reported in the 1997-1999 mapping study.

3.5 Education Workers

Key features of education workers

- This occupational group numbers 1,141,000, and is the largest of the four 'human services' occupational groups. It includes six individual occupations: *Primary/nursery education teachers; Secondary education teachers; Special education teachers; Educational assistants; Teaching professionals;* and *School mid-day assistants*. The last two are new classifications, not included in the earlier analysis. Teachers make up 58 percent of the total.
- Since 1997-99, the number of Education workers has increased by 45 percent (356,000). Even if the two new groups – *Teaching professionals* and *School mid-day assistants* – are excluded, there has still been an increase of 21 percent, mainly due to a near doubling in *Educational assistants* (an additional 139,000) between 1997-99 and 2001-05.
- Mean age is 43; 78 percent are female; and 95 percent are of white ethnic origin. Secondary teachers and Teaching professionals have much higher proportions of male workers than the other occupations. Educational assistants and School mid-day assistants are much more likely to have coresident children.
- This group has a high overall level of qualification, with nearly three quarters having a qualification above A-level, most with a degree. However, the inclusion of *School mid-day assistants* among Education workers for 2001-05 has reduced the overall level of qualifications compared to 1997-99. *Educational assistants* and *School mid-day assistants* have much lower levels of qualification than the other occupations, the latter group having the lowest qualification levels of all individual occupations studied. They are also least likely to have had recent work-related training; *Primary* and *Special education teachers* are most likely to have had such training.
- Education workers have the highest earnings of all occupational groups, well above earnings for all women workers. Workers in the non-private sector earn more than those in the private sector, but the difference is small. There is a big difference between the earnings of teachers and teaching professionals on the one hand, and educational assistants and school midday assistants on the other.
- Two-fifths work part time, the proportion having increased since 1997-99, again mainly due to the inclusion in 2001-05 of *School mid-day assistants*. Nearly all *School mid-day assistants* and nearly two-thirds of *Educational assistants* work part time, while full-time working is very high among *Secondary teachers* higher than for any other occupation studied.
- The great majority work in the non-private sector, with most employed within local government. The main exception is *Teaching professionals*, a group including a large number of private nursery and education workers.

There were 1,141,000 persons classified within the Education workers occupational group. This is significantly higher than the 785,000 classified as working in this group from the 1997-1999 data in the previous mapping study. Most of this increase is due to the inclusion of two new groups, *Teaching*

professionals, and School mid-day assistants. As mentioned earlier in this report, many of the people previously classified in the SOC 1990 within the Childcare workers group are, in the SOC 2000, classified as working within these two individual occupational groupings. Together, these two 'new' occupations in the Education workers group account for 193,000 Education workers - or 17 percent of Education workers. However, the increase in total persons classified as Education workers between SOC 1990 and SOC 2000 can also be attributed to the large increase in numbers of people working as *Educational assistants*.

This group now consists of six individual occupations. Of the four groups examined in the last mapping study, approximately 299,000 were classified in 2001-2005 as *Primary/nursery education teachers* (3,000 more than between 1997 and 1999), 308,000 *Secondary education teachers* (1,000 less than between 1997 and 1999), 60,000 *Special education teachers* (22,000 more than between 1997 and 1999), and 281,000 *Educational Assistants* (139,000 more than between 1997 and 1999). In addition, there are approximately 109,000 persons classified as *Teaching professionals*, and 84,000 persons classified as *School mid-day assistants*.

3.5.1 Education workers overall: The current situation

The mean age of Education workers is 43 years. Almost half of these workers (44 percent) are aged between 35 and 49 years, with 30 percent aged 50 years or older, 20 percent aged 25-34 years, and only 6 percent aged under 25 years (Table 2). Although the majority (78 percent) of Education workers are female, almost a quarter of this group are male (Table 3). Ninety-five percent are of white ethnic origin (Table 4), 67 percent are married or living with a partner (Table 6), and almost half (48 percent) live with children (Table 5).

In terms of qualifications, the Education workers are highly qualified - 54 percent have a degree and a further 18 percent have qualifications above A-levels, as their highest qualification (Table 7). In addition, 51 percent of the Education workers have undergone some form of work related training in the last three months (Table 9). Also, whilst the majority (84 percent) of Education workers are in a permanent job, a sizeable minority (16 percent) are in a temporary job (Table 12).

The Education workers work on average a total of 37 hours per week and earn approximately £19,127 per annum or £12.00 per hour (Table 11). Fifty-nine percent works full time in their jobs (Table 13), and the proportion with a work-limiting disability was three percent between 2000 and 2005 (Table 10).

The majority of education workers (87 percent) are working in the non-private sector (Table 14), with 93 percent employed within local government (Table 15). The Education workers group earn slightly more on average per hour in the non-private sector (Table 16: ± 10.15) compared with the private sector (Table 16: ± 9.91).

3.5.2 Education workers overall: changes between 1997-99 and 2001-05 The level of qualification overall has declined somewhat between 1997-1999 and 2001-2005. The proportion of education workers with a qualification above A level has fallen from 82 to 72 percent. This decline can be attributed to the inclusion of the *School mid-day assistants*, who as we shall see later, hold much lower qualifications than the other occupations in this group.

Considerably fewer Education workers are in full-time employment in 2001-2005, 59 percent (Table 13) compared with 70 percent between 1997 and 1999. This can also be attributed to the inclusion of the *School Mid-day Assistants* occupation, who work very short part-time hours.

3.5.3 Individual occupations within the education workers group: the current situation

The Education workers group in many respects can be divided into two parts. On demographics, the group divides into the teachers (*Primary/nursery education teachers*, *Secondary education teachers*, *Special education teachers*) and *Teaching professionals* on the one hand, and other workers involved in education on the other (*Educational assistants* and *School mid-day assistants*). On working conditions, the group divides into the teachers (primary, secondary and special needs), and 'others' (the *Teaching professionals, Educational assistants*, and the *School mid-day assistants*). Within-group differences are particularly striking for pay, full-time/part-time working, and number of hours worked.

On demographic characteristics, all of the occupations within this group have a similar profile for age (Table 2: mostly aged 35-49 years or over 50 years), gender (Table 3: mostly female, with the exception of the *Secondary education teachers*, who are only 55 percent female, and the *Teaching professionals*, only 68 percent female), ethnicity (Table 4: over 90 percent of each occupation within this group are white), and marital status (Table 6: over 60 percent of each occupation is married or living with a partner). However, the *Educational assistants* and the *School mid-day assistants* are much more likely to be co-residing with children (Table 5: 65 percent and 64 percent respectively, relative to 48 percent on average across all Education workers).

Level of qualification divides the group into those where over 50 percent of the occupation have a degree (Table 7: *Primary/nursery education teachers*, *Secondary education teachers*, *Special education teachers*, and *Teaching professionals*), and those with lower qualifications (Table 7: only 13 percent of *Educational assistants*, and 1 percent of *School mid-day assistants* have a degree). The *School mid-day assistants* are the least qualified of the group, with 35 percent having no qualifications (Table 7). Work-related training is also more likely to have been taken up in the past 3 months by the three teacher occupations, than by the *Teaching professionals*, the *Educational assistants* or the *School mid-day assistants* (Table 9).

The group divides differently depending on which measure of working condition is examined. The *Educational assistants* and the *School mid-day assistants* are much more likely to be working part time, the three teacher occupations (the *Primary/nursery education teachers*, the *Secondary education teachers*, the *Special education teachers*) full time, while the *Teaching professionals* come somewhere in between (Table 13). The annual gross income ranks individual occupations in the group in descending order as: *Secondary education teachers*

(£28,511), Primary/nursery education teachers (£24,562), Special education teachers (£21,533), Teaching professionals (£15,716), Educational assistants (£8,343) and, lastly, the School mid-day assistants (£2,124) (Table 11). However, when hours worked are taken into account, the group divides into two in terms of hourly pay: the three teacher occupations (the Primary/nursery education teachers, the Secondary education teachers, the Special education teachers) together with the Teaching professionals earning £14-15 per hour, and the other Education workers (the Educational assistants and the School mid-day assistants) earning £5-6 per hour (Table 11). The group divides similarly for length of time continuously employed (Table 11).

Finally, there are within group differences in the proportion working within the nonprivate sector. Over 90 percent of all of the occupations that make up this Education workers group, with the exception of the *Teaching professionals* (Table 14), are working in the non-private sector, and of those, most are employed within local government (Table 15). Only 42 percent of the *Teaching professionals* on the other hand, are working within the non-private sector (Table 14). Of those *Teaching professionals* working within the non-private sector, 62 percent are employed within local government, 11 percent are employed within Universities, and 19 percent are employed within charity or voluntary organisations (Table 15). Hourly pay between the non-private and private sectors is very similar between the individual occupations that make up this group, with the hourly pay being higher in the non-private sector than the private sector (Table 16). However, the *Secondary education teachers* earn a very similar amount per hour in both the non-private and private sectors (Table 16).

3.5.4 Individual occupations within the education workers group: changes between

1997-1999 and 2001-2005

In the 1997-1999 data, sixty-five percent of the *Educational assistants* were in permanent jobs. Now, using data from 2001-2005, 76 percent of the *Educational assistants*, are in a permanent job. Job stability, therefore, seems to have improved for the lesser qualified employees working within the education service.

3.6 Workers in high percentage female jobs

Key features of workers in high percentage female jobs

- This group numbers nearly three million and includes three broad occupational groups: *Clerical workers*; *Hairdressers and beauticians*; and *Retail workers*. Overall, 89 percent of the workers in these three groups are women, slightly more than for Education workers, similar to Social care workers, well below Childcare workers, and identical to the Nursing workers.
- Mean age is 37 and 21 percent are under 25 years, making this a younger workforce than all but the Childcare workers; and 94 percent are of white ethnic origin. Only a third live with co-resident children, considerably lower than the proportions among the 'human services' workers
- Educational qualifications and recent work-related training are low among this group, lower even than for Childcare workers.

- Earnings per hour are also low though higher than for Childcare workers and on a par with the Social care workers. Workers in the non-private sector earn rather more than their private sector counterparts.
- Around half work part time and three-quarters work in the private sector, higher than any of the 'human services' workers.

This group is made up of approximately 2,820,000 persons. Occupations selected for inclusion in this group are those that are known to attract a high proportion of female workers.

To obtain this group, all occupations in the LFS for 2001-2005 were examined for the female: male ratio of their workforces. Occupational groups where women made up 75 percent or more of the workforce were considered for inclusion in this group. These were, in descending order:

- 'Childcare workers' see above for individual occupations included in this group (98 percent female)
- 'Clerical workers', including the following individual occupations: 'General office assistants and clerks', 'legal secretaries', 'typists' and 'Medical secretaries' (92 percent female)
- 'Hair and Beauty technicians', including the following individual occupations: 'Hairdressers and barbers' and 'beauticians and related occupations' (91 percent female)
- 'Nursing workers' see above for individual occupations included in this group (89 percent female)
- 'Social care workers' see above for individual occupations included in this group (84 percent female)
- 'Education workers' group see above for individual occupations included in this group (78 percent female)
- 'Retail staff', including the following individual occupations: 'Retail cashiers and check-out operators' and 'counter clerks' (75 percent female)

Of the seven high female occupational groups listed above, four are 'human services' workers already discussed. The group considered here – 'workers in high percentage female jobs' – consist of the remaining three occupational groups: clerical workers, hair and beauty technicians and retail staff. Although we have looked at the Social care workers, Childcare workers, Nursing workers and Education workers in terms of each overall group and variations between individual occupations within each group, here we only consider overall findings combining the workforces in all three occupational groups.

3.6.1 Workers in high percentage female jobs: The current situation

Eighty-nine percent are female: this is identical to the Nursing workers, slightly higher than the Education workers and the Social care workers, but less than the Childcare workers (Table 3). The mean age of this group is 37 years, with peaks at under 25 years (Table 2: 21 percent) and 35-49 years (Table 2: 33 percent), which is rather lower than the average age for the Social Care, Nursing and

Education workers (average age of 41-42 years), but slightly higher than the Childcare workers group (35 years).

Ninety-four percent of this group are of white ethnic origin (Table 4), which is almost identical to both the Childcare and Education workers group, but higher than the Social Care workers and the Nursing workers groups (Table 4: 90 percent and 87 percent respectively).

Fifty-three percent of this group are married/ living with a partner (Table 6), which is similar to the Social Care workers and Childcare workers (Table 6: 51 percent and 52 percent respectively) but lower than the Nursing workers or the Education workers (Table 6: 60 percent and 67 percent respectively). Finally, 34 percent of this group live with children (Table 5). This is lower than all the other occupation groups (Table 5).

Only seven percent of this group have a degree (Table 7) compared to 54 percent of Education workers, 15 percent of Nursing workers, 16 percent of Social Care workers, and 19 percent of All women workers. However, the Childcare workers group hold a similar level of qualification to this group (Table 7: 5 percent of the Childcare workers group have a degree). In terms of NVQ levels, 58 percent of those in this High percentage female jobs group are qualified to NVQ level 2 or above, compared to 64 percent of All women workers, 85 percent of Education workers, 86 percent of Nursing workers, 64 percent of Childcare workers, and 63 percent of Social Care workers (Table 8).

More than three-quarters of this group have not taken up work-related training in the past three months, which is much higher than all of the other occupational groups, but is nearest to the Childcare workers group (Table 9: 60 percent) or All women workers (Table 9: 68 percent). Approximately three percent of this group have a work-limiting disability, which is identical or almost identical to the average for all the other occupational groups (including All women workers).

The workforce in high percentage female jobs earn on average £6,698 per annum (£7.29 per hour), working on average a total of 29 hours per week and have been employed continuously in their current job for 79 months (over 6 years) (Table 11). Their pay is lower than all the other occupation groups except, on hourly pay rates, for Childcare workers, who earn on average £5.72 per hour, Table 11). The hours, too, are identical with the Childcare workers, but lower than the average for the other occupation groups (Table 11). The length of time continuously employed is similar to both the Social Care workers and the Childcare workers groups (Table 11).

Approximately 94 percent are permanently employed (Table 12), which is higher than the proportion for the Education workers group as a whole, but slightly lower than for Childcare, Social care and Nursing workers. Forty-seven percent work part time (Table 13), which is higher than all the other occupation groups and for All women workers (Table 13).

This group works mainly in the private sector (75 percent: Table 14), which makes it very different to the 'human services' occupation groupings except for Childcare
workers, where 65 percent work in the private sector; but similar to All women workers, 62 percent of whom are employed in the private sector. Of those in the non-private sector, the workers are much more distributed across the different types of industry than the other occupational groups examined. Ten percent are found within non-private companies, seven percent in central government, 29 percent in local government, 7 percent in Universities, 32 percent in the health sector, 10 percent in charity or voluntary organisations, and 4 percent with another kind of organisation (Table 15). As with many of the other occupation groups, those classified within the High proportion female worker group earn more in the non-private than the private sector per (Table 16: \pounds 7.47 per hour compared with \pounds 7.07 per hour).

3.6.2 Workers in high percentage female jobs: Changes between 1997-99 and 2001-05

There have been no major changes to this group between the 1997-1999 analysis and the current analysis for 2001-2005, except for the proportion working within the private sector. In 1997-1999 86 percent were employed in the private sector. This is much higher than the figure for 2001-2005, where 75 percent of this group works in the private sector (Table 14).

3.7 All women workers

Key features of all women workers

- There are 10,800,000 women workers: women working in 'human services' and the three other occupational groups with high proportions of women workers make up 42 percent of the female workforce.
- Mean age is 39 years; and 93 percent are of white ethnic origin. Nearly twofifths have co-resident children, lower than for the four 'human services' groups.
- A third have a qualification above A level, comparable to the care workforce, but lower than education and nursing workers.
- Average earnings, per hour, are comparable to Nursing workers, lower then Education workers but substantially above earnings in the care workforce. Slightly more than half work full time, rather similar to the other occupational groups studied.
- Nearly two-thirds work in the private sector, less than workers in High percentage female jobs, similar to Childcare workers – but far more than Social care workers, Nursing workers and Education workers. Private sector workers earn about 16 percent less than other workers.

According to the LFS 2001-2005, 23,381,655 people are employed within England (selecting only those with a SOC code and using an estimate of five years data averaged). Of the total employed, approximately 10,797,000 are female workers – 46 percent of the total.

3.7.1 All women workers: The current situation

The mean age of All women workers is 39 years: 17 percent are aged below 25 years, 21 percent between 25 and 34 years, 38 percent between 35 and 49 years

and 25 percent 50 years and over (Table 2). The All women workforce is largely white (Table 4: 93 percent) and married or living with a partner (Table 6: 53 percent), and most do not have a work-limiting disability (Table 10: 87 percent).

Nineteen percent of All women workers have a degree, 14 percent have qualifications above A-level, 20 percent have A-levels, 23 percent have O-levels, 13 percent have some other qualification as their highest level of qualification, and 11 percent of the female workforce have no qualifications at all (Table 7). In terms of NVQ levels, 64 percent of the female workforce is qualified to level 2 or above (Table 8). Also, 32 percent of all women workers undertook some form of work-related training in the past 3 months (Table 9).

Ninety-three percent are in a permanent job (Table 12) and over half (Table 13: 56 percent) are working full time in their main job. The mean annual income for the female workforce is approximately £13,893 (Table 11), which equates to £9.98 per hour (Table 11). The mean total hours worked per week is 31 (Table 11), and the All women workforce have been working continuously (on average) with their current employer for 82 months (approximately 7 years).

Approximately 62 percent of the All women workers group work in the private sector (Table 14). Of those working in the non-private sector (Table 14: 38 percent), most are working within local government (Table 15: 44 percent) or health (Table 15: 24 percent), and with smaller proportions also working within charity or voluntary organisations (Table 15: eight percent) or public companies (Table 15: six percent). Those working in the non-private sector are earning more than those working in the private sector (£8.99 per hour compared with £7.59 in the private sector (Table 16), which is similar to the individual occupation groups that are the main focus for this report.

3.7.2 All female workers: changes between 1997-999 and 2001-05 In terms of NVQ levels, more of the female workforce is qualified to level 2 or above (8 percent up from 1997-1999).

Fewer now work in the private sector (a decrease of 8 percent from 1997-1999).

3.8 Comparative data

We have compared the results presented here with those from other large scale surveys of the workforce. The Labour Force Survey has been used because it is the largest regular study of the working population which collects a large amount of demographic data from respondents. Comparing results from the LFS with results from smaller scale studies would therefore generally not serve to check the LFS results, as there may be quite small sample numbers in some smaller occupations. However, specialist data collections might have larger and more representative samples of those occupations. There are some other large scale sources which can usefully act as a comparison, although none of them collect the range of data that is collected by the LFS. Results from three of them will be presented here. They are the Annual Survey of Hours and Earnings, the NHS workforce collections and surveys of the childcare and early years workforce conducted on behalf of DfES.

3.8.1 Annual Survey of Hours and Earnings

The Annual Survey of Hours and Earnings (ASHE) is conducted by the Office for National Statistics (ONS). It is a UK-wide one percent sample of those on the Pay As You Earn (PAYE) register: employers are asked to provide data on their employees (Ormerod, 2006). Employees are assigned to occupation codes using SOC 2000 using information supplied by the employer. The results are published on the ONS web site¹⁴. ASHE uses a weighting scheme to scale up the survey data to give population estimates. The published figures give an estimate on the numbers of employees for each SOC code. It is, therefore possible to compare the LFS estimates of numbers with those from ASHE. Table 18 shows the two estimates for each of the individual SOC 2000 codes used in this report. As the ASHE data are for the UK, the LFS data have also been calculated at the UK level, so they differ from the results given earlier for England. The LFS figures are an average for 2001-2005; SOC 2000 only began to be used on ASHE in 2002, so the ASHE figures are an average for 2002-2005.

Table 18: Populations estimates from LFS (2001-2005) and ASHE (2002-2005) (thousands): UK

Occupations	SOC codes	LFS	ASHE
1. Social Care Workers:			
Social workers	2442	86	72
Youth and community workers	3231	85	58
Housing and welfare officers	3232	133	143
Houseparents and residential wardens	6114	34	29
Care assistants/home carers	6115	572	451
Total		911	753
2. Childcare Workers:			
Nursery nurses	6121	148	101
Childminders and related occupations	6122	118	20
Playgroup workers	6123	59	25
Total		326	145
3. Nursing workers			
Nurses	3211	480	508
Midwives	3212	39	29
Nursing auxiliaries/assistants	6111	219	203
Total		739	740
4. Education workers:			
Primary/nursery ed. teachers	2315	365	347
Secondary ed. teachers	2314	373	370
Special ed. teachers	2316	73	39
Other teaching professionals	2319	122	35
Educational assistants	6124	318	100
School mid-day assistants	9244	92	240
Total		1,342	1,130
Total female workers/employees	N/A	12,841	9,152

¹⁴ <u>http://www.statistics.gov.uk/StatBase/Product.asp?vlnk=13101</u>

The methodologies for the two surveys have some important differences, which might lead to differences between the two estimates (Ormerod & Ritchie, 2007). As the sample for ASHE comes from the PAYE register, it does not include the self-employed or those below the PAYE threshold, and these will be included in the LFS. ASHE consists of employees whereas LFS covers all workers. An occupation with a large number of self-employed would therefore tend to have a lower estimate in ASHE than in LFS. The descriptions of the occupations used for coding into the SOC coding for the LFS come from the workers themselves, whereas for the ASHE they come from the employer. It is possible the two do not entirely agree on what the job involves. In particular, the employees might tend to overstate their role, as a form of social presentation, whereas the employers might tend to understate the role. Consequently, the LFS might be expected to have higher numbers in more prestigious roles than ASHE but fewer in less prestigious, more menial roles.

It is clear from Table 18 that there is mostly a very good match between the two estimates. Among social care workers, the number of care assistants/home carers is higher in the LFS (572,000) than ASHE (451,000). It is possible that some people in this occupation are employed through agencies, and are not employees. This would give a higher LFS estimate. For childcare workers, the LFS (148,000) has many more nursery nurses than does ASHE (101,000). This could be because nursery nurses not working in nurseries might not be described as such by their employers; conversely, it might be that lower skilled childcare workers are claiming the more professional title. The LFS has many more childminders and related (118,000) and playgroup workers (59,000) than the ASHE (20,000 and 25,000 respectively). This is most likely to be because many in these occupations – and childminders especially – are self-employed, and so do not show up in employee counts.

The numbers for nursing workers are very close. For education workers, the numbers of primary and secondary teachers are quite similar. However, for educational assistants and school mid-day assistants the numbers are very different: the LFS has many more educational assistants than ASHE (318,000 v 100,000) and many fewer school mid-day assistants (92,000 v 240,000). This could be because employees describe their jobs differently to their employers.

ASHE collects data on earnings, so it is possible to compare the LFS and ASHE estimates of earnings. Mean annual earnings from the two surveys are shown in Table 19. As with Table 18, LFS figures have been calculated for the UK and the same periods have been used. These estimates are remarkably close, even when the survey numbers (in Table 18) are very different.

 Table 19: Mean gross annual pay

Occupation Group	SOC 2000	LFS	ASHE
1. Social Care Workers:			
Social workers	2442	£21,866	£22,199
Youth and comm. Workers	3231	£15,692	£15,267
Housing and welfare officers	3232	£16,632	£16,830
Houseparents and residential wardens	6114	£13,678	£13,993
Care assistants/home carers	6115	£9,424	£10,198
2. Childcare Workers:			
Nursery nurses	6121	£9,197	£10,130
Childminders and related occupations	6122	£7,824	£8,814
Playgroup workers	6123	£5,544	£5,521
3. Nursing workers			
Nurses	3211	£18,622	£19,224
Midwives	3212	£19,906	£21,311
Nursing auxiliaries/assistants	6111	£11,728	£11,103
4. Education workers:			
Primary/nursery ed. Teachers	2314	£24,562	£25,252
Secondary ed. teachers	2315	£28,511	£27,818
Special ed. Teachers	2316	£21,533	£25,833
Teaching Professionals	2319	£15,716	£12,432
Educational Assistants	6124	£8,343	£7,688
School mid-day assistants	9244	£2,124	£2,696
All Women workers:			
Total		£13,893	£15,620

3.8.2 NHS workforce

The NHS annually collects data on its workforce, including staff who are directly employed by the NHS and by GP practices contracted to the NHS. This is done in two parts: the first of these covers NHS hospital and community staff and consists of the Medical and dental workforce census and the Non-medical workforce census. In addition, the General and personal medical services census covers those who work in general practice. Figures are published on the NHS Information Centre web site¹⁵.

The categories used for the NHS workforce do not correspond directly to the occupations found in the SOC 2000. The nearest would seem to be 'All qualified nurses', which includes nurses, midwives and health visitors. Table 20 shows UK estimates using LFS, ASHE and the NHS data for 2001-2005 (ASHE was using SOC 1990 in 2001, so the data are not directly comparable and are not included here). All three series show a steady increase, except that the LFS estimate shows a slight fall in 2005. The LFS and ASHE estimates are fairly similar, as would have been expected from the averaged similarity in Table 18. The estimates from the NHS are lower, which is because not all nurses work in the NHS. However, the trends are fairly similar.

¹⁵ <u>http://www.ic.nhs.uk/statistics-and-data-collections/workforce/nhs-staff-numbers</u>

Table 20: Number of nurses and midwives: 2001-2005. UK

	2001	2002	2003	2004	2005
LFS	488	520	531	532	526
ASHE	*	507	516	554	569
NHS	350	368	386	398	404

* Not available

3.8.3 Childcare and early years workforce surveys

DfES has commissioned a number of surveys of preschool childcare and early years education in England. One was conducted in 2001 and one in 2003 (Sure Start, 2004), which come in the period being analysed for this report. MORI undertook a series of surveys for different types of settings, including full daycare, playgroups and childminders. Eight hundred and fifty interviews were conducted for each type of setting; for group care the target respondent was the senior manager. Workforce numbers are weighted to give population estimates. However, numbers are presented by type of setting, not by occupation, so they are not directly comparable with those from the LFS. However, full daycare corresponds most closely to the nursery nurse occupation (although not all staff in full daycare are nursery nurses and not all nursery nurses work in full daycare settings); playgroups correspond to playgroup workers and childminders correspond closely to childminders and related occupations.

As can be seen in Table 21, the LFS has a bigger estimate of nursery nurses than the MORI survey has for staff in full daycare settings. This is not surprising, given that many nursery nurses may work in other settings. Also, the LFS has fewer playgroup workers, and it may be that some of these are describing themselves as nursery nurses when interviewed for the LFS: many playgroup workers will be trained nursery nurses (Moss et al., 1995). The LFS also has a much larger estimate for childminders. As the number of registered childminders at 31 March 2003 was 68,200 (Ofsted, 2003), the MORI estimate would seem a bit high and the LFS estimate far too high. It could be that the SOC code is wider than childminders. Alternatively, they may be many people working as childminders who are not registered with their local authority, so that the register will be an underestimate of the true number.

MORI		LFS Nursery nurses 128,000 Playgroup workers 51,000				
Full daycare	111,100	Nursery nurses	128,000			
Playgroups	69,600	Playgroup workers	51,000			
Childminders	72,900	Childminders etc.	101,000			

Table 21: Childcare workforce estimates. England

3.8.4 Summary of comparative data

Although the LFS is the largest and most comprehensive survey of the workforce, there are other surveys against which results from the LFS analysis can be compared. Three have been used here: the Annual Survey of Hours and Earnings, the NHS workforce censuses and DfES childcare and early years survey. In all cases the results from the different sources are very similar, and the

discrepancies can be explained by the different methodologies. These findings give extra confidence in the results from the LFS.

3.9 Cluster analysis

We have been comparing and contrasting a range of occupations concerned with care, education and health. Another way of looking for similarities and differences is the statistical technique of cluster analysis (Everitt, Landau and Leese, 2001). This is a convenient method of sorting separate entities – such as the individual occupations included in this study - into groups on the basis of some measure of similarity using multivariate data. There are many methods available and no single method is to be preferred for all situations. Additionally, there are several ways of specifying the data. In general, it is advisable to apply more than one method: consistent results would indicate that the clustering is robust.

For this analysis a small number of summary variables were computed for the seventeen 'human services' occupations and the group of High percentage female occupations. These variables were:

- Average hourly pay
- Total usual hours worked
- Average age
- Percentage with qualifications equivalent to NVQ 3 or above
- Percentage in the non-private sector
- Percentage of female
- Percentage white

These are the variables that have been the focus of this report. The variables were standardised to have the same mean and variance before the analysis. This standardisation gives all the variables the same weight, and avoids some variables assuming a greater importance than others in the analysis. The cluster analysis method used was Ward's hierarchical clustering method (Ward, 1963). Ward's method uses the sum of squared deviations of each point from the mean of the cluster as its index of similarity. The method tends to generate clusters of similar size. The analysis proceeds by forming the two most similar occupations into a single cluster. The operation is repeated, as similar occupations or clusters are joined together to form new clusters.

The results of this agglomeration process can be displayed graphically as a dendrogram. In a dendrogram, the shorter the horizontal arm that links two items, the more similar they are. There is no statistical procedure for deciding on the correct number of clusters, and visual inspection of the dendrogram is the most common approach to deciding the number of clusters to include. This is done by drawing a vertical line through the branches of the dendrogram: items to the left that are linked by a single branch to the right are deemed to form a single cluster. This is known as the 'best cut' (Everitt et al., 2001: 76).

The dendrogram for this analysis is shown in Figure 1. It is clear that one possible result from the analysis would be a two cluster solution, since the bottom six occupations are separated from the others at a high level of distance (the

horizontal axis). However, two clusters would not provide a lot of differentiation in the data and the second cluster (of 12) would be much larger than the first. Making the cut further to the left, at a value of about 10 on the rescaled distance, gives a three cluster solution with clusters of size 8, 4 and 6. This seems a good balance. Making cuts further to the left starts to generate clusters of a single occupation, which is not analytically helpful. It was decided to adopt the three cluster solution for closer examination.

Figure 1: Dendrogram for hierarchical cluster analysis of occupations Rescaled Cluster Distance

	0 +	5 +	10	15 +	20	25 +
Youth/Community Housing/Welfare Nurse Asst Educational Asst	000000 0÷ 000 00000÷000 0÷ 0	0000				
Houseparent etc	0000000÷	0000	100000			
Social Worker	0000		Ο			
Nurse	0÷ 000000	1000÷				
Midwife	000÷		00000	000000000000000000000000000000000000000	100000000000000000000000000000000000000	
Primary Teacher	00000		Π			
Spec Ed Teacher	0÷ 000		0			Ο
Secondary Teach	00000÷000	1000000000	1000÷			0
Teaching Prof	0000000÷					Ο
Childminder etc	0000					
High Female Job	0÷ 000					
Care Asst	000÷ 00000	000000				0
Nursery Nurse	00000÷	Ο	000000000000000000000000000000000000000	100000000000000	0000000000	
Playgroup Worker	000÷	[]			
Midday Asst	000000000	00000÷				

The occupations assigned to the three clusters are shown in Table 22. One cluster has been called Education as it includes the four occupations of *Primary/nursery* education teacher, Secondary education teacher, Special education teacher and *Teaching professionals*. Another cluster includes eight occupations mostly concerned with welfare and health, although it also includes *Educational* assistants. It can be seen from the dendrogram that *Educational assistants* are most similar to *Nursing assistants*. The final group has been labelled Childcare/Assistants, as it includes the three Childcare occupations as well as those of *Care assistants* and *School mid-day assistants*. This cluster also includes the High percentage female occupations (though not *Education* and *Nursing assistants*).

1. Education	2. Welfare/Health	3. Childcare/Assistants
Primary/Nursery Teacher Secondary Teacher Special Education Teacher Teaching Professional	Social Worker Youth/Community Worker Housing/Welfare Officer Houseparent etc. Nurse Midwife Nursing Assistant	Nursery nurse Childminder Playgroup worker Care assistant Midday Assistant High Percentage Female Occupations
	Education Assistant	

Table 22: Cluster membership of occupations

The mean values on the variables within each cluster are shown in Table 23. It can be seen that some variables are markedly different between the clusters whereas some are very similar. The variable that shows the biggest differentiation is hourly pay: the average for cluster 1 (Education) is £14.70, for cluster 2 (Welfare/Health) £9.39 and for cluster 3 (Childcare/ Assistants) £5.78. The next biggest difference is in the percentage with NVQ level 3 or above: for cluster 1 there are 93 percent at this level, for cluster 2 it is 68 percent and for cluster 3 just 32 percent. This reflects the qualification requirements for the different occupations: teaching is a largely graduate profession, and welfare and health occupations are increasing becoming graduate entry whereas no occupations in cluster 3 would require a degree. The link between educational qualifications and pay in occupations is clearly illustrated.

A number of other variables show a similar pattern of differentiation across the three clusters. The average age for cluster 1 is 44.6 years and for cluster 2 42.4 years, with cluster 3 being somewhat younger at 38.9 years. This reflects the relatively young age of Childcare workers, as already noted, who are included in this cluster. Cluster 1 has the lowest percentage of female members, at 73 percent; cluster 2 is intermediate at 86 percent; while cluster 3 is the highest with 94 percent. This reflects the high percentage of Childcare workers who are female, although midwives have the highest percentage and they are in cluster 2. Usual hours worked shows a similar pattern: the highest is cluster 1, averaging 37 hours per week; cluster 2 has an average of 34 hours and cluster 3 has the lowest at 24, reflecting the large number of part-time workers in these Childcare/assistant occupations.

Cluster	Hourly pay (£)	Total usual hours	Age	NVQ 3+ %	Non- private sector %	Female %	White %
1	14.70	36.8	44.6	93.0	78.7	73.4	95.5
	(0.68)	(9.22)	(2.52)	(7.31)	(24.56)	(13.83)	(1.70)
2	9.39	33.9	42.4	67.5	85.7	85.5	90.9
	(2.36)	(5.67)	(1.75)	(22.0)	(12.80)	(9.21)	(3.48)
3	5.78	24.4	38.9	31.9	45.3	94.0	94.4
	(0.54)	(9.47)	(4.02)	(13.37)	(30.21)	(6.21)	(1.65)
Total	9.37	31.4	41.7	61.3	70.7	85.7	93.1
	(3.70)	(9.03)	(3.49)	(28.64)	(28.14)	(11.82)	(3.22)

Table 23: Variables used in cluster analysis: mean (standard deviation)

The final two variables do not show the same differentiation. The highest percentage working outside of the private sector is cluster 2 at 86 percent; cluster 1 is intermediate for this variable at 79, whilst cluster 3 has the lowest percentage, 45. The percentage of workers who are white differs little between the clusters, and shows a different pattern. Cluster 1 has the highest level of white workers, 96 percent. This is above the national average for all occupations, 93 percent. Cluster 3 has 94 percent white, which is also above the national average: cluster 2 has the lowest level of white workers, 91 percent, which is below the national average.

The clusters can, therefore, be summarised as follows. Cluster 1 (Education) occupations are on average better qualified and better paid than the other occupations; they work longer hours, have a lower percentage of female and a higher percentage of white employees, and are slightly older. Cluster 2 (Welfare/ Health) is intermediate on qualifications, pay, hours, age and percentage female; they are the most likely to work outside the private sector and have the lowest percentage of white employees. Cluster 3 (Childcare/ Assistants) occupations have the lowest levels of qualifications and pay; they are more likely to work part-time; they are the youngest group, with the highest percentage of female employees and are the least likely to work outside of the private sector.

Chapter Four: Findings for Scotland

4.1 Numbers in the workforce

The LFS was also analysed for Scotland to examine the demographic characteristics and working conditions for the same six broad occupational groupings as in England. The occupational groups discussed below are based on the same occupational coding as for England. However, due to the small sample sizes, analyses for Scotland were only conducted on the occupation groups overall (not the individual occupations within each of the main groups). Unlike the data findings for England, this analysis was not previously conducted using the 1997-1999 data, so comparisons with the previous study are not possible.

Overall, the four broad groupings making up the 'human services' workforce in Scotland employ 307,000 workers. As in England, they constitute about 12 percent of the total workforce. The care workforce accounts for a 122,000 workers or just under two fifths of the 'human services' total (39 percent), and Education workers contribute a similar share, a rather lower proportion than in England. Table 24 shows the population sizes for the six occupational groups and the individual occupations which make up each grouping.

Occupation Group	Individual occupations within the groups	SOC codes ¹⁶	Population Numbers ¹⁷
1. Social Care	Social workers	2442	11,000
Workers ¹⁸	Youth and comm. Workers	3231	9,000
	Housing and welfare officers	3232	16,000
	Houseparents and residential	6114	4,000
	wardens		
	Care assistants/home carers	6115	57,000
	Total		97,100
2. Childcare	Nursery nurses	6121	12,000
Workers	Childminders and related	6122	8,000
	occupations		
	Playgroup workers	6123	5,000
	Total		25,000
	Т	otal care workers	122,000

Table 24: The population sizes of the six occupation groups examined in the study (Scotland)

¹⁶ SOC codes are taken from the Standard Occupational Classification 2000, ONS publications.

¹⁷ Numbers taken from LFS population estimates for each occupation group as defined above. Numbers are rounded to the nearest thousand. Data are taken from the spring quarters (Q1) of LFS 2001-2005. See technical appendix for weighting information.

¹⁸ Within the LFS, managers form a large group of the total workforce, and obviously some are involved in social work activities. However, we have only included people directly involved in the provision of care.

		0011	= 4 0 0 0
3. Nursing	Nurses	3211	54,000
Workers	Midwives	3212	4,000
	Nursing auxiliaries/assistants	6111	26,000
	Total		84,000
4. Education	Primary/nursery ed. Teachers	2315	34,000
Workers	Secondary ed. teachers	2314	34,000
	Special ed. Teachers	2316	6,000
	Teaching professionals	2319	7.000
	Educational Assistants	6124	19,000
	School mid-day assistants	9244	1,000
	Total		101,000
5. High			
percent	Clerical workers	4211,4212,4213,	
Female Jobs		4214,4215,4216,	
		4217,4141,4150	
	Hairdressers and Barbers	6221, 6222	
	Sales/retail workers	7111, 7112	
	Total		169,000
	Total	non-care workers	354,000
6. All Women			
Workers	Total	N/A	1,130,000
		All workers	2,375,000

Key features for occupational groups in Scotland

- Across all groups, workers in Scotland are less likely than in England to come from ethnic minority groups.
- Compared with England, the Care workforce and Education workers in Scotland have rather higher educational qualifications and rather more workers are in the non-private sector.
- Education workers in Scotland earn, on average, 20 percent more than their counterparts in England; Social care workers earn 7 percent more. However, Scotland has proportionately far fewer School mid-day assistants, which may account for some of the pay differential among Education workers
- Education and Childcare workers in Scotland are rather more likely to work full time.

4.2 Social care workers

In Scotland, there are approximately 97,000 persons classified within the Social Care workers occupational group: approximately 11,000 are *Social workers*, 4,000 are *Houseparents and residential wardens*, 9,000 are *Youth and community workers*, 16,000 are *Housing and welfare officers*, and 57,000 are *Care assistants/home carers*.

4.2.1 The Social Care Workers overall: the current situation

The mean age of the group is 41 years. Few (11 percent) are aged under 25 years and just over a quarter (27 percent) are aged 50 years or over (Table 21). Eightyone percent of this group are female (Table 22), 99 percent are of white ethnic

origin (Table 23), 41 percent live with children (Table 24), 51 percent are married or living with someone and 29 percent are single (Table 25).

In terms of highest qualifications, 18 percent of the group have a degree, 26 percent have qualifications above A-level (but below degree level), 21 percent have A-levels, 12 percent have O-levels and 14 percent have some other qualification. Ten percent said they had no qualifications at all (Table 26). In NVQ terms, over half of the social care workers group is qualified to level 2 or above (68 percent) (Table 27).

As shown in Table 28, almost half (44 percent) have undertaken work-related training in the past three months, and two percent have a work-limiting disability (Table 27).

The mean gross pay for the group overall is £12,868 per annum (£8.09 per hour), the group works, on average, 32 hours in total per week and has been with their current employer for 77 months (6 years) (Table 30). The majority of the group (90 percent) are also in a permanent job (Table 31), and are working full time (62 percent) in their main job (Table 32).

Twenty-seven percent are working in the private sector and 73 percent are working in the non-private sector (Table 33). Of those working in the non-private sector, most (66 percent) are employed within local government (Table 34).

Pay differs for Social care workers according to whether they work in the nonprivate or private sector: Social care workers earn on average £8.56 per hour in the non-private sector and £5.73 per hour in the private sector (Table 35).

4.2.2 Social care workers overall: differences between England and Scotland¹⁹

There are few substantial differences. Firstly, more Social care workers are of white ethnic origin in Scotland (99 percent compared with 90 percent in England). Secondly, more Social care workers have an 'above A level' qualification in Scotland (26 percent compared with 18 percent in England). Thirdly, fewer Social care workers have undertaken work-related training in the past three months in Scotland (44 percent compared with 49 percent in England). Finally, more Social care workers are in the non-private sector in Scotland (73 percent compared with 59 percent in England). As non-private sector workers earn more, this accounts for higher average earnings for Scotlish Social care workers.

4.3 Childcare workers

Approximately 25,000 persons are classified within the Childcare workers occupational group in Scotland. This group is made up of three individual occupations: approximately 12,000 are *Nursery nurses*, 5,000 are *Playgroup workers* and 8,000 are *Childminders and related occupations*. Compared with England, more of this group is made up of *Nursery Nurses*, whereas in England, the balance is shifted more towards the *Childminders and related occupations*.

4.3.1 Childcare workers overall: the current situation

¹⁹ Only differences greater than 5% are mentioned here.

The mean age of the group is 36 years. Over a quarter (26 percent) is aged between 25 years or younger and 56 percent is aged between 25 and 49 years (Table 21). The group is overwhelmingly female (98 percent, Table 22) and white (99 percent, Table 23). In addition, 52 percent are currently co-residing with children (Table 24), over half (54 percent) are married or living with a partner (Table 25), and 34 percent are single (Table 25).

In terms of qualifications, the Childcare workers are much less qualified than the Social care workers, the Nursing workers and the Education workers: only 7 percent have a degree, 38 percent 'A levels or above' (but lower than degree level), and 6 percent have no qualifications at all (Table 26). However, the qualification levels are similar to the High percentage female workers (Table 26).

Childcare workers are also poorly paid, especially relative to the Social care workers, the Nursing workers, and the Education workers. Childcare workers as a group earn £8,373 gross per annum, and work for 30 hours per week on average, which equates to £5.64 per hour (Table 30). Hourly pay is also higher for the Childcare workers in the non-private sector (£5.87 per hour compared with £4.82 per hour in the private sector, Table 35).

Ninety-one percent of Childcare workers have permanent jobs (Table 31) and 58 percent are working full time (Table 32). Forty-six percent are now working in the non-private sector (Table 33), and of those, most (74 percent) are working for local government (Table 34). In addition, Childcare workers have been continuously working with their current employer on average for 66 months (or approximately 5 and half years, Table 30).

4.3.2 Childcare workers overall: differences between England and Scotland

Rather more Childcare workers in Scotland are working full time (58 percent compared with 50 percent in England) and more are in the non-private sector (44 percent compared with 35 percent in England). In addition, 38 percent have qualifications at above A level but below degree level, compared with 25 percent in England.

4.4 Nursing workers

There are approximately 84,000 persons classified within the Nursing workers occupational group. This group consists of four individual occupations. The majority of these (54,000) are *Nurses*. There are also 4,000 *Midwives* and 26,000 *Nursing auxiliaries/assistants*.

4.4.1 Nursing workers overall: the current situation

The mean age of the nursing workers group is 42 years. Almost half (51 percent) are aged between 35 and 49 years, 19 percent between 25 and 34 years, 25 percent 50 years or over and 6 percent 25 years or younger (Table 21). The great majority (89 percent, Table 22) of this group are female and of white ethnic origin (98 percent, Table 23). The majority of the Nursing workers are married or living with a partner (63 percent, Table 25), and almost half (44 percent, Table 24) are living with children.

This group are well qualified compared with some of the other workers examined in this report (Table 26 and 27), with 18 percent having a degree, and 56 percent a qualification above A level but below degree level. Combined this represents 72 percent qualified to NVQ level 4 or higher (Table 27). In addition, 51 percent have undergone some form of work-related training in the three months prior to the survey (Table 28).

Ninety-five percent are in permanent jobs (Table 31), with just over half (57 percent) working full time in their main job (Table 32). Nursing workers have been continuously working for the same employer for approximately 11 years on average, work for approximately 33 hours per week, and earn on average £16,092 per annum gross (Table 30).

The proportion with a work-limiting disability is 3 percent (Table 29). The majority of this group (88 percent, Table 33) works in the non-private sector, and of these, the majority (94 percent) are employed within the health service (Table 34).

4.4.2 Nursing workers overall: differences between England and Scotland More Nursing workers in Scotland are of white ethnic origin (98 percent compared with 90 percent in England), and slightly fewer undertook work-related training in the past three months (51 percent compared with 59 percent in England).

4.5 Education workers

There are 101,000 persons classified within the Education workers occupational group. This group is comprised of six individual occupations: approximately 34,000 are classified as *Primary/nursery* education teachers, 34,000 as *Secondary* education teachers, 6,000 as *Special* education teachers, 19,000 as *Educational* Assistants, 7,000 as *Teaching* professionals, and 1,000 as *School mid-day* assistants.

4.5.1 Education workers overall: The current situation

The mean age of Education workers is 44 years. Almost half of these workers (45 percent) are aged between 35 and 49 years, with 36 percent aged 50 years or older, 15 percent aged 25-34 years, and only 4 percent aged under 25 years (Table 21). Although the majority (78 percent) of education workers are female, almost a quarter of this group (22 percent) are male (Table 22). Ninety-nine percent are of white ethnic origin (Table 23), 69 percent are married or living with a partner (Table 25), and almost half (47 percent) live with children (Table 24).

In terms of qualifications, the Education workers are highly qualified: 60 percent have a degree and a further 25 percent have qualifications above A-level but below degree level as their highest qualification (Table 26). In addition, 51 percent of the Education workers have undergone some form of work-related training in the last three months (Table 28). Whilst the majority (85 percent) of Education workers are in a permanent job, a sizeable minority (15 percent) are in temporary job (Table 31).

The Education workers work on average 36 hours per week and earn approximately £22,831 per annum or £14.38 per hour (Table 30). Seventy-two

percent work full time (Table 32), and the proportion with a work-limiting disability is 2 percent (Table 29).

The majority of education workers (91 percent) are working in the non-private sector (Table 33), with 96 percent employed within local government (Table 34). The Education workers group earn slightly more on average per hour in the non-private sector (Table 35: \pounds 12.17) compared with the private sector (Table 35: \pounds 10.65).

4.5.2 Education workers overall: differences between England and Scotland

The most striking difference is the relatively small number of Scottish workers in the *School mid-day assistants* occupation – just 1,000 compared to 88,000 in England; the reason for this difference is not clear. Slightly more Education workers in Scotland are aged 50 years and over (36 percent compared with 30 percent in England), have degrees (60 percent compared with 54 percent in England) or a qualification above A level but below degree level (25 percent compared with 18 percent in England). In addition, Education workers in Scotland are more likely to work full time (72 percent compared with 59 percent in England) and earn a fifth more (per hour) than their English equivalents; some, but not all of these differences, are due to the low number of *School mid-day assistants* in Scotland, since this group works short hours and has relatively low pay.

4.6 Workers in high percentage female jobs

This group is made up of approximately 169,000 persons. Occupations selected for inclusion in this group, are those which are known to attract a high proportion of female workers. This group is made up of a mixture of clerical occupations, hairdressers and beauticians, and sales/retail occupations.

4.6.1 Workers in High percentage female jobs: the current situation

Eighty-eight percent are female: this is considerably less than the Childcare workers and just less Nursing workers, but slightly higher than the Education workers and the Social Care workers (Table 22). The mean age of this group is 37 years, with peaks at under 25 years (Table 19: 26 percent) and 35-49 years (Table 19: 21 percent). Ninety-nine percent of this group are of white ethnic origin (Table 23), which is identical to the Social care workers, Childcare and Education workers groups. Fifty-one percent are married/ living with a partner (Table 25), which is identical to the Social care workers and very similar to the Childcare workers but lower than the Nursing workers or the Education workers. Finally, 33 percent of this group live with children (Table 24). This is lower than all the other occupation groups (Table 22).

Only 7 percent of this group have a degree (Table 26) compared to 60 percent of Education workers, 18 percent of Nursing workers, 18 percent of Social care workers, and 18 percent of All women workers. However, the Childcare workers group hold a similar level of qualification to this group (Table 26: 7 percent of the Childcare workers group have a degree). In terms of NVQ levels, 67 percent of those in this High percentage female jobs group were qualified to NVQ level 2 or above (Table 27).

More than three-quarters of this group have not taken up work-related training in the past three months, which is much lower than all of the other occupation groups, but is nearest to the Childcare workers group (Table 28: 61 percent). Approximately 2 percent of this group have a work-limiting disability, which is identical or almost identical to the average for all the other occupation groups (including all women workers, Table 29).

They earn on average £10,043 per annum (£6.69 per hour), working on average 29 hours per week and have been employed continuously in their current job for 82 months (almost 7 years) (Table 30). The pay is lower than all the other occupation groups (except on hourly pay for the Childcare workers, who earn on average £5.64 per hour, Table 30).

Approximately 93 percent are permanently employed (Table 31), which is higher than the proportion for the Education workers group as a whole, slightly higher than the Childcare and Social care workers groups, and lower than the Nursing workers. Fifty-four percent work full time (Table 32), which is lower than all the other occupation groups, especially relative to the Education workers group (Table 32).

This group works mainly in the private sector (72 percent: Table 33), which makes it very different to all of the occupation groups except for the Childcare workers, where 56 percent work in the private sector, and for All women workers, where 57 percent work in the private sector. Of the 28 percent in the non-private sector, the workers were much more distributed across the different types of industry than the other types of occupation groups examined. Seven percent are in public companies, 9 percent in central government, 27 percent in local government, 9 percent in Universities, 32 percent in the health sector, 12 percent in charity or voluntary organisations, and 2 percent with another kind of organisation (Table 34). As with many of the other occupation groups, those classified in the High proportion female worker group earn more in the non-private than the private sector per (Table 35: £6.99 per hour compared with £6.43 per hour).

4.6.2 Workers in high percentage female jobs: differences between England and Scotland

In Scotland, more of this group are of white ethnic origin (99 percent compared with 94 percent in England); and are educated to A level or above (50 percent compared with 36 percent in England).

4.7 All women workers

According to the LFS 2001-2005, 2,374,913 people were employed within Scotland (selecting only those with a SOC code and using an estimate of five years data averaged). Of the total employed, approximately 1,130,000 were female workers, 47 percent of the total workforce.

4.7.1 All women workers: the current situation

The mean age of all women workers is 39 years: 17 percent are aged below 25 years, 20 percent between 25 and 34 years, 40 percent between 35 and 49 years and 23 percent 50 years and over (Table 21). The all women workforce is largely

white (Table 23: 99 percent) and married or living with a partner (Table 25: 52 percent), and few have a work-limiting disability (Table 29: 98 percent).

Eighteen percent have a degree as their highest level of qualification, 20 percent qualifications above A-level but below degree level, 23 percent A-levels, 17 percent O-levels, 9 percent some other qualification, and 13 percent of the female workforce have no qualifications at all (Table 26). In terms of NVQ levels, 67 percent of the female workforce is qualified to level 2 or above (Table 27). Also, 31 percent of all women workers undertook some form of work-related training in the past 3 months (Table 28).

Ninety-three percent are in a permanent job (Table 31) and over half (Table 30: 58 percent) are working full time in their main job. The mean annual income for the female workforce is approximately £13,051 (Table 30), which equates to approximately £8.20 per hour (Table 30). The mean total hours worked per week is 31 (Table 30), and the all women workforce have been working continuously, on average, with their current employer for 91 months (approximately 7.5 years, Table 30).

Approximately 57 percent of the all female workers group work in the private sector (Table 33). Of those working in the non-private sector (Table 33: 43 percent), most were working within local government (Table 34: 45 percent) or health (Table 34: 26 percent), and with smaller proportions also working within charity or voluntary organisations (Table 34: eight percent) or public companies (Table 34: four percent). Those working in the non-private sector were earning more than those working in the private sector (£8.94 per hour compared with £6.84 in the private sector (Table 35).

4.7.2 All women workers: differences between England and Scotland

In Scotland, more of the all women workers group are of white ethnic origin (99 percent compared with 93 percent in England). They have also been employed continuously for longer (91 months, or 7.5 years, compared with 82 months in England). However, fewer work in the private sector (57 percent compared with 62 percent in England).

Chapter Five: Conclusions

The care workforce in England and Scotland consists of 1.1 million workers, while the 'human services' workforce (adding in Nursing and Education workers) comes to just over 3 million workers.

In England, where we can make comparison, the 'human services' workforce has increased from 2.46 million in 1997-99 to 2.74 million in 2001-05, an increase of 11 percent. This increase is mainly accounted for by Education workers, in particular a large rise in *Educational assistants*, but also the addition of two new occupational groups, most of whose members were previously included in the Childcare workers grouping (on a like-for-like basis, therefore, Childcare and Education workers would both have shown a substantial increase, but the Education workers increase would have been lower). By contrast, the increase among all women workers has been 6 percent (619,000); overall, therefore, the increase in the 'human services' workforce is equivalent to nearly half the overall growth in women's employment (45 percent). As well as increasing numbers, there is some evidence of improving qualifications and work-related training amongst the care workforce, while pay has also improved across the board.

'Human services' workers, and especially Childcare, Nursing and Education workers, are more likely to have co-resident children than women working in High percentage female jobs and, indeed, all women workers. The level is particularly high among *Playgroup workers, Childminders and related occupations, Midwives, Educational assistants* and *School mid-day assistants*. In most of these occupations, this may reflect parents (mostly mothers) being drawn into the work, perhaps because it is seen as 'fitting' in with caring for own children and requires little or no prior qualification. But this is unlikely to be the case for *Midwives*, who need a long basic education.

There is some variation in ethnicity, both between England and Scotland, with more non-white workers in England, and between occupational groupings and individual occupations. Highest levels of non-white workers (in England) are found among Nursing and Social care workers, twice or more the level among Childcare and Education workers; and among *Social workers* and *Nurses*, who are nearly three times as likely to be non-white as *Nursery nurses*, *Childminders and related occupations, Playgroup workers* and all types of *Teacher* and *Educational assistants*. It is unclear to what extent this is because social work and nursing are particularly attractive career paths for the minority ethnic population (or parts of it), and if so why, or because these occupations rely more on migrant labour.

Most Education and Nursing workers are in the non-private sector (consisting of workers in the public sector and the non-profit private sector), mainly in the public sector. However, half or more of the care workforce are in the private sector. Pay for workers in similar occupations is consistently better for those working within the non-private sector.

The 'human services' workforce in general, and the care workforce in particular, remains strongly gendered. The human services workforce accounts for four of the seven occupational groupings with the highest female membership: carework (with young children and older people), nursing and educational work (at least with younger children) remain strongly defined as women's work.

Looking across the individual occupations in the 'human services' workforce and the High proportion female jobs, three main clusters can be discerned. A cluster of mainly teaching occupations in education has the highest qualifications, pay and working hours and the highest proportion of male and white workers. At the other extreme, there is a cluster of occupations working in childcare or elsewhere as assistants that has the lowest qualifications and pay and the highest proportion of female and part-time workers; overall, this cluster has the youngest workers and its members are most likely by far to work in the private (for profit) sector. They are also characterised by higher levels of part-time work and co-resident children. This suggests that this grouping of occupations attracts disproportionate numbers of women with children seeking to combine employment with childcare. In between come a cluster of health and welfare workers, intermediate on most variables, though having the lowest proportion of white workers.

From this wide-ranging, cross-sectoral analysis, seven main conclusions emerge:

- 1. The 'human services' workforce constitutes a large and growing proportion of the overall workforce, and even more so of the female workforce: women in the 'human services workforce' account for a quarter of all women workers, while women in the 'care workforce' are nearly 10 percent of women workers. The conditions of these workforces will, therefore, play an important role in determining the overall position of women workers in the labour force and in the attainment of gender equality in employment.
- 2. The 'human services' workforce is strikingly hierarchical, with the 'care workforce' strongly represented in the lowest tier of the three-tier hierarchy described in the cluster analysis of occupations. Put another way, 'care work' unlike education and health work is dominated by low paid, relatively low qualified women workers employed by the private sector. The renewed emphasis on closer working relationships among the children's workforce takes place within this context, of occupations having very different qualifications, pay and status, and with education, health and childcare workers employed by different providers; these structural differences may not facilitate collaboration. Moreover, there is little indication that the hierarchy is reducing; indeed, quite the contrary, with the marked growth of *Educational assistants* and Childcare workers.
- 3. The hierarchical nature of the workforce suggests that the occupations included in the human services workforce are not competing to recruit the same kinds of workers: for example, teaching and childcare work require very different qualifications and pay very different salaries. However, there may be the potential for competition within each of the three tiers, into which the occupations fall; for example, childcare and eldercare services

may increasingly compete among the same group of women workers, along with other high percentage female occupations.

- 4. There is a clear relationship between gender, qualification and pay: the cluster of 'childcare/assistant' occupations has the highest level of women workers and the lowest levels of qualification and pay; while the cluster of 'education' occupations has the lowest level of women workers and the highest levels of qualification and pay.
- 5. With the growth of *Educational assistants* and Childcare workers, among which the proportion of female workers is very high, the human services workforce is becoming more gendered. Younger children are in overwhelmingly feminised service settings.
- 6. Pay and conditions in the 'for profit' sector are mostly lower than in other sectors, especially the public sector. The 'for profit' sector dominates the provision of both 'childcare' and 'eldercare' services, which rely heavily on low paid women workers with relatively low levels of qualification. Whatever other benefits it may have brought, the growth of 'for profit' providers, especially in childcare and social care services, has had adverse consequences for the pay and conditions of the care workforce.
- 7. Finally, on a technical note, the Labour Force Survey, used in this analysis, is only one of several large-scale data-sets providing information on all or parts of the 'care' and 'human services' workforces. Three other data-sets have been compared with the LFS. In all cases the results from the different sources are very similar, and the discrepancies can be explained by the different methodologies. However, when interpreting and using reported findings on workforces, it is important to be aware of the data-set used and its coverage, sample source and conventions.

References

- Cameron, C., and Moss, P. (2007) *Care Work in Europe: Current Understandings and Future Directions*. London: Routledge.
- Everitt, B., Landau, S. and Leese, M. (2001) *Cluster Analysis*. London: Arnold.
- Low Pay Commission (2005) National Minimum Wage. Low Pay Commission Report 2005. London: HMSO.
- Moss, P., Owen, C., Statham, J., Bull, J., Cameron, C., and Candappa, M. (1995). Survey of Day Care Providers in England and Wales. London: TCRU.
- Office for National Statistics (2000a). *Standard Occupational Classification 2000 Volume 1.* London: The Stationery Office.
- Office for National Statistics (2000b). *Standard Occupational Classification 2000 Volume 2.* London: The Stationery Office.
- Office for National Statistics (2003), LFS User Guide Volume 1: Background and methodology. London: The Stationery Office. <u>http://www.statistics.gov.uk/statbase/Product.asp?vlnk=1537</u>
- Ofsted. (2003, 19 December). Registered childcare providers and places in England, 31 March 2003. from <u>http://www.ofsted.gov.uk/assets/3411.pdf</u>
- Ormerod, C. (2006). Earnings data: a brief guide to sources and outputs. *Labour Market Trends, 114*(11), 389-396.
- Ormerod, C., and Ritchie, F. (2007). Linking ASHE and LFS: can the main earnings sources be reconciled? *Economic & Labour Market Review*, *1*(3), 24-31.
- Owen, C. (1999) 'Government household surveys'. In D. Dorling and S. Simpson (eds.) *Statistics in Society*. London: Arnold. pp. 19-28
- Simon, A., Owen, C., Moss, P. and Cameron, C. (2003) Mapping the Care Workforce: Supporting Joined-up Thinking (Understanding Children's Social Care, Number 5). London: Institute of Education University of London/Department of Health
- Sure Start. (2004). 2002/03 Childcare and Early Years Workforce Survey: Overview Report. London: DfES.
- Wanless, D. (2006) Securing Good Care for Older People: Taking a Long-term View. London: King's Fund
- Ward, J.H. (1963) 'Hierarchical groupings to optimize an objective function', Journal of the American Statistical Association, 58, 236-254

In addition to these, the following data sets have been used:

- Office for National Statistics. Socio-Economic Division and Northern Ireland Statistics and Research Agency. Central Survey Unit, *Quarterly Labour Force Survey, March - May, 1997* [computer file]. *6th Edition.* Colchester, Essex: UK Data Archive [distributor], May 2004. SN: 3766.
- Office for National Statistics. Socio-Economic Division and Northern Ireland Statistics and Research Agency. Central Survey Unit, Quarterly Labour Force Survey, March - May, 1998 [computer file]. 3rd Edition. Colchester, Essex: UK Data Archive [distributor], May 2004. SN: 3898.
- Office for National Statistics. Socio-Economic Division and Northern Ireland Statistics and Research Agency. Central Survey Unit, Quarterly Labour Force Survey, March - May, 1999 [computer file]. 5th Edition. Colchester, Essex: UK Data Archive [distributor], May 2004. SN: 4012.
- Office for National Statistics. Social Survey Division and Northern Ireland Statistics and Research Agency. Central Survey Unit, Quarterly Labour Force Survey, March - May, 2001 [computer file]. 4th Edition. Colchester, Essex: UK Data Archive [distributor], May 2004. SN: 4416.
- Office for National Statistics. Social Survey Division and Northern Ireland Statistics and Research Agency. Central Survey Unit, Quarterly Labour Force Survey, March - May, 2002 [computer file]. 3rd Edition. Colchester, Essex: UK Data Archive [distributor], May 2004. SN: 4547.
- Office for National Statistics. Social Survey Division and Northern Ireland Statistics and Research Agency. Central Survey Unit, Quarterly Labour Force Survey, March - May, 2003 [computer file]. 3rd Edition. Colchester, Essex: UK Data Archive [distributor], June 2005. SN: 4712.
- Office for National Statistics. Social and Vital Statistics Division and Northern Ireland Statistics and Research Agency. Central Survey Unit, Quarterly Labour Force Survey, March - May, 2004 [computer file]. 2nd Edition. Colchester, Essex: UK Data Archive [distributor], November 2005. SN: 4998.
- Office for National Statistics. Social and Vital Statistics Division and Northern Ireland Statistics and Research Agency. Central Survey Unit, Quarterly Labour Force Survey, March - May, 2005 [computer file]. Colchester, Essex: UK Data Archive [distributor], July 2005. SN: 5211.

Appendix

Table 2: Age profile of the occupation groups (England)

Occupation Group					Age	groups					Mean
	A	ge	A	ge	A	ge	A	ge	Total		Age
	Und	er 25	25-34	years	35-49	years	50+ years				
	ye	ars									
	%	N	%	N	%	N	%	N	%	N	
1. Social Care Workers:											
Social workers	4	3	18	12	49	34	28	19	100	68	43
Youth and comm. Workers	9	6	26	18	41	27	24	16	100	68	40
Housing and welfare officers	7	7	19	20	46	48	29	30	100	105	42
Houseparents and residential wardens	5	1	12	3	41	11	42	12	100	29	46
Care assistants/home carers	15	70	19	89	36	166	30	138	100	462	41
Total	12	87	19	142	39	287	29	215	100	732	41
2. Childcare Workers:											
Nursery nurses	37	48	22	28	31	40	10	13	100	128	33
Childminders and related occupations	23	23	24	24	37	37	17	17	100	101	37
Playgroup workers	16	8	18	9	52	26	15	7	100	51	38
Total	28	78	22	61	37	104	13	37	100	279	35
3. Nursing workers											
Nurses	6	24	20	6	54	17	22	7	100	31	41
Midwives	4	1	24	90	49	186	21	79	100	379	42
Nursing auxiliaries/assistants	12	21	20	35	41	72	27	48	100	176	41
Total	8	47	22	130	47	275	23	133	100	586	41
4. Education workers:											
Primary/nursery ed. Teachers	7	20	25	74	38	114	30	91	100	299	42
Secondary ed. teachers	5	16	25	76	39	121	31	95	100	308	42
Special ed. Teachers	2	1	11	6	44	26	43	26	100	60	47
Teaching professionals	6	6	16	17	37	40	42	45	100	109	46
Educational Assistants	9	24	14	38	56	158	22	61	100	281	41
School mid-day assistants	4	3	13	11	50	42	34	28	100	84	45
Total	6	70	20	223	44	502	30	346	100	1,141	43
5. High % female jobs:											
Total	21	366	18	315	33	595	28	506	100	178	37
6. All Women workers:											
Total	17	1,789	21	2,251	38	4,098	25	2,658	100	10,797	39

N= thousands (rounded to nearest thousand) LFS data: 2000-2005

Table 3: Gender of the occupation groups (England)

Occupation Group	Gender								
	Ma	les	Fem	ales	To	tal			
	%	Ν	%	N	%	N			
1. Social Care Workers:									
Social workers	22	15	78	53	100	68			
Youth and comm. Workers	29	19	71	48	100	68			
Housing and welfare officers	25	26	75	79	100	105			
Houseparents and residential wardens	15	4	85	24	100	28			
Care assistants/home carers	11	52	89	411	100	463			
Total	16	117	84	615	100	732			
2. Childcare Workers:									
Nursery nurses	1	1	99	127	100	128			
Childminders and related occupations	2	2	98	99	100	101			
Playgroup workers	6	3	94	47	100	50			
Total	2	6	98	273	100	279			
3. Nursing workers									
Nurses	11	41	89	337	100	379			
Midwives	*	<1	98	31	100	31			
Nursing auxiliaries/assistants	14	25	86	151	100	176			
Total	11	67	89	519	100	586			
4. Education workers:									
Primary/nursery ed. Teachers	15	45	85	254	100	299			
Secondary ed. teachers	45	139	55	169	100	308			
Special ed. Teachers	17	10	83	50	100	60			
Teaching Professionals	32	35	68	74	100	109			
Educational Assistants	6	18	94	263	100	281			
School mid-day assistants	1	1	99	83	100	84			
Total	22	247	78	737	100	1,141			
5. High % female jobs:									
Total	11	189	89	1,593	100	1,782			
6. All Women workers:									
Total	N/A	N/A	100	10,797	100	10,797			

Table 4: Ethnic composition of the occupation groups (England)

Occupation Group							Eth	nicity						
	W	hite	Mi	xed	Asia	in or	Blac	ck or	Chir	nese	Other	ethnic	Т	otal
					Asian	British	Black	British			gro	oup		
	%	N	%	N	%	Ν	%	N	%	N	%	N	%	Ν
1. Social Care Workers:														
Social workers	86	58	1	1	3	2	8	5	*	<1	2	1	100	67
Youth and comm. Workers	90	60	1	1	4	3	4	3	*	<1	*	<1	100	67
Housing and welfare officers	90	94	1	1	2	2	5	5	*	<1	1	1	100	105
Houseparents and residential wardens	96	26	0	0	*	<1	3	1	0	0	1	<1	100	28
Care assistants/home carers	91	415	1	3	1	8	6	25	*	<1	1	5	100	457
Total	90	654	1	6	2	15	5	39	*	<1	1	8	100	724
2. Childcare Workers:														
Nursery nurses	95	121	*	<1	3	3	1	2	*	<1	*	<1	100	127
Childminders and related occupations	95	95	*	<1	2	2	1	1	*	<1	1	1	100	98
Playgroup workers	95	48	1	<1	1	<1	2	1	*	<1	*	<1	100	50
Total	95	263	1	1	2	6	1	4	*	<1	1	1	100	277
3. Nursing workers														
Nurses	86	321	1	<1	4	17	6	21	*	1	3	11	100	374
Midwives	90	27	*	<1	1	<1	6	2	1	<1	1	<1	100	31
Nursing auxiliaries/assistants	90	156	*	3	3	5	4	7	*	1	2	3	100	172
Total	87	51	*	4	4	23	5	30	1	3	2	14	100	578
4. Education workers:														
Primary/nursery ed. Teachers	96	286	1	2	1	4	1	3	*	<1	*	1	100	296
Secondary ed. teachers	95	291	*	1	2	7	1	4	*	<1	1	2	100	305
Special ed. Teachers	96	58	1	<1	1	<1	1	<1	0	0	1	<1	100	60
Teaching Professionals	92	99	*	<1	3	4	1	1	*	<1	2	2	100	108
Educational Assistants	95	264	*	1	3	8	1	4	*	<1	*	1	100	279
School mid-day assistants	95	79	*	<1	3	3	*	<1	*	<1	*	<1	100	83
Total	95	1,077	1	6	2	27	1	13	*	1	1	8	100	1,133
5. High % female jobs:														
Total	94	165	1	12	3	52	2	30	*	5	1	3	100	1,759
6. All Women workers:														
Total	93	9,910	1	71	3	32	2	229	*	39	1	90	100	10,662

Occupation Group		(Co-res	ident chi	ldren	
		No		/es	Т	otal
	%	N	%	N	%	Ν
1. Social Care Workers:						
Social workers	59	40	41	28	100	68
Youth and comm. Workers	59	40	41	27	100	66
Housing and welfare officers	59	61	41	43	100	104
Houseparents and residential						
wardens	64	18	36	10	100	28
Care assistants/home carers	60	277	40	183	100	460
Total	60	439	40	291	100	727
2. Childcare Workers:						
Nursery nurses	60	73	43	55	100	128
Childminders and related						
occupations	50	51	50	50	100	101
Playgroup workers	34	17	66	33	100	51
Total	50	141	50	139	100	280
3. Nursing workers						
Nurses	52	195	48	182	100	376
Midwives	42	13	58	18	100	31
Nursing auxiliaries/assistants	59	104	41	72	100	175
Total	53	311	47	271	100	583
4. Education workers:						
Primary/nursery ed. Teachers	60	178	40	121	100	299
Secondary ed. teachers	60	184	40	122	100	305
Special ed. Teachers	55	33	45	27	100	60
Teaching Professionals	64	70	36	39	100	108
Educational Assistants	35	99	65	181	100	281
School mid-day assistants	36	30	64	54	100	84
Total	52	594	48	543	100	1,137
5. High % female jobs:						
Total	66	1,172	34	607	100	1,779
6. All Women workers:						
Total	62	6,682	38	4,087	100	10,769

Table 5: Proportion of occupation groups co-residing with children (England)

Table 6: Marital Status of the occupation groups (England)

Occupation Group						Marita	al status					
	Mar	ried/	Sin	igle	Wido	owed	Divo	rced	Sepa	rated	Т	otal
	Liv	ring										
	toge	ether										
	%	N	%	N	%	N	%	N	%	N	%	N
1. Social Care Workers:												
Social workers	51	35	30	20	1	1	14	10	4	2	100	68
Youth and comm. Workers	45	30	35	24	2	1	15	10	3	2	100	68
Housing and welfare officers	51	54	29	31	2	2	13	14	4	5	100	105
Houseparents /residential wardens	57	16	19	5	3	1	16	4	4	1	100	28
Care assistants/home carers	51	235	28	132	3	15	13	58	5	23	100	463
Total	51	370	29	212	3	20	13	97	5	33	100	732
2. Childcare Workers:												
Nursery nurses	45	57	47	60	1	1	4	5	3	4	100	128
Childminders and related occs	54	55	34	34	1	1	8	8	3	3	100	101
Playgroup workers	68	34	24	12	*	<1	7	3	2	1	100	51
Total	52	146	38	107	1	2	6	16	3	8	100	280
3. Nursing workers												
Nurses	60	229	24	89	2	9	10	37	4	15	100	379
Midwives	71	22	17	5	2	<1	7	2	3	1	100	31
Nursing assistants/Auxiliaries	56	99	25	43	2	4	12	21	4	8	100	176
Total	60	349	24	138	2	14	10	60	4	24	100	586
4. Education workers:												
Primary/nursery ed. Teachers	66	197	24	71	1	2	7	21	3	7	100	299
Secondary ed. teachers	63	195	28	85	1	2	6	19	2	6	100	308
Special ed. Teachers	71	43	15	9	2	1	9	6	3	2	100	60
Teaching Professionals	62	68	23	25	2	2	10	11	3	3	100	109
Educational Assistants	69	194	17	48	2	4	9	24	4	10	100	281
School mid-day assistants	76	63	11	9	4	4	6	5	3	2	100	84
Total	67	760	22	247	1	1	8	86	3	31	100	1,141
5. High % female jobs:												
Total	<u>5</u> 3	947	34	598	2	29	9	159	3	48	100	<u>17</u> 8
6. All Women workers:												
Total	53	5,734	32	3,464	2	222	10	1,034	3	343	100	10,797

Table 7: Highest Qualification of the occupation groups (England)

Occupation Group							High	est Qual	ification	level				
	De	egree	Abo	ove A	A le	vels	01	evels	Ot	her	No quali	fications	To	tal
			le	vels					qualifi	cations				
	%	N	%	N	%	N	%	N	%	Ν	%	N	%	Ν
1. Social Care Workers:														
Social workers	50	34	27	19	9	6	6	4	6	4	1	1	100	68
Youth and comm. Workers	34	23	20	14	20	13	13	9	11	8	2	1	100	67
Housing and welfare officers	32	34	21	22	19	20	17	17	8	9	3	3	100	105
Houseparents/residential wardens	10	3	29	8	18	5	13	4	19	5	10	3	100	28
Care assistants/home carers	4	19	14	65	28	13	17	78	22	101	15	70	100	460
Total	16	113	18	128	23	17	15	112	18	128	11	77	100	729
2. Childcare Workers:														
Nursery nurses	3	3	32	41	26	33	26	33	11	13	3	3	100	128
Childminders and related occs	3	3	16	16	18	18	27	27	26	26	9	9	100	100
Playgroup workers	11	6	22	11	20	10	27	14	14	7	6	3	100	51
Total	5	12	25	68	22	61	26	73	17	47	6	15	100	278
3. Nursing workers														
Nurses	19	70	74	278	2	8	2	6	4	14	*	1	100	378
Midwives	31	9	67	21	0	0	*	<1	2	<1	*	<1	100	31
Nursing auxiliaries/assistants	5	9	27	48	26	46	17	29	15	25	10	18	100	176
Total	15	89	59	347	9	54	6	35	7	4	3	19	100	585
4. Education workers:														
Primary/nursery ed. Teachers	71	212	25	75	1	3	1	2	2	6	*	<1	100	299
Secondary ed. teachers	86	265	11	35	1	3	*	<1	1	4	0	0	100	307
Special ed. Teachers	60	36	31	19	3	2	3	2	2	1	*	<1	100	60
Teaching Professionals	57	62	19	21	8	9	6	7	7	8	1	1	100	108
Educational Assistants	13	36	19	54	25	69	25	7	12	35	6	16	100	280
School mid-day assistants	1	1	5	4	11	9	24	20	25	21	35	29	100	84
Total	54	612	18	207	8	95	9	102	7	75	4	47	100	1,139
5. High % female jobs:														
Total	7	13	10	176	26	461	32	566	15	271	9	164	100	177
6. All Women workers:														
Total	19	2,045	14	1,527	20	2,092	23	2,461	13	1,403	11	1,213	100	10,741

Table 8: NVQ level of highest qualification (England)

Occupation Group							NV	'Q level						
	NV	Q5	NV	Q4	NV	Q3	NV	'Q2	NV	Q1	N۷	′Q0	-	Fotal
	%	Ν	%	Ν	%	Ν	%	N	%	Ν	%	N	%	Ν
1. Social Care Workers:														
Social workers	50	34	23	16	8	6	7	5	10	6	1	1	100	68
Youth and comm. Workers	34	23	11	8	20	13	14	9	19	13	2	1	100	67
Housing and welfare officers	32	34	15	16	18	19	14	15	17	18	3	3	100	105
Houseparents and residential														
wardens	10	3	18	5	21	6	14	4	27	7	10	3	100	28
Care assistants/home carers	4	19	6	26	17	78	24	111	34	155	15	69	100	460
Total	16	113	10	71	17	122	20	144	28	201	11	77	100	728
2. Childcare Workers:														
Nursery nurses	3	3	18	24	29	37	23	29	25	32	3	3	100	128
Childminders and related														
occupations	3	3	9	9	17	17	20	20	41	41	9	9	100	100
Playgroup workers	11	6	9	4	24	12	22	11	29	14	6	3	100	50
Total	5	12	13	37	24	66	22	60	31	87	6	15	100	278
3. Nursing workers														
Nurses	31	9	67	21	*	<1	0	0	2	1	*	1	100	31
Midwives	5	9	15	27	21	37	22	39	26	45	11	18	100	175
Nursing auxiliaries/assistants	19	70	72	273	3	10	2	7	5	17	*	<1	100	378
Total	15	89	55	320	8	47	8	46	11	62	3	19	100	584
4. Education workers:														
Primary/nursery ed. Teachers	71	212	25	74	1	3	1	2	2	7	*	<1	100	299
Secondary ed. teachers	86	265	11	35	1	2	*	1	1	4	0	0	100	307
Special ed. Teachers	60	36	30	18	4	3	2	1	3	2	*	<1	100	60
Teaching Professionals	57	62	17	19	8	8	6	6	10	11	1	1	100	108
Educational Assistants	13	36	12	34	21	58	23	65	25	71	6	16	100	280
School mid-day assistants	1	<1	2	2	9	7	12	10	41	34	35	29	100	84
Total	54	612	16	182	7	81	8	86	11	130	4	47	100	1,139
5. High % female jobs:														
Total	7	13	5	9	21	369	25	442	32	567	9	164	100	1,767
6. All Women workers:														
Total	19	205	10	1,076	16	1,680	19	2,053	25	2,668	11	1,213	100	10,735

Table 9: Proportions that have taken up work related training in the past 3 months (England)

Occupation Group	W	ork Rela	ted Traii	ning in p	ast 3 mc	onths
	Y	es	N	lo	Т	otal
	%	N	%	N	%	N
1. Social Care Workers:						
Social workers	59	40	41	28	100	68
Youth and comm. Workers	56	38	44	29	100	67
Housing and welfare officers	51	53	50	52	100	105
Houseparents and residential wardens	50	14	50	14	100	28
Care assistants/home carers	46	212	54	249	100	460
Total	49	357	51	372	100	729
2. Childcare Workers:						
Nursery nurses	46	58	54	70	100	128
Childminders and related occupations	26	26	74	73	100	99
Playgroup workers	51	25	49	25	100	50
Total	40	109	60	167	100	277
3. Nursing workers						
Nurses	64	243	36	135	100	377
Midwives	64	20	36	11	100	31
Nursing auxiliaries/assistants	48	84	52	92	100	176
Total	59	346	41	238	100	584
4. Education workers:						
Primary/nursery ed. Teachers	64	191	36	107	100	298
Secondary ed. teachers	55	167	46	140	100	307
Special ed. Teachers	63	38	37	22	100	60
Teaching Professionals	34	36	66	71	100	108
Educational Assistants	48	134	52	146	100	280
School mid-day assistants	15	12	85	71	100	83
Total	51	580	49	557	100	1,137
5. High % female jobs:						
Total	22	389	78	137	100	176
6. All Women workers:						
Total	32	3,434	68	7,211	100	10,646

Table 10: Proportion of occupation groups with a work limiting disability (England)

Occupation Group				Disa	bility			
	Work L	imiting	Ot	her	No dis	ability	Tc	otal
	disabil	ity only	type of disability					
	%	N	%	N	%	N	%	N
1. Social Care Workers:								
Social workers	4	3	14	9	82	56	100	68
Youth and comm. Workers	4	3	13	8	83	56	100	67
Housing and welfare officers	3	3	12	12	85	89	100	105
Houseparents and residential wardens	4	1	16	4	80	22	100	28
Care assistants/home carers	4	18	13	59	83	386	100	463
Total	4	28	13	94	83	610	100	732
2. Childcare Workers:								
Nursery nurses	3	5	8	10	88	113	100	128
Childminders and related occupations	2	5	9	9	88	89	100	101
Playgroup workers	4	3	10	5	86	43	100	51
Total	3	14	9	25	88	246	100	230
3. Nursing workers								
Nurses	3	11	11	40	87	328	100	379
Midwives	2	1	9	2	89	27	100	31
Nursing auxiliaries/assistants	3	5	12	20	85	150	100	176
Total	3	16	11	64	86	506	100	586
4. Education workers:								
Primary/nursery ed. Teachers	2	6	8	25	90	269	100	299
Secondary ed. teachers	2	7	7	23	90	276	100	308
Special ed. Teachers	4	2	8	4	88	53	100	60
Teaching Professionals	3	3	10	11	87	95	100	109
Educational Assistants	3	8	11	30	87	243	100	281
School mid-day assistants	5	4	13	10	82	69	100	84
Total	3	31	9	105	88	1,006	100	1,141
5. High % female jobs:								
Total	3	51	11	191	86	1,539	100	1,782
6. All Women workers:								
Total	3	302	10	1,100	87	9,395	100	10,797

Table 11: Annual pay, hours worked per week, hourly pay, and months continuously employed for the occupation groups (England)

Occupation Group	Mean gross annual pay	Total usual hours in main job (mean)	Hourly pay	Length of time continuously employed (months)
1. Social Care Workers:				
Social workers	£21,866	36	£12.35	97
Youth and comm. Workers	£15,692	32	£9.71	69
Housing and welfare officers	£16,632	33	£10.16	83
Houseparents and residential wardens	£13,678	45	£6.96	99
Care assistants/home carers	£9,424	31	£6.02	64
Total	£12,338	32	£7.59	71
2. Childcare Workers:				
Nursery nurses	£9,197	31	£5.95	62
Childminders and related occupations	£7,824	32	£5.00	61
Playgroup workers	£5,544	19	£5.72	67
Total	£7,963	29	£5.72	63
3. Nursing workers				
Nurses	£18,622	35	£10.66	109
Midwives	£19,906	33	£12.48	150
Nursing auxiliaries/assistants	£11,728	32	£7.07	97
Total	£16,630	34	£9.69	108
4. Education workers:				
Primary/nursery ed. Teachers	£24,562	43	£14.41	113
Secondary ed. teachers	£28,511	45	£15.63	118
Special ed. Teachers	£21,533	35	£14.95	114
Teaching Professionals	£15,716	24	£14.27	100
Educational Assistants	£8,343	25	£6.52	65
School mid-day assistants	£2,124	8	£5.48	77
Total	£19,127	37	£12.00	99
5. High % female jobs:				
Total	£9,302	28	£6.47	68
6. All Women workers:				
Total	£13,893	31	£8.63	82

Table 12: Proportions working on a permanent or temporarily basis (England)

Occupation Group			Perm	/temp		
	Perm	anent	Temp	orary	To	otal
	%	Ν	%	N	%	N
1. Social Care Workers:						
Social workers	90	60	10	6	100	67
Youth and comm. Workers	82	53	18	12	100	65
Housing and welfare officers	89	90	11	11	100	101
Houseparents and residential wardens	97	22	3	1	100	23
Care assistants/home carers	94	462	6	27	100	453
Total	92	652	8	56	100	708
2. Childcare Workers:						
Nursery nurses	93	115	7	9	100	124
Childminders and related occupations	81	36	19	9	100	45
Playgroup workers	93	45	7	3	100	48
Total	90	196	10	21	100	217
3. Nursing workers						
Nurses	95	357	5	19	100	356
Midwives	97	30	3	1	100	31
Nursing auxiliaries/assistants	94	164	6	10	100	175
Total	95	551	5	30	100	581
4. Education workers:						
Primary/nursery ed. Teachers	85	250	15	45	100	296
Secondary ed. teachers	90	275	10	30	100	305
Special ed. Teachers	87	51	13	7	100	59
Teaching Professionals	76	46	24	14	100	60
Educational Assistants	76	211	24	67	100	278
School mid-day assistants	94	78	6	5	100	84
Total	84	911	16	170	100	1,082
5. High % female jobs:						
Total	94	154	6	98	100	1,640
6. All Women workers:						
Total	93	9,258	7	657	100	9,915

Table 13: Proportions working full-time or part-time (England)

Occupation Group			Work	status		
	Full-	time	Part	time	To	tal
	%	Ν	%	Ν	%	Ν
1. Social Care Workers:						
Social workers	76	52	24	17	100	68
Youth and comm. Workers	64	43	36	25	100	67
Housing and welfare officers	67	71	33	35	100	105
Houseparents and residential wardens	80	22	20	6	100	28
Care assistants/home carers	51	234	49	228	100	462
Total	58	422	42	309	100	732
2. Childcare Workers:						
Nursery nurses	63	80	37	48	100	128
Childminders and related occupations	51	52	49	49	100	101
Playgroup workers	17	8	83	42	100	51
Total	50	140	40	140	100	280
3. Nursing workers						
Nurses	64	242	36	136	100	379
Midwives	54	17	46	14	100	31
Nursing auxiliaries/assistants	54	95	46	81	100	176
Total	60	353	40	232	100	585
4. Education workers:						
Primary/nursery ed. Teachers	75	225	25	74	100	299
Secondary ed. teachers	84	258	16	50	100	308
Special ed. Teachers	61	37	39	24	100	60
Teaching Professionals	41	45	59	64	100	108
Educational Assistants	39	110	61	171	100	281
School mid-day assistants	1	1	99	83	100	84
Total	59	675	41	465	100	1,140
5. High % female jobs:						
Total	53	943	47	838	100	1,781
6. All Women workers:						
Total	56	6,012	44	4,779	100	10,791
Table 14: Proportions working in the non-private and private sectors (England)

Occupation Group	Sector											
	Pr	ivate	Non-	private	T	otal						
	%	Ν	%	Ν	%	Ν						
1. Social Care Workers:												
Social workers	8	5	92	63	100	68						
Youth and comm. Workers	10	6	91	61	100	67						
Housing and welfare officers	14	15	86	90	100	105						
Houseparents and residential wardens	46	12	56	15	100	28						
Care assistants/home carers	57	262	43	198	100	461						
Total	41	301	59	428	100	739						
2. Childcare Workers:												
Nursery nurses	54	69	46	58	100	128						
Childminders and related occupations	88	89	12	12	100	101						
Playgroup workers	44	22	56	28	100	50						
Total	65	180	35	98	100	279						
3. Nursing workers												
Nurses	15	56	85	323	100	378						
Midwives	2	<1	98	30	100	31						
Nursing auxiliaries/assistants	14	24	86	151	100	176						
Total	14	81	86	504	100	585						
4. Education workers:												
Primary/nursery ed. Teachers	8	24	92	274	100	298						
Secondary ed. teachers	9	27	91	281	100	308						
Special ed. Teachers	10	6	90	542	100	60						
Teaching Professionals	58	63	42	45	100	60						
Educational Assistants	9	25	91	255	100	280						
School mid-day assistants	4	3	96	81	100	84						
Total	13	149	87	990	100	1,139						
5. High % female jobs:												
Total	75	1,310	25	449	100	1,759						
6. All Women workers:												
Total	62	6,691	38	4,026	100	10,717						

Table 15: Type of non-private industry (England)

Occupation Group	Proportion in Non-private Sector: breakdown by type of organisation																	
	Pu	blic	Natior	alised	Ce	entral	Loca	l gov.	Uni	versity	He	alth	Ch	narity,	Otl	ner	Т	otal
	comp	bany,	indust	try etc	Gov	∕, Civil	or co	uncil	(etc.	auth	nority	vol	untary	kine	d of		
	pl	С.			Sei	rvice,	(in	cl.			or N	NHS	or	g etc.	or	g.		
					ar	med	police	e etc)			tru	ust						
					fo	rces												
	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N
1. Social Care Workers:																		
Social workers	*	<1	0	0	3	1	80	19	*	<1	5	1	10	2	*	<1	100	24
Youth and comm. Workers	0	0	0	0	7	1	51	11	1	<1	3	<1	37	8	1	<1	100	22
Housing and welfare officers	1	<1	*	<1	4	1	50	15	4	1	7	2	33	10	2	<1	100	31
Houseparents/resid wardens	0	0	0	0	0	0	62	4	1	<1	0	0	33	2	4	<1	100	6
Care assistants/home carers	*	<1	0	0	1	1	61	49	0	0	17	14	20	16	1	<1	100	80
Total	*	1	*	<1	2	4	60	98	1	1	11	18	24	39	1	2	100	163
2. Childcare Workers:																		
Nursery nurses	*	<1	*	<1	1	<1	74	17	5	1	6	1	11	2	2	1	100	23
Childminders and related occs	0	0	0	0	0	0	53	2	2	<1	0	0	6	<1	40	1	100	4
Playgroup workers	0	0	0	0	1	<1	42	5	1	<1	2	<1	46	6	7	1	100	12
Total	*	<1	*	<1	1	<1	62	24	3	1	4	2	21	8	8	3	100	40
3. Nursing workers																		
Nurses	*	<1	*	<1	1	1	1	2	*	<1	93	116	3	4	*	<1	100	125
Midwives	0	0	0	0	0	0	2	<1	1	<1	97	11	0	0	0	0	100	12
Nursing auxiliaries/assistants	1	<1	1	1	1	1	3	2	0	0	91	56	3	2	*	<1	100	62
Total	*	<1	1	1	1	2	2	4	*	<1	93	184	3	6	*	<1	100	199
4. Education workers:																		
Primary/nursery ed. teachers	*	<1	0	0	*	<1	95	99	1	1	0	0	2	2	1	1	100	103
Secondary ed. teachers	0	0	0	0	*	<1	90	94	5	5	0	0	4	4	*	<1	100	105
Special ed. Teachers	0	0	0	0	1	<1	87	17	3	<1	*	<1	10	2	0	0	100	19
Teaching Professionals	0	0	0	0	1	<1	62	96	11	2	1	<1	19	3	1	<1	100	16
Educational Assistants	0	0	*	<1	*	<1	93	85	2	2	*	<1	3	3	1	<1	100	91
School mid-day assistants	0	0	0	0	0	0	98	32	2	<1	0	0	*	<1	0	0	100	33
Total	*	<1	*	<1	*	1	93	336	3	11	*	<1	4	14	1	1	100	367
5. High % female jobs:																		
Total	10	17	1	2	7	13	29	51	7	12	32	56	10	17	4	6	100	175
6. All Women workers:																		
Total	6	93	1	21	9	134	44	689	5	81	24	373	8	130	2	39	100	1,560

Table 16: Hourly pay in the non-private and private sectors (England)

Non-private Sector		Private Sector	
Occupation Group	Hourly pay	Occupation Group	Hourly pay
1. Social Care Workers:		1. Social Care Workers:	
Social workers	£11.55	Social workers	£11.56
Youth and comm. Workers	£9.16	Youth and comm. Workers	£8.71
Housing and welfare officers	£9.82	Housing and welfare officers	£8.65
Houseparents and residential wardens	£6.62	Houseparents and residential wardens	£6.92
Care assistants/home carers	£6.88	Care assistants/home carers	£5.27
Total	£8.54	Total	£5.61
2. Childcare Workers:		2. Childcare Workers:	
Nursery nurses	£6.72	Nursery nurses	£4.85
Childminders and related occupations	£4.92	Childminders and related occupations	£4.95
Playgroup workers	£5.79	Playgroup workers	£4.86
Total	£6.24	Total	£4.88
3. Nursing workers		3. Nursing workers	
Nurses	£10.48	Nurses	£9.60
Midwives	£12.05	Midwives	£14.39
Nursing auxiliaries/assistants	£7.15	Nursing auxiliaries/assistants	£5.99
Total	£9.56	Total	£8.69
4. Education workers:		4. Education workers:	
Primary/nursery ed. Teachers	£11.25	Primary/nursery ed. Teachers	£10.59
Secondary ed. teachers	£12.42	Secondary ed. teachers	£12.88
Special ed. Teachers	£12.31	Special ed. teachers	£9.10
Teaching Professionals	£13.22	Teaching Professionals	£11.89
Educational Assistants	£6.24	Educational Assistants	£5.79
School mid-day assistants	£5.50	School mid-day assistants	£4.36
Total	£10.15	Total	£9.91
5. High % female jobs:		5. High % female jobs:	
Total	£7.47	Total	£7.07
6. All Women workers:		6. All Women workers:	
Total	£8.99	Total	£7.59

Table 17: The job titles associated with the five occupation groups examined in the study (England)

Occupation	Individual occupations within the	Related job titles
1. Social Care Workers	Social workers	Childcare officer, child protection officer, social worker
	Youth and comm. Workers	Community worker, day centre officer, youth leader
	Housing and welfare officers	Advice worker, care officer, counsellor (welfare services), education welfare officer, housing officer, welfare officer
	Houseparents and residential wardens	Resident warden, houseparent
		Care assistant, home care assistant, night care
	Care assistants/home carers	assistant, home help, residential social worker
2. Childcare Workers	Nursery nurses	Crèche assistant, nursery assistant, nursery nurse
	Childminders and related occupations	Au pair, child minder, children's nanny
	Playgroup workers	Play leader, playgroup assistant, playgroup leader
3. Nursing Workers	Nurses	Health visitor, nurse, staff nurse, staff enrolled nurse, state registered nurse, ward sister
	Midwives	Midwife, midwife sister
	Nursing auxiliaries/assistants	Assistant nurse, nursing assistant, nursing auxiliary, occupational therapy helper, operating department assistant, phlebotomist, physiotherapy helper, ward assistant, ward orderly
4. Education Workers	Primary/nursery ed. Teachers	Head primary, middle school teacher, infant teacher, junior school teacher, nursery school teacher, primary school teacher
	Secondary ed. teachers	Head secondary school teacher, secondary school teacher, teacher of secondary schools
	Special ed. Teachers	Head teacher of special needs school, special needs teacher, teacher of special schools
	Teaching professionals	Nursery manager, owner of children's day nursery, private tutors, teachers of English as a foreign language, examiners

Educational Assistants	Classroom helper, education care officer, non- teaching assistant, school helper, special needs helper
School mid-day assistants	Dinner supervisor, lunchtime supervisor, mid-day school assistant, supervisory assistant (school meals)

Table 21: Age profile of the occupation groups (Scotland)

Occupation Group					Age	groups					Mean
	A	ge	Ag	je	A	ge	Ag	ge	Тс	tal	Age
	Unde	er 25	25-34	years 35-49 year			50+ y	/ears			
	ye	ars									
	%	Ν	%	Ν	%	Ν	%	Ν	%	Ν	
Social Care workers	11	11	18	18	44	42	27	26	100	97	41
Childcare workers	26	7	15	4	41	10	18	4	100	25	36
Nursing workers	6	5	19	16	51	43	25	21	100	84	42
Education workers	4	4	15	15	45	45	36	36	100	101	44
High % female jobs	26	44	17	30	34	56	23	39	100	169	37
All Women workers	17	193	20	228	40	447	23	263	100	1,130	39

Table 22: Gender of the occupation groups (Scotland)

Occupation Group	Gender										
	Mal	es	Fei	nales	T	otal					
	%	N	%	Ν	%	N					
Social Care workers	19	18	81	79	100	97					
Childcare workers	2	<1	98	25	100	25					
Nursing workers	11	9	89	75	100	84					
Education workers	22	22	78	78	100	101					
High % female jobs	11	19	88	150	100	169					
All Women workers	N/A	N/A	100	1,130	100	1,130					

Table 23: Ethnic composition of the occupation groups (Scotland)

Occupation Group							Eth	nicity						
	Wł	nite	Mixe	ed	Asia	n or	Black	or	or Chinese		Other	ethnic	Total	
					As	ian	Blac	ck			gro	oup		
			N 0/ N				Britis							
	%	N	%	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%	Ν
Social Care workers	99	94	*	<1	*	<1	*	<1	*	<1	*	<1	100	96
Childcare workers	99	25	*	<1	*	<1	*	<1	0	0	*	<1	100	25
Nursing workers	98	82	*	<1	*	1	*	<1	*	<1	*	<1	100	84
Education workers	99	99	*	<1	*	<1	*	<1	0	0	*	<1	100	100
High % female jobs	99	165	*	<1	1	1	*	<1	*	<1	*	<1	100	167
All Women workers	99	1,101	*	5	1	17	*	3	*	4	*	5	100	2,341

Table 24: Proportion of occupation groups co-residing with children (Scotland)

Occupation Group		(Co-res	ident chi	ldren	
	l	No	۲ ا	′es	Т	otal
	%	Ν	%	Ν	%	Ν
Social Care workers	59	57	41	39	100	96
Childcare workers	48	12	52	13	100	25
Nursing workers	56	47	44	37	100	84
Education workers	53	53	47	48	100	101
High % female jobs	67	113	33	56	100	169
All Women workers	62	698	38	430	100	1,129

Table 25: Marital Status of the occupation groups (Scotland)

Occupation Group						Marita	al status					
	Marı Liv toge	ried/ ing ther	Sin	gle	Wido	owed	Divo	rced	Sepa	rated	Total	
	%	Ν	%	Ν	%	N	%	Ν	%	Ν	%	Ν
Social Care workers	51	49	29	28	3	3	11	10	6	6	100	97
Childcare workers	54	14	34	8	1	<1	6	1	4	1	100	25
Nursing workers	63	53	21	17	3	2	8	7	5	4	100	84
Education workers	69	70	18	18	2	2	6	6	4	4	100	101
High % female jobs	51	87	38	64	1	2	6	10	3	6	100	169
All Women workers	52	594	33	368	2	27	8	87	5	54	100	1,130

Table 26: Highest Qualification of the occupation groups (Scotland)

Occupation Group						High	est Quali	ification I	_evel					
	Deg	gree	Abo	ve A	A le	vels	O levels		Other		No		To	tal
			lev	levels						qualifications		qualifications		
	%	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%	Ν
Social Care workers	18	17	26	25	21	20	12	11	14	14	10	9	100	97
Childcare workers	7	2	38	9	22	5	18	4	9	2	6	2	100	25
Nursing workers	18	15	56	47	8	6	5	4	6	5	6	5	100	84
Education workers	60	61	25	25	6	6	4	4	1	2	2	2	100	101
High % female jobs	7	12	17	28	33	56	24	41	10	17	9	15	100	168
All Women workers	18	205	20	221	23	255	17	192	9	106	13	147	100	1,126

Table 27: NVQ level of highest qualification (Scotland)

Occupation Group							NVQ	level						
	NV	Q5	NV	Q4	NV	Q3	NV	Q2	NVQ1		NVQ0		Total	
	%	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%	Ν
Social Care workers	18	17	20	20	16	16	14	13	22	21	10	9	100	97
Childcare workers	7	2	34	8	17	4	16	4	20	5	6	2	100	25
Nursing workers	18	15	54	45	6	5	5	4	10	8	6	5	100	84
Education workers	60	61	24	24	6	6	3	3	5	5	2	2	100	101
High % female jobs	7	12	13	22	25	42	22	37	24	40	9	15	100	168
All Women workers	18	205	17	194	17	189	15	173	19	217	13	147	100	1,126

Table 28: Proportions that have taken up work-related training in the past 3 months (Scotland)

Occupation Group	Work-related Training in past 3 months						
	Ye	es	N	lo	Total		
	%	Ν	%	N	%	Ν	
Social Care workers	44	43	56	54	100	97	
Childcare workers	39	10	61	15	100	25	
Nursing workers	51	43	49	41	100	84	
Education workers	51	51	49	49	100	100	
High % female jobs	22	36	78	129	100	165	
All Women workers	31	346	69	765	100	1,112	

Table 29: Proportion of occupation groups with a work-limiting disability (Scotland)

Occupation Group	Disability							
	Wo	ork-	Other		No d	isability	Total	
	Limi	ting	type of					
	disabili	disability only		disability				
	%	N	%	N	%	N	%	N
Social Care workers	2	2	13	12	85	83	100	97
Childcare workers	3	<1	9	2	88	22	100	25
Nursing workers	3	2	9	8	88	74	100	84
Education workers	2	4	10	9	88	88	100	101
High % female jobs	2	4	9	15	89	150	100	169
All Women workers	2	26	10	113	88	991	100	1,130

Table 30: Annual pay, hours worked per week, hourly pay, and months continuously employed for the occupation groups (Scotland)

Occupation Group	Mean gross annual	Total usual	Hourly pay	Length of time
	pay	hours in main		continuously employed
		job (mean)		(months)
Social Care workers	£12,868	32 (SD=12.02)	£8.09	77 (SD=83.14)
Childcare workers	£8,373	30 (SD=12.02)	£5.64	66 (SD=82.25)
Nursing workers	£16,092	33 (SD=10.28)	£9.99	137 (SD=112.13)
Education workers	£22,831	36 (SD=13.37)	£14.38	140 (SD=119.99)
High % female jobs	£10,043	29 (SD=11.59)	£6.69	82 (SD=92.30)
All Women workers	£13,051	31 (SD=12.58)	£8.20	91 (SD=95.11)

Table 31: Proportions working on a permanent or temporarily basis (Scotland)

Occupation Group	Perm/temp							
	Perm	anent	Tem	porary	Total			
	%	Ν	%	Ν	%	Ν		
Social Care workers	90	86	10	9	100	95		
Childcare workers	91	17	9	2	100	19		
Nursing workers	95	80	5	4	100	84		
Education workers	85	83	15	15	100	98		
High % female jobs	93	146	7	12	100	158		
All Women workers	93	988	7	74	100	1,062		

Table 32: Proportions working full-time or part-time (Scotland)

Occupation Group	Work status							
	Full-	time	Par	t-time	Total			
	%	Ν	%	Ν	%	Ν		
Social Care workers	62	60	38	37	100	97		
Childcare workers	58	14	42	106	100	25		
Nursing workers	57	48	42	36	100	84		
Education workers	72	72	28	28	100	101		
High % female jobs	54	92	46	77	100	169		
All Women workers	58	651	42	478	100	1,129		

Table 33: Proportions working in the non-private and private sectors (Scotland)

Occupation Group	Sector ²⁰							
	Pr	ivate	Non-	private	Total			
	%	Ν	%	N	%	Ν		
Social Care workers	27	26	73	71	100	97		
Childcare workers	56	14	44	11	100	25		
Nursing workers	12	11	88	74	100	84		
Education workers	9	9	91	92	100	101		
High % female jobs	72	120	28	48	100	168		
All Women workers	57	642	43	483	100	1,125		

N=thousands (rounded to nearest thousand)

*=< than 1%

²⁰ In the LFS, the "private" sector is defined as 'A private firm or business or a limited company' and the "public" sector is defined as everything else. See Technical appendix for a fuller description of this variable, and how it is defined within the LFS. 80

Table 34: Type of non-private industry (Scotland)

Occupation Group	Proportion in Non-private Sector: breakdown by type of organisation																					
	Pu	Public Nationalise		Cer	Central Loc		Local gov. University		Health		Charity,		Other kind		Total							
	company,		company,		company,		d ind	ustry	Gov,	Civil	or co	uncil	et	c.	autho	rity or	volur	ntary	of c	org.		
	pl	С.	et	tc	Serv	vice,	(incl.	police			NHS	trust	org	etc.								
					arm	ned	et	c)														
					for	ces																
	%	Ν	%	Ν	%	N	%	Ν	%	N	%	Ν	%	Ν	%	Ν	%	Ν				
Social Care workers	*	<1	0	0	1	<1	66	15	0	0	5	1	25	6	2	<1	100	23				
Childcare workers	0	0	0	0	0	0	74	3	2	<1	0	0	14	1	10	<1	100	4				
Nursing workers	0	0	0	0	0	0	4	1	1	<1	94	28	1	<1	1	<1	100	29				
Education workers	0	0	0	0	*	<1	96	33	1	<1	0	0	2	1	*	<1	100	34				
High % female jobs	7	1	1	<1	9	2	27	5	9	2	32	6	12	2	2	<1	100	19				
All Women workers	4	8	1	1	8	14	45	83	6	11	26	49	8	14	2	5	100	187				

Table 35: Hourly pay in the non-private and private sectors (Scotland)

Non-private Sector		Private Sector				
Occupation Group	Hourly pay	Occupation Group	Hourly pay			
Social Care workers	£8.56	Social Care workers	£5.73			
Childcare workers	£5.87	Childcare workers	£4.82			
Nursing workers	£9.78	Nursing workers	£9.71			
Education workers	£12.17	Education workers	£10.65			
High % female jobs	£6.99	High % female jobs				
			£6.43			
All Women workers	£8.94	All Women workers	£6.84			

Table 36: Changes to SOC descriptions for selected occupations between SOC 1990 and SOC 2000

SOC 1990	SOC 1990 Description	SOC 2000	SOC 2000 Description
Code		Code	
293	Social workers/probation officers: Social workers and probation officers provide information, advice and support for individuals or groups on emotional, financial, health, housing and other social issues and supervise, counsel and help rehabilitate offenders	2442	Social workers: Social workers provide information, advice and support to protect the welfare of vulnerable groups including children, young people, families under stress, people with disabilities, elderly people and people who are mentally or physically ill.
370	<u>Matrons/houseparents</u> : Matrons and houseparents organize and control the work of day or residential nurseries and residential homes for children or the elderly and supervise the care and control of young people in homes, schools or institutions for young offenders.	6114	Houseparents and residential wardens: Houseparents and residential wardens are responsible for the care and supervision of children, young offenders and the elderly within residential homes and nurseries, schools or institutions for young offenders.
371	<u>Welfare, community, youth workers</u> : Welfare, community and youth workers organize and co- ordinate group social activities for youth and community groups, assist the blind, deaf, sick, elderly, physically handicapped and mentally ill with problems relating to their condition, investigate cases of child neglect or ill treatment and perform other welfare tasks not elsewhere classified	3231	Youth and community workers: Youth and community workers provide support to individuals or groups of individuals through a range of activities or services that aim to encourage participation in social, political and community activities.
		3232	Housing and welfare officers: Housing and welfare officers assess and address housing needs of particular localities and individuals, assist blind deaf, sick, elderly, physically handicapped and mentally ill with problems relating to their condition, investigate cases of child neglect or ill treatment and perform other welfare tasks not elsewhere classified.
644	Care Assistants/attendants: Care assistants and attendants attend to the personal needs and comforts of residents in establishments for the elderly and infirm.	6115	Care assistants/home carers: Care assistants and attendants attend to the personal needs and comforts of residents of the elderly and infirm, either within residential establishments or at home.
650	Nursery Nurses: Nursery Nurses care for children in day or residential nurseries, children's homes, maternity units and similar	6121	Nursery Nurses: Nursery Nurses care for children in day or residential nurseries, children's homes, maternity units and similar establishments

	establishments		
659	Other Childcare and related occupations: Workers in this unit group perform a variety of childcare and related occupations not elsewhere classified.	6122	<u>Childminders and related occupations</u> : Childminders and related occupations perform a variety of domestic activities in the day-to-day care of children, and supervise and participate in their play, educational and other activities.
651	Playgroup Leaders: Playgroup leaders supervise play and other activities for pre-school age children	6123	Playgroup Leaders/Assistants: Playgroup leaders/assistants deliver and facilitate play opportunities for children in a range of formal and informal settings including play groups, play schemes, free play locations and after-school activities
340	<u>Nurses:</u> Nurses provide general and/or specialised nursing care for the sick, injured and others in need of such care, assist medical doctors with their tasks, and advise and teach on nursing practice.	3211	<u>Nurses:</u> Nurses provide general and/or specialised nursing care for the sick, injured and others in need of such care, assist medical doctors with their tasks, and advise and teach on nursing practice.
341	Midwives: Midwives deliver, or assist in the delivery of babies, provide antenatal and postnatal care and advise parents on baby care.	3212	Midwives: Midwives deliver, or assist in the delivery of babies, provide antenatal and postnatal care and advise parents on baby care.
640	Assistant nurses, Nursing Auxiliaries: Assistant nurses and nursing auxiliaries assist doctors, nurses and other health professionals by providing nursing care for the sick and injured and others in need of such care.	6111	Nursing auxiliaries and assistants: Nursing auxiliaries and assistants assist doctors, nurses and other health professionals in caring for the sick and injured within hospitals, homes, clinics and the wider community.
234	Primary (And Middle school deemed Primary) Education Teaching Professionals: Primary (and middle school deemed primary) and nursery education teaching professionals plan, organise and provide instruction to children at all levels up to the age of entry into secondary education.	2315	Primary/Nursery Education teachers: Primary (and middle school deemed primary) and nursery education teaching professionals plan, organise and provide instruction to children at all levels up to the age of entry into secondary education.
233	Secondary (And Middle school deemed Secondary) Education Teaching Professionals: Secondary (and middle school deemed secondary) education teaching professionals plan, organise and provide instruction in one or more subjects, including physical education and diversionary activities, within a prescribed curriculum in a secondary or secondary/middle school.	2314	Secondary Education teachers: Secondary (and middle school deemed secondary) education teaching professionals plan, organise and provide instruction in one or more subjects, including physical education and diversionary activities, within a prescribed curriculum in a secondary or secondary/middle school.
235	Special Needs Education Teaching Professionals: Special needs education teaching professionals organise and provide instruction at a variety of different levels to children who are partially blind, deaf, physically or mentally	2316	Special Needs Education Teachers: Special needs education teaching professionals organise and provide instruction at a variety of different levels to children who are partially blind, deaf, physically or mentally handicapped,

	handicapped, epileptic or suffering from speech defects or		epileptic or suffering from speech defects or other learning
	other learning difficulties.		difficulties.
N/A	Did not use before (with 1997-1999 LFS data)	2319	Teaching Professionals:
			Workers in this unit group perform a variety of other education
			and teaching occupations not elsewhere
			classified in MINOR GROUP 231: Teaching Professionals.
652	Educational Assistants:	6124	Educational Assistants:
	Educational assistants assist teachers with, or relieve them		Educational assistants assist teachers with, or relieve them of,
	of, a variety of non-teaching duties.		a variety of non-teaching duties.
N/A	This code did not previously exist	9244	School mid-day assistants:
			Workers in this unit group supervise the activities of school
			children during break and meal times.

<u>NB:</u> The above descriptions are quoted from Volume 1 of the Standard Occupational Classification descriptions: OPCS 1990 and ONS 2000.