

# Kent Academic Repository

## Full text document (pdf)

### Citation for published version

Hussein, Shereen and Moriarty, Jo and Manthorpe, Jill and Huxley, Peter (2008) Diversity and Progression among Students Starting Social Work Qualifying Programmes in England between 1995 and 1998: a quantitative study. *British Journal of Social Work*, 38 (8). pp. 1588-1609. ISSN 0045-3102.

### DOI

<https://doi.org/10.1093/bjsw/bcl378>

### Link to record in KAR

<https://kar.kent.ac.uk/68412/>

### Document Version

Author's Accepted Manuscript

#### Copyright & reuse

Content in the Kent Academic Repository is made available for research purposes. Unless otherwise stated all content is protected by copyright and in the absence of an open licence (eg Creative Commons), permissions for further reuse of content should be sought from the publisher, author or other copyright holder.

#### Versions of research

The version in the Kent Academic Repository may differ from the final published version.

Users are advised to check <http://kar.kent.ac.uk> for the status of the paper. **Users should always cite the published version of record.**

#### Enquiries

For any further enquiries regarding the licence status of this document, please contact:

[researchsupport@kent.ac.uk](mailto:researchsupport@kent.ac.uk)

If you believe this document infringes copyright then please contact the KAR admin team with the take-down information provided at <http://kar.kent.ac.uk/contact.html>

Hussein S., Moriarty J, Manthorpe, J. and Huxley P. (2008) Diversity and progression among students starting social work qualifying programmes in England between 1995 to 1998: a quantitative study. *British Journal of Social Work*. 38 (8): 1588-1609.

## **DIVERSITY AND PROGRESSION AMONG STUDENTS STARTING SOCIAL WORK QUALIFYING PROGRAMMES IN ENGLAND BETWEEN 1995 AND 1998: A QUANTITATIVE STUDY**

Shereen Hussein, Jo Moriarty, Jill Manthorpe and Peter Huxley

Correspondence to Shereen Hussein, BSc, MSc, PhD, Research Fellow, Social Care Work- force Research Unit, King's College London, 5th Floor, Melbourne House, 44-46 Aldwych, London WC2B 4LL, UK. E-mail: shereen.hussein@kcl.ac.uk

Shereen Hussein is a Research Fellow for SCWRU following doctoral studies at the London School of Economics and Masters studies at the London School of Hygiene and Tropical Science. She is a Demographer with a background in statistics and computer science. She is experienced in quantitative research techniques and applied statistics methods in demography and population studies. She is particularly interested in demographic factors affecting social care workforce as well as international variations in handling the global demographic changes. She also has experience in marriage and family dynamics and relationships between cultural diversity and social care needs.

Jo Moriarty is a Research Fellow at the Social Care Workforce Research Unit. She has undertaken a series of studies looking at community care services, with a particular interest in services for older people with dementia and their carers and people from minority ethnic groups.

Jill Manthorpe is Co-Director of SCWRU with a background in university social work and health professional training at pre- and post-qualifying levels. She has undertaken a range of research studies in areas of community care, adult protection, professional training and risk. She has published widely, with recent books on social policy, inquiries, abuse and students' mental health. Her particular interests are in social gerontology and she has undertaken a range of research into older people's services for voluntary groups, local providers and national bodies.

Peter Huxley is a qualified social worker with practice experience in child and adult mental health settings. He also has management

and Board-level experience in adult mental health and social care services. He is Professor of Social Work, Head of the Section of Social Work and Social Care, and Deputy Head of Department in the Health Services Research Department at the Institute of Psychiatry at Kings College, and Director of SCWRU. He recently completed a national survey of the mental health social work workforce in England and Wales which has been published in several papers, including one which compares the provision of ASWs in 1992 and 2002. His current interests include workforce performance (how the work environment, such as team climate and culture, affect user outcomes); the changing workforce (he is conducting a pilot evaluation of Support, Time and Recovery workers); and the development of better- quality data about the social care workforce in all sectors.

Shereen Hussein, Jo Moriarty and Jill Manthorpe are all currently working on the evaluation of the social work degree qualification in England alongside colleagues from Sharpe Research and the Glasgow School of Social Work.

## **Summary**

There has been no large-scale study looking at the proportion of social work students in the UK who achieve the professional qualification, although there is some evidence that different groups experience different rates of progression. This article examines progression rates among students studying for the DipSW in England and analyses the factors that influence whether students achieve an award on time (defined as achieving an award without being referred, deferred, failing or withdrawing). The results show that male students, students from a black and minority ethnic group, and students with a self-reported disability have poorer progression rates. However, contrary to the picture in higher education as a whole, older students and students with previously lower levels of educational attainment do not have poorer progression rates. Social work education has important lessons to share with higher-education colleagues in terms of working with an increasingly diverse student group. However, work is needed to identify students at greater risk of non-progression than others and to develop more effective student support strategies.

**Keywords:** professional training, minority ethnic groups, gender, disability, social work, progression rates, higher education

## **Introduction**

The recruitment and retention of social workers in the United Kingdom (UK) has attracted increased policy attention, most The Hussein et al. (2008)

recruitment and retention of social workers in the UK has attracted increased policy attention, most clearly indicated in the decision to make social work a degree-level qualification (Department of Health, 2001). This coincides with a wider government target of increasing entry to higher education, particularly among under-represented groups (Secretary of State for Education and Skills, 2003). Arguably, social work was one of the earliest professions to engage with issues of discrimination (Ahmad, 1990; Statham, 1994; Dominelli, 2002). Indeed, these concerns, which were subject to ridicule from some quarters in the 1980s, have now entered the political mainstream (McLaughlin, 2005). In this context, examining how theoretical commitments to combat discrimination are reflected in the demographic characteristics of people completing social work programmes provides information on how the profession both addresses the issue of workforce diversity and raises questions about the role of social work education in contributing to this process. Perhaps surprisingly, this has been an under-researched area within social work education until now. However, with the formal investigation into public sector fitness standards (Disability Rights Commission, 2006), it is likely to become increasingly important. Furthermore, the establishment of the Commission for Equality and Human Rights (CEHR) (2006 Equality Act) suggests that there will be more strategic and overarching attempts to tackle different types of inequality in the future.

This article presents secondary analysis of data provided by the General Social Care Council (GSCC) on three cohorts of students registering in England for the Diploma in Social Work (DipSW) in 1995–96, 1996–97 and 1997–98 to explore factors associated with its completion. The DipSW formed the basic professional qualifying award for social work in the UK from 1989 until the introduction of the new degree-level qualification in 2003.

## **Background**

### Social work, and the widening participation agenda

Indicators that different students have differing experiences of social work education have been clear for some time. For example, students with disabilities face barriers in accessing and completing social work programmes (Baron et al., 1996; Crawshaw, 2002; Wray et al., 2005). Practice placements may pose particular challenges. While many disabled students report positive experiences, others say that some placement staff show limited awareness and fear being made to feel a 'burden' or that their employment prospects will be jeopardized if they disclose a  
*Hussein et al. (2008)*

disability (Wray et al., 2005). This may explain why only one in ten social work students declares a disability (Central Council for Education and Training in Social Work, 2001; General Social Care Council, 2002, 2003, 2004a), whereas, among the working-age population, almost twice as many people consider themselves to be disabled (Smith and Twomey, 2002). This has led to the assertion that 'disability issues have remained a poor relation among all the equalities of social work training' (Oliver, 2004, p. 10). It is possible that changes to the way that the GSCC asks students to report whether they have a disability may capture students' difficulties more accurately but this has only taken effect from 2006 and its impact on reporting rates has yet to be monitored.

Improving the under-representation of older students in higher education is an important part of the government's widening participation strategy and commitment to life-long learning (Secretary of State for Education and Skills, 2003). What has caused particular concern is that mature students (defined as those aged twenty-five and over at the beginning of a course of study) have poorer progression rates than their counterparts aged eighteen to twenty-five, with almost twice as many full-time mature students (15.4 per cent) not continuing in higher education after their first year compared with young entrants (7.8 per cent) (Higher Education Statistics Authority, 2004). By contrast, over two-thirds of social work students are aged twenty-five to forty-four (Central Council for Education and Training in Social Work, 2001; General Social Care Council, 2002, 2003, 2004a) in comparison with around a fifth of students accepted for higher education as a whole (Moriarty and Murray, 2005). Furthermore, the introduction of the DipSW was seen as a way of removing unnecessary barriers to higher education among mature applicants (Green Lister, 2003).

Widening participation strategies also aim to address the variations in the proportion of students from different ethnic groups. While Asian-Indian, black African and Chinese people are relatively over-represented in higher education in comparison with their numbers within the working-age population as a whole, black Caribbean people are under-represented (Department for Education and Skills, 2004). Furthermore, it is not enough simply to consider participation rates without also considering different students' experiences in higher education and their progression rates. Connor and colleagues (2004) have shown that while people from black and minority ethnic groups are more likely than white people to progress to higher education in England, they are, on average, less likely to do as well in degree performance and face greater problems finding employment (Connor et al., 2004). With black students comprising between 10 and 15 per cent of new enrolments

each year (Central Council for Education and Training in Social Work, 2001; General Social Care Council, 2002, 2003, 2004a), social work represents one of the few subjects in which there are substantial proportions of black students (Department for Education and Skills, 2004). However, there are comparatively few social work students from Asian-Indian, Asian-Pakistani and Asian-Bangladeshi backgrounds (Moriarty and Murray, 2005). With some exceptions (Aymer and Bryan, 1996; Cropper, 2000), there has been very little UK research looking at the experiences of social work students from black and minority ethnic groups. However, evidence from the USA suggests that a supportive culture within the institution, relevant curricula and the presence of faculty staff who are themselves from a minority ethnic background are positive factors in attracting and retaining social work students from minority ethnic groups (Aranda, 2001; Bowie et al., 2005).

The position of male social work students is perhaps more complex. While always in a minority (Christie, 2001), their numbers have declined from around a third to a fifth during the past twenty years (Lyons et al., 1995; Perry and Cree, 2003). Furthermore, proportionally fewer men achieve an award in comparison with women (Cree, 2001). At the same time, both men and women students are aware that it is men who are the more likely to achieve promotion upon entering paid employment (Taylor, 1994; Cree, 1996).

Regrettably, very little research has looked at how social work supports students from less privileged socio-economic backgrounds or those whose sexuality means that they may experience discrimination. Shaw (1985) suggested that social work was a 'closed profession' to applicants from lower socio-economic backgrounds. However, the decline in the proportion of students from routine and semi-routine economic backgrounds within higher education (Galindo- Rueda et al., 2004) means that social work may be attracting a broader representation of students from different socio-economic backgrounds than many subjects. This may be the result of people working in social care support roles embarking on professional training (Moriarty and Murray, BJSW Advance Access doi:10.1093/bjsw/bch325).

While there has been some research on the experiences of lesbian, gay, bisexual and transgendered (LGBT) social work students (Trotter and Gilchrist, 1996; Burgess et al., 1997), this has not explored whether sexuality affects progression.

Lastly, previous educational attainment is important to consider when analysing progression rates because research suggests that lower levels of previous educational attainment are associated with

higher rates of non-continuation in higher education (Smith and Naylor, 2001; Davies and Elias, 2003). Social work is one of the subjects attracting fewest undergraduate students with high levels of previous educational attainment (Leslie, 2002, 2003), albeit this picture fails to take into account the fact that around a quarter of social work students undertake postgraduate routes (Central Council for Education and Training in Social Work, 2001; General Social Care Council, 2002, 2003, 2004a).

## Progression rates

The chances that a student will complete a course of study in higher education are affected by different factors.

Factors attributable to the higher education institution (HEI) at which the student is studying range from teaching and assessment methods, course structure, numbers and types of students to relationships and levels of staff and student contact. The expansion of higher education has led to a larger and more diverse student population without commensurate increases in staffing or resources (Manthorpe and Stanley, 2002). Where HEIs are offering vocational courses, there are further potential influences on progression rates. As well as providing the theoretical components of the programme, arrangements have to be made for students to develop their practice skills. This depends on sufficient numbers of good-quality practice placements and of practice teachers; shortages exist both in social work education and other professional training courses, such as nursing and occupational therapy (Craik and Turner, 2005; Hutchings et al., 2005). This was one of the reasons why the establishment of the Practice Learning Taskforce was seen as an important part of introducing the new degree (Department of Health, 2003a).

Students themselves may experience a number of challenges. These include concerns about the course, worries about their future career, depending upon levels of graduate unemployment, difficulties in adjusting to student life and personal relationship problems (Grant, 2002). In addition, the question of how debt affects participation in higher education has dominated debates (Callender and Jackson, 2005). As social work students tend to be older than the average undergraduate, the change from maintenance grants to student loans was one explanation for the decline in newly qualifying social workers in the late 1990s (Wallis-Jones and Lyons, 2003) and a major spur to the introduction of bursaries for the new degree (Department of Health, 2003b).

The introduction of the new degree and concerns about a shortage of social workers highlighted the timeliness of a study examining

*Hussein et al. (2008)*

progression rates among social work students. In 2005, the General Social Care Council (GSCC) commissioned the Social Care Workforce Research Unit at King's College London to analyse progression rates among DipSW students. As they would not be including any variables within the data-set that would permit identification of individuals, it was not necessary to seek ethical approval. However, in order to maintain anonymity among individual HEIs, this article is based on aggregated data.

## **Methods**

### **Data**

The data comprised a complete set of three national cohorts of full-time students registering for a DipSW in England from 1995 to 1998. The variables comprised background details on 10,891 students (gender, age at time of registration, whether they had a self-reported disability, ethnicity, previous educational attainment at time of registration, and the type of financial support received). Ethnicity and self-reported disability (which included sensory impairments, mental health difficulties, dyslexia and other 'hidden disabilities') were recoded into dichotomous variables because some categories contained insufficient numbers of students to permit valid statistical analyses. We were also given information on the date on which they began the programme, their end result in terms of achieving an award or not achieving an award and whether they had been required to repeat a piece of course work or practice placement (referred) or whether there had been any delays due to illness, maternity leave and so on (deferred).

Researchers are rarely in a privileged position, as we were, of having access to data on a complete population. In addition, the quality of the data set was extremely high in that there were very few missing values. At 8 per cent, the only variable with a relatively high missing value was self-reported disability. This finding is by no means unique; studies have consistently highlighted that people may be reluctant to disclose a disability for fear of potentially negative consequences, or are unclear about what counts as a disability (McLean, 2003; Wray et al., 2005). Thus, while we might have taken these missing values as meaning that the students had a disability, this was not an interpretation that could be robustly defended.

### **Theoretical relationships between different variables**

Our analyses were guided by theories highlighting the multiplicity of factors influencing progression rates, which have been outlined in the first part of this article. These suggested that students from a  
*Hussein et al. (2008)*



minority ethnic group, students with disabilities, men, older students and students with lower levels of previous educational attainment were likely to have lower progression rates. Financial support might be another reason for withdrawal. The data set with which we were provided enabled consideration of all these factors. However, the GSCC does not collect information on students' sexuality or socio-economic status so we were unable to consider whether these made a difference.

It proved difficult to take account of the factors relating to the HEI providing the programme. Although we were able to link individual students to the HEI at which they studied, there were insufficient numbers of students spread across too many HEIs to include progression rates at individual HEIs in the analyses. The data set provided no means of grouping different HEIs together in terms of the ratios of teaching staff to students and so on. However, we knew that older universities tended to have fewer non-traditional students than post-1992 universities (Higher Education Statistics Authority, 2004). Thus, it might be expected that this might make a difference to progression rates. We derived a variable grouping HEIs into pre-1992 universities, post-1992 universities and colleges of further and higher education. In addition, in the 1990s, reductions in the number of applicants for social work and the introduction of new employment-based routes to a qualification meant that some HEIs and employers banded together to form a single consortium. These generally consisted of arrangements whereby a university and local college of further and higher education pooled resources, offering a single programme. We included an additional category to cover these programmes, referred to in the tables and text as consortia. This is not an entirely satisfactory way of recording such arrangements but, as the results will show, it reflected some of the differences that existed, most usually in cohort size, when compared with other programmes. We also wondered whether universities based in large metropolitan areas and conurbations would attract different types of student from those found in less urban areas, where higher proportions of local students might be expected. We divided the HEIs into metropolitan (situated in Greater London and metropolitan/unitary authorities) and non-metropolitan (situated in county and borough councils) using the listing of local authorities of the time. As will be apparent, both HEI-type and metropolitan versus non-metropolitan HEI groupings are in themselves rather crude and are no more than rough proxies indicating areas in which HEIs might theoretically be expected to differ.

We also considered whether students at greater risk of non-completion would find it easier or more difficult to achieve an award

if they were enrolled on programmes in which they were represented in greater numbers. In order to examine this, we derived new variables from the data set recording the proportions of students from a black and minority ethnic group, students with any self-reported disability and male students. The divisions were based on overall distributions so that each category had a reasonably equal proportion of students in comparison to the other categories.

The size of social work programmes varies considerably, ranging from as few as fifteen students to as many as 120 per cohort (General Social Care Council, 2004b). In order to see whether this impacted upon progression rates, we divided them into small (fewer than twenty-five students), medium (twenty-six to forty-nine) and large (more than fifty) programmes.

## Analyses

We measured variations in progression rates by examining the proportions of students completing the DipSW within the expected time, passing at a later date after deferring or having being referred and not achieving an award because they failed or chose to withdraw altogether.

Initial descriptive analyses showed that the proportion of students never completing (due to failing or withdrawing) did not vary as much as the proportion of those who passed within expected time (i.e. those who passed without being referred or deferred). To identify which background variables had significant effect on students' progression, we used conditional forward logistic regression models to predict the probability of achieving an award within the expected time. Using logistic regression does not make any assumptions about the distribution of the independent variables (e.g. whether they are interval data or whether they are normally distributed). Importantly, where an event is likely to be attributable to several factors, as with this sort of data, logistic regression distinguishes the effects of each factor after controlling for all the other risk factors. The results of the analysis are presented in the form of odds ratio (OR). For each variable in the model, one of the categories is taken as a reference group. For example, in the case of gender, the odds of women achieving an award on time are compared with the odds of men—the reference category—achieving an award on time. If the odds ratio for women is greater than 1, then it shows that women are more likely to pass on time than men; where it is less, it is men who are more likely to pass on time. The significance level ( $p$ -value) shows whether these differences are statistically significant—it indicates how likely it is that these results have occurred by chance. The  $p$ -value represents the probability of obtaining the results given the null hypothesis—in this case, the

null hypothesis that the b-coefficient is equal to 0, suggesting that there is no statistical relationship between the independent (completing or not completing the DipSW on time) and the dependent variables (age, gender and so on). In other words, if the p-value is smaller than 0.005, it means that there is less than a 0.5 per cent chance that an observed statistical relationship (the inverse of the null hypothesis) is due to error.

We also had to consider whether different variables were, in fact, measuring the same thing. For example, when we examined the inter-correlations between variables, we found a significant correlation between financial support and the type of programme. This was because, before the new degree, postgraduate students were eligible for a means-tested bursary but non-graduate and under-graduate students relied on maintenance grants, loans or secondment. For this reason, financial support was omitted from the final models, as it was highly correlated with type of programme.

In the same way, HEI type was highly correlated with course composition. These correlations suggested that HEI factors and course composition have some hierarchical effects so the models were performed repeatedly for each type of HEI to take them into account.

Finally, in this article, we have excluded part-time students because we needed to develop a separate analysis for this group. These results are to be reported elsewhere (for details contact the authors).

## **Results**

### **Descriptive results**

Table 1 presents the distribution of the results for students following full-time DipSW programmes. Overall, 74 per cent of all full-time students completed their programmes within the expected time. Fourteen per cent completed later, after having deferred or being referred, and 12 per cent did not achieve an award, because they either failed or withdrew from the programme. Although Table 1 shows that men, students with a self-reported disability, students from a black and minority ethnic group and students with less financial support were less likely to pass on time and that students from pre-1992 universities and postgraduate students were more likely to complete on time, these results can be deceptive, as one variable may appear to affect the outcome, whereas the effect may be due to another confounding effect. This is what we shall go on to explore.

\*\*\*\* Table 1 around here \*\*\*\*

The need to take account of the interrelationship between different factors influencing progression rates is strikingly demonstrated in Tables 2 and 3. Correlation analyses showed that student characteristics, course composition and type of programme offered varied widely in relation to the type of HEI. For example, almost a third of students attending pre-1992 universities were younger than twenty-five years, compared with around a seventh at other HEIs. Post-1992 universities and consortia HEIs had the highest mean cohort size of fifty-three and sixty-two students, respectively. This compares with thirty-four and thirty-seven within pre-1992 HEIs and colleges of further and higher education.

\*\*\*\* Table 2 around here \*\*\*\*

There were also differences between students undertaking different routes to a DipSW. Table 3 shows that the proportion of students with reported disability is slightly higher and the proportion of younger students was highest among undergraduates in comparison with the corresponding proportions among under and postgraduates. As mentioned earlier, financial support was highly associated with route type. The majority of postgraduate students received bursaries; non-graduates and undergraduates relied more upon maintenance grants from local authorities, for which the postgraduates were not eligible. The Department of Health stipulated that part of the Training Support Programme grant should be used to help unqualified staff acquire a professional qualification (Department of Health, 2002). Seconded students were usually on non-graduate programmes, reflecting employers' interests in minimizing the time spent in training. Non-graduate programmes were also likely to contain larger cohorts of students.

\*\*\*\* Table 3 around here \*\*\*\*

## Analytical results

Table 4 presents the results of a logistic regression model testing the association between predictive variables and probability of passing on time for all full-time students (see 'Methods' for interpretation of Table 4). The results confirm both the descriptive findings and the literature that men, students from black and minority ethnic groups, and students with a disability were less

likely to pass on time. However, in contrast to the literature, age and previous educational attainment did not make a difference. It should be noted that the recording of educational attainment data does not differentiate between levels of attainment in the way that, for example, the UCAS tariff score distinguishes between those achieving top grade A 'A' levels and those with grade 'E's. It is possible that a more tightly calibrated system would allow differences between those with differing levels of achievement to become more apparent. An alternative explanation is that social work has developed a repertoire of teaching methods capable of dealing successfully with students with diverse levels of previous educational attainment.

Undergraduates were least likely to complete social work courses on time. Cohort size and cohort composition in terms of gender and ethnicity did not affect the likelihood of passing on time but the proportion of students with a self-reported disability did.

\*\*\*\* Table 4 around here \*\*\*\*

Table 2 showed that students' profiles vary considerably across different HEIs. It was thus important to identify which factors were significantly associated with the probability of passing on time while controlling for this. We therefore undertook a set of logistic regression models for students attending each HEI type.

Table 5 presents the results of the four logistic regression models. Programme route was not included as a predictor variable for higher education and further education colleges because, at the time, they only offered non-graduate routes. The Omnibus tests and Hosmer-Lemeshow goodness-of-fit statistics showed that the four models provided a reasonably good fit for the data. However, the models only explained 8–13 per cent of the variance in the probability of passing on time in different HEI types (see footnotes for details of numbers and statistics for each model). This was unsurprising, given the potential number of factors that might have influenced progression about which we had no information. Notwithstanding this limitation, the analyses provided further information on which of the predictor variables have a significant association with the probability of passing on time in different types of HEI.

\*\*\*\* Table 5 around here \*\*\*

The results confirm that, across all types of HEI and regardless of other characteristics, students' ethnicity and self-reported disability all have significant effects on students' chances of achieving an

award on time. In all types of HEI, students from black and minority ethnic groups had the lowest odds ratio (0.39– 0.54) of passing on time, followed by students with a self-reported disability (0.55– 0.65). However, with the exception of ethnicity and self-reported disability, the analyses show that, of all the remaining factors presented in Table 4 as significantly affecting students' chances of passing on time, the importance of each factor varies between different types of HEI. Each is considered in turn.

Undergraduates were significantly less likely to pass on time when compared with non-graduate students in both post-1992 universities and consortia (OR = 0.55 and 0.60, respectively). The different length of their programmes (three or four years as opposed to two years) needs recognizing. Postgraduates attending programmes run by consortia had significantly higher chances of passing on time when compared with the same reference group (OR = 1.95). These students also undertook their programmes over two years.

Age similarly seemed to exert a different effect in different types of HEI. Only in pre-1992 universities did younger students have a greater chance of passing on time than older students. In post-1992 universities and consortia, there were no significant differences between them. By contrast, older students were almost twice as likely (OR = 1.93) to pass on time in FE/HE colleges.

In contrast to higher education generally, students' levels of previous attainment were significantly associated with the probability of passing on time only among students attending higher/further education colleges and, even here, the level of significance was only moderate.

With the exception of pre-1992 universities, students' gender made a significant difference to their chances of passing within the expected time. Otherwise, in post-1992 universities, higher/further colleges and in consortia, men were always less likely than women to pass on time.

Men, students from black and minority ethnic groups and students with a disability are minorities on most social work programmes. As Table 2 showed, the extent to which students with these characteristics were distributed across different types of HEI varied. Feelings of isolation may contribute to poorer progression (Connor et al., 2004), so it was important to consider what happened in HEIs in which there were fewer or more students with a particular characteristic.

Differences in the proportion of men on a programme produced

inconsistent results. In post-1992 universities and higher/further colleges, where more than a quarter of the group were men, then students were significantly less likely to pass on time. By contrast, where the number of men in a cohort ranged from just over a fifth to a quarter (i.e. where men were slightly over-represented in terms of their overall numbers among the student social work population as a whole), there was a positive effect on students' chances of passing on time, especially within colleges of higher and further education.

The analyses also suggested that where black and minority students were over and under-represented in comparison with their proportion within the student social work population (i.e. 10–15 per cent), the effect on overall progression rates differed. In pre-1992 universities and consortia, students on programmes in which 25–40 per cent of the students were from a black and minority ethnic group, stood a greater chance of passing on time than those attending programmes in which fewer than 10 per cent were from a black and minority ethnic group (OR = 2.62 and 1.47, respectively). By contrast, in post- 1992 universities, this effect was reversed, with programmes in which black and minority ethnic groups were under-represented doing better (OR = 0.61). This is intriguing, as, on the whole, black and minority ethnic students are more likely to attend post-1992 universities and are generally under-represented in pre-1992 universities (Connor et al., 2004). It seems probable that something is happening at programme, rather than HEI, level, which these data were unable to capture. For example, some social work programmes in pre-1992 universities may have developed very effective mentorship for students from a black and minority ethnic group or have more black staff as positive role models.

The proportion of students with a self-reported disability in the group was significantly associated with the probability of passing on time in post-1992 universities and consortia. Students on programmes in which 7–12 per cent of students had a self-reported disability were more likely to pass on time. However, their chances of passing on time were reduced if the proportion of students with a self-reported disability was greater. Although the data available do not show why this difference exists, possible explanations are that HEIs with higher proportions of students with disabilities face greater difficulty in arranging suitable practice placements or that staff (or students) have less time pro rata to assist individuals with potentially higher support needs.

Whether students were part of a small, medium or large intake made no difference except in pre-1992 universities. Students on courses comprising fifty or more students were three-and-a-half times more likely to pass on time when compared with those

*Hussein et al. (2008)*

attending courses of fewer than twenty-five students. This may be because, at the time, fewer than 5 per cent of pre-1992 universities ran courses with more than fifty students. It was striking that, among the 120 students in this category, 95 per cent had no self-reported disability, and 91 per cent were white. However, we lacked any supplementary information to set cohort size into context; it is possible that larger social work programmes in pre-1992 universities are better resourced.

Students attending pre-1992 universities and higher/further colleges in non-metropolitan areas were significantly more likely to pass on time than their counterparts in metropolitan areas. However, this relationship was not significant among students attending post-1992 universities or consortia. It is possible that pre-1992 universities and higher/further colleges in more rural areas may be the only HEI negotiating practice placements, with less likelihood that students will need to defer because of problems in arranging a placement.

## **Discussion**

For the first time, it is possible to make public statistical analyses of national progression rates among social work students in England. Until now, although research has revealed the contrasting experiences of different groups of students, this mainly rested upon small-scale studies with no means of determining their generalizability. These results provide some important messages for social work education. On a positive note, the great majority of social work students go on to achieve an award. Attrition rates are low in comparison with subjects such as nursing (National Audit Office, 2001) and teaching (Smithers and Robinson, 2001), in which around a fifth of students leave before completing their training. In addition, many social work students are from non-traditional backgrounds in terms of participation in higher education, yet the majority achieve an award within the expected time. In contrast to higher education as a whole, being in an older age group and having lower levels of previous educational attainment do not broadly reduce students' chances of achieving an award.

At the same time, it is important to consider the effects of non-progression upon individuals themselves and upon recruitment to the profession as a whole. The results suggest that men, people from black and minority ethnic groups, and people with disabilities all have lower progression rates. This highlights the need for research. This should also consider the position of LGBT students, and the effects of socio-economic status because differences



sometimes attributed to, for example, ethnicity are often the effects of disparities in socio-economic status (Nazroo, 1998; Connor et al., 2004).

The results of this research are particularly timely in the context of the new social work degree qualification. The pattern whereby undergraduate students have lower progression rates might continue if social work attracts a wider range of students without substantial experience of social care employment, or indeed of any employment. The change to a degree-level qualification met with widespread support among social work educators who were concerned about UK social work's lack of comparability with training programmes in the EU (Lyons, 2002) and welcomed the additional teaching and practice time. However, educators and policy makers also need to be alert to the potential impact on progression rates of these changes.

In addition to factors that might be ascribed to the type of social work programme, the results suggest that factors unique to an HEI impact upon progression rates. Enhancing support for diverse students requires consideration of disability, gender and ethnicity by all HEIs, but the differences revealed between HEIs suggest that a range of tailored strategies is likely to be useful. This highlights the need for developments that strengthen individual HEIs and programmes. Although the evaluation of the new degree in England funded by the Department of Health (Manthorpe et al., 2005) will inform this area, more data on a broader range of programmes are clearly required.

Together, these results highlight the need for further debate among social work educators, policy makers, researchers and students themselves on understanding why students face difficulties in completing a programme within the expected time and how to support them effectively. Such discussions are likely to be furthered by the Disability Rights Commission's investigation of social work, nursing and teaching experiences (Disability Rights Commission, 2006). It is hard to underestimate the importance of such work. Developments such as the 2000 Race Relations (Amendment) Act (chapter 34), the Equality Standard for Local Government (Employers' Organisation for Local Government/ Disability Rights Commission/Equal Opportunities Commission/Commission for Racial Equality, 2005) and the NHS Plan (Secretary of State for Health, 2000) emphasize that equalities and diversities strategies within the workforce are central to the delivery of public services that are fair to, and meet the needs of, the communities they serve. While social work is felt to have made progress in becoming a more diverse workforce (Beresford and Croft, 2004), the starting point for improvements must be at the level of social work education. This

research represents one step in highlighting some of the barriers to developing a more diverse profession; the challenge is to improve our understanding of how these barriers may be overcome.

## Note

1. Published data do not distinguish between black African, black Caribbean and other black students.

## References

- Ahmad, B. (1990). *Black Perspectives in Social Work*. Birmingham: Venture Press.
- Aranda, M. P. (2001). The development of the Latino social work profession in Los Angeles. *Research on Social Work Practice*, **11**(2), pp. 254-265.
- Aymer, C. and Bryan, A. (1996). Black students' experience on social work courses: accentuating the positives. *British Journal of Social Work*, **26**(1), pp. 1-16.
- Baron, S., Phillips, R. and Stalker, K. (1996). Barriers to training for disabled social work students. *Disability & Society*, **11**(3), pp. 361-378.
- Beresford, P. and Croft, S. (2004). Service users and practitioners reunited: the key component for social work reform. *British Journal of Social Work*, **34**(1), pp. 53-68.
- Bowie, S. L., Cherry, D. J. and Wooding, L. H. (2005). African American MSW students: personal influences on social work careers and factors in graduate school selection. *Social Work Education*, **24**(2), pp. 169-184.
- Callender, C. and Jackson, J. (2005). Does the fear of debt deter students from higher education. *Journal of Social Policy*, **34**(4), pp. 509-540.
- Central Council for Education and Training in Social Work (2001). *Data Pack 2000-2001: Social Work Education and Training Statistics*. London: CCETSW.
- Christie, A. (ed). (2001). *Men and Social Work - Theories and Practices*. Basingstoke: Palgrave.
- Connor, H., Tyers, C. and Modood, T. (2004). *Why the Difference? A Closer Look at Higher Education Minority Ethnic Students and Graduates: DfES Research Report RR552*. London: Institute for Employment Studies.
- Craik, C. and Turner, A. (2005). A chronic shortage of practice placements: whose responsibility? *The British Journal of Occupational Therapy*, **68**(5), pp. 191.

Crawshaw, M. (2002). Disabled people's access to social work education - ways and means of promoting environmental change. *Social Work Education*, **21**(5), pp. 503-514.

Cree, V. E. (1996). *Why do men care?* In Cavanagh, K. and Cree, V. E. (eds), *Working with Men: Feminism and Social Work* (pp. 64-86). London: Routledge.

Cree, V. E. (2001). *Men and masculinities in social work education*. In Christie, A. (ed), *Men and Social Work - Theories and Practices* (pp. 147-163). Basingstoke: Palgrave.

Cropper, A. (2000). Mentoring as an inclusive device for the excluded: black students' experience of a mentoring scheme *Social Work Education*, **19**(6), pp. 597-607.

Davies, R. and Elias, P. (2003). *Dropping Out: A Study of Early Leavers from Higher Education*. London: Department for Education and Skills.

Department for Education and Skills (2004). *Race Impact Assessment*. London: Department for Education and Skills.

Department of Health (2001). *Press release 2001/0154: Radical reforms to social work training to raise social care standards*. London: Department of Health.

Department of Health (2002). *Government response to COI report*. London: Department of Health.

Department of Health (2003). *Press Release 2003/0188: Extra resources and innovative reforms for social work training*. London: Department of Health.

Disability Rights Commission (2006). *Press Release 31/05/2005: DRC launches first formal investigation into public sector fitness standards*. London: Disability Rights Commission.

Dominelli, L. (2002). *Anti-oppressive social work theory and practice*. Basingstoke: Palgrave Macmillan.

Employers' Organisation for Local Government/Disability Rights Commission/Equal Opportunities Commission/Commission for Racial Equality (2005). *The Equality Standard for Local Government. Equality Act 2006*. London: The Stationery Office Limited.

Galindo-Rueda, F., Marcenaro-Gutierrez, O. and Vignoles, A. (2004). *The Widening Socio-economic Gap in UK Higher Education*. London: Centre for the Economics of Education, London School of Economics.

General Social Care Council (2002). *Data Pack 2001-2002: Social Work Education and Training Statistics*. London: Care Council for Wales, General Social Care Council, Northern Ireland Social Care Council, Scottish Social Services Council.

General Social Care Council (2003). *Data Pack 2002-2003: Social Work Education and Training Statistics*. London: Care Council for Wales, General Social Care Council, Northern Ireland Social Care Council, Scottish Social Services Council.

General Social Care Council (2004a). *Data Pack 2003-2004: Social*

Hussein et al. (2008)

*Work Education and Training Statistics*. London: Care Council for Wales, General Social Care Council, Northern Ireland Social Care Council, Scottish Social Services Council.

General Social Care Council (2004b). *Eleventh Report: Applications to Diploma in Social Work Programmes via the Social Work Admissions System 2003 Entry*. London: Care Council for Wales, General Social Care Council, Northern Ireland Social Care Council, Scottish Social Services Council.

Grant, A. (2002). *Identifying students' concerns*. In Stanley, N. and Manthorpe, J. (eds), *Students' Mental Health Needs: Problems and Responses* (pp. 83-105). London: Jessica Kingsley Publishers.

Green Lister, P. (2003). It's like you can't be a whole person, a mother who studies'. Lifelong learning: mature women students with caring commitments in social work education. *Social Work Education*, **22**(2), pp. 125-138.

Higher Education Statistics Authority (2004). *Performance Indicators in Higher Education in the UK 2003/2004*. Cheltenham: HESA.

Hutchings, A., Williamson, G. R. and Humphreys, A. (2005). Supporting learners in clinical practice: capacity issues. *Journal of Clinical Nursing*, **14**(8), pp. 945-955.

Leslie, D. (2002). *Using Success to Measure Quality in British Higher Education: Which Subjects Attract the Best-Qualified Students?* Manchester: Department of Economics, Manchester Metropolitan University.

Leslie, D. (2003). Using success to measure quality in British higher education: which subjects attract the best-qualified students? *Journal of the Royal Statistical Society: Series A (Statistics in Society)*, **166**(3), pp. 329-347.

Lyons, K. (2002). European and international perspectives. *Social Work in Europe*, **9**(2), pp. 1-9.

Lyons, K., LaValle, I. and Grimwood, C. (1995). Career patterns of newly qualified social workers. Discussions of a recent survey. *British Journal of Social Work*, **25**(2), pp. 173-190.

Manthorpe, J., Hussein, S. and Moriarty, J. (2005). The evolution of social work education in England: a critical review of its connections and commonalities with nurse education *Nurse Education Today*, **25**(5), pp. 369-376.

Manthorpe, J. and Stanley, N. (2002). *Introduction: constructing the framework*. In Stanley, N. and Manthorpe, J. (eds), *Students' Mental Health Needs: Problems and Responses* (pp. 13-33). London: Jessica Kingsley Publishers.

McLaughlin, K. (2005). From ridicule to institutionalization: anti-oppression, the state and social work. *Critical Social Policy*, **25**(3), pp. 283-305.

McLean, J. (2003). Employees with long term illnesses or disabilities in the UK social services workforce. *Disability & Society*, **18**(1), pp.

*Hussein et al. (2008)*

51-70.

- Moriarty, J. and Murray, J. (BJSW Advance Access 10.1093/bjsw/bch325). Who wants to be a social worker: using routine published data to identify trends in the numbers of people applying for and completing social work programmes in England. *British Journal of Social Work*.
- National Audit Office (2001). *Educating and training the future health professional workforce for England*.
- Nazroo, J. Y. (1998). Genetic, cultural or socio-economic vulnerability? Explaining ethnic inequalities in health. *Sociology of Health & Illness*, **20**(5), pp. 710-730.
- Oliver, M. (2004). *If I had a hammer: the social model in action*. In Swain, J., French, S., Barnes, C. and Thomas, C. (eds), *Disabling Barriers - Enabling Environments* (pp. 1-10). London: Sage Publications Ltd.
- Perry, R. W. and Cree, V. E. (2003). The changing gender profile of applicants to qualifying social work training in the UK. *Social Work Education*, **22**(4), pp. 375-383.
- Race Relations (Amendment) Act 2000 (2000). *Race Relations (Amendment) Act 2000, Chapter 34*. London: The Stationery Office Limited.
- Secretary of State for Education and Skills (2003). *The Future of Higher Education, Cm 5735*. London: HMSO.
- Secretary of State for Health (2000). *The NHS Plan: a Plan for Investment, a Plan for Reform*. London: HMSO.
- Shaw, I. F. (1985). A closed profession? Recruitment to social work. *British Journal of Social Work*, **15**(3), pp. 261-280.
- Smith, A. and Twomey, B. (2002). *Labour market experiences of people with disabilities*. In Office for National Statistics (ed), *Labour Market Trends, August 2002* (pp. 415-427). Norwich: HMSO.
- Smith, J. P. and Naylor, R. A. (2001). Dropping out of university: a statistical analysis of the probability of withdrawal for UK university students. *Journal of the Royal Statistical Society Series A (Statistics in Society)*, **164**(2), pp. 389-405.
- Smithers, A. and Robinson, P. (2001). *Teachers Leaving*. Liverpool: Centre for Education and Employment Research.
- Statham, D. (1994). What's in a word? *Professional Social Work*(April), pp. 10-11.
- Taylor, C. (1994). Is gender inequality in social work management relevant to social work students? *British Journal of Social Work*, **24**(2), pp. 157-172.
- Wallis-Jones, M. and Lyons, K. (2003). *2001 Employment Survey of Newly Qualified Social Workers*. London: University of East London.
- Wray, J., Fell, B., Stanley, N., Manthorpe, J. and Coyne, E. (2005). *The PEdDS Project: Disabled Social Work Students and Placements*. Hull: University of Hull.



**Tables:**

**Table 1: Distribution of full time students according to different HEI and students' characteristics by end results**

Background characteristics	End Result			Total
	Passed on time	Passed later	Non completion	
<b>Course composition Factors</b>				
Registration Cohort				
95-96	74.6%	14.4%	11.0%	3,852
96-97	74.6%	13.3%	12.1%	3,585
97-98	71.6%	14.6%	13.8%	3,454
Programme type				
Non Graduate	73.3%	14.1%	12.6%	6,388
Post Graduate	78.5%	12.9%	8.6%	2,794
Under Graduate	67.1%	16.0%	17.0%	1,709
Cohort Size				
Less than 25	77.5%	11.6%	10.9%	1,349
25 to 49	73.4%	14.6%	12.0%	5,953
50 or more	72.6%	14.2%	13.2%	3,589
Proportion in group with disability				
< 7 %	75.5%	12.3%	12.1%	2,473
[7 %- 12 %]	75.8%	12.7%	11.5%	6,101
12% or more	66.1%	19.5%	14.4%	2,317
Proportion BME in group				
< 10 %	77.4%	11.2%	11.4%	3,220
[10 %- 25%]	74.6%	14.4%	11.0%	4,233
[25 %- 40%]	68.8%	18.4%	12.8%	1,414

Background characteristics	End Result			Total
	Passed on time	Passed later	Non completion	
40% or more	69.0%	15.1%	15.9%	2,024
Proportion male in group				
< 22%	74.4%	13.0%	12.6%	2,222
[22 %- 25%[	73.6%	14.0%	12.4%	5,520
25% or more	73.2%	15.1%	11.7%	3,149
<b>HEI Factors</b>				
Type of HEI				
Pre 1992	78.0%	13.3%	8.7%	2,626
Post 1992	71.8%	14.1%	14.1%	3,599
HE/FE College	72.4%	15.2%	12.4%	1,381
Consortia	72.8%	14.2%	13.0%	3,285
Type of area				
Metropolitan	70.2%	16.2%	13.6%	5,499
Non-metropolitan	77.1%	12.0%	10.9%	5,392
<b>Students' Factors</b>				
Gender				
Male	69.2%	14.7%	16.0%	2,712
Female	75.1%	13.8%	11.0%	8,167
Age				
<25	75.3%	13.0%	11.7%	2,054
25-34	74.1%	14.1%	11.8%	5,126
35 +	72.2%	14.7%	13.1%	3711
Reported disability				
None	75.8%	13.0%	11.2%	8,995



Background characteristics	End Result			Total
	Passed on time	Passed later	Non completion	
Any	63.0%	19.3%	17.8%	996
Ethnicity				
White	77.0%	12.6%	10.5%	8,551
BME	61.4%	19.7%	18.8%	2,246
Financial support				
Mandatory/discretionary grant	70.4%	15.1%	14.4%	6,035
Secondment/sponsorship	82.0%	11.7%	6.3%	1,138
Bursary	77.8%	12.4%	9.7%	2,854
Other	72.6%	15.0%	12.4%	749
Education				
O' level/ NVQ2/ NCL	75.0%	13.4%	11.6%	1,349
NVQ3/ NVQ4/ 'A' level	73.0%	13.8%	13.1%	3,402
Diploma	74.9%	13.3%	11.8%	2,508
Degree	73.1%	14.9%	12.0%	3,485
<b>All full time students</b>	<b>73.7%</b>	<b>14.1%</b>	<b>12.3%</b>	<b>10,891</b>

**Table 2 Variations in some characteristics according to type of HEI**

<i>Characteristics</i>	<i>Type of HEI</i>			
	Pre 1992	Post 1992	HE/FE College	Consortia
% Students younger than 25	29.4%	15.5%	11.9%	17%
% BME students*	13.5%	31.1%	20.8%	14.8%
% Students already possessing a degree	33.1%	30.6%	34.7%	31.7%
Mean cohort size	33.6	52.7	36.7	61.2
Type of programmes offered	NG/PG/UG	NG/PG/UG	NG	NG/PG/UG
% of HEIs in metropolitan areas	33.3%	58.8%	33.7%	62.1%
Total number of HEIs	22	22	15	20
Total number of full time students	2626	3599	1381	3285

\* Black and Minority Ethnic group

**Table 3 Variations in some characteristics according to type of programme**

<i>Characteristics</i>	<i>Type of HEI</i>		
	Non Graduates	Post Graduates	Under Graduates
% Students younger than 25	11.7%	25.3%	35.0%
% Students with reported disability	9.5%	7.4%	10.6%
% Students with Degrees	31.1%	34.8%	30.7%
Mean cohort size	56.0	33.4	45.9
Major financial support	Mandatory/ Discretionary Grant 68%	Bursary 85.5%	Mandatory/ Discretionary Grant 89%
Total number of full time students	6388	2794	1709

**Table 4: Results of logistic regression model testing probability of passing on time among all full time students<sup>i</sup>**

Independent variables	sig	Adj Odds Ratio	95% CI	
			Lower	Upper
Non-metropolitan area vs. metropolitan	**	1.37	1.24	1.50
Cohort (ref. 95-96)	*			
96-97	NS	-	-	-
97-98	**	0.84	0.75	0.95
Programme type (ref NG)	**			
Post graduates	**	1.27	1.13	1.43
Under graduates	**	0.80	0.70	0.91
Cohort size (ref <25)	NS			
25-49	-			
50+	-			
% With disability in group (ref. <7%)	**			
[7%-12%[	**	1.21	1.07	1.37
12% or more	**	0.69	0.60	0.79
% BME students in group (ref. <10%)	NS			
[10%-25%[	-			
[25%-40%[	-			
40% or more	-			
% Male in group (ref. <22%)	NS			
[22%-25 %[	-			
25% or more	-			
Female vs. Male	**	1.34	1.20	1.49
Age (ref. <25 years)	*			

Independent variables	sig	Adj Odds Ratio	95% CI	
			Lower	Upper
25-34	NS	1.05	0.92	1.20
35 years or more	NS	0.91	0.79	1.05
Any disability (vs. none)	**	0.59	0.51	0.69
BME (vs. white)	**	0.50	0.45	0.56
Education (ref. 'O' level/ NVQ2/ NCL)	NS			
NVQ3 or 4/ 'A' level	-			
Diploma	-			
Degree	-			
Constant	**	2.54		

NS: Not Significant, \*: Significant on p-value<0.05, \*\*: Significant on p-value<0.005

**Table 5: Results of logistic regression models testing significant associations with probability of passing on time among full time students according to type of HEI**

Independent variables	HEI Type															
	Pre 1992 <sup>ii</sup>				Post 1992 <sup>iii</sup>				HE/FE College <sup>iv</sup>				Consortia <sup>v</sup>			
	sig	Adj Odds Ratio	95% CI		sig	Adj Odds Ratio	95% CI		sig	Adj Odds Ratio	95% CI		sig	Adj Odds Ratio	95% CI	
			Lower	Upper			Lower	Upper			Lower	Upper			Lower	Upper
Non-metropolitan areas vs. metropolitan	**	1.70	1.29	2.25	NS				**	4.34	2.67	7.07	NS			
Cohort (ref. 95-96)	NS				NS				NS				*			
96-97	-				-				-				NS	1.21	0.99	1.49
97-98	-				-				-				NS	0.90	0.73	1.10
Programme type (ref NG)	NS				**				NI				**			
Post graduates	-				NS	0.79	0.60	1.05	-				**	1.95	1.45	2.61
Under graduates	-				**	0.55	0.43	0.69	-				**	0.60	0.45	0.78
Cohort size (ref <25)	*				NS				NS				NS			
25-49	NS	0.89	0.67	1.16	-				-				-			
50+	**	3.61	1.52	8.59	-				-				-			

Independent variables	HEI Type															
	Pre 1992 <sup>ii</sup>				Post 1992 <sup>iii</sup>				HE/FE College <sup>iv</sup>				Consortia <sup>v</sup>			
	sig	Adj Odds Ratio	95% CI		sig	Adj Odds Ratio	95% CI		sig	Adj Odds Ratio	95% CI		sig	Adj Odds Ratio	95% CI	
			Lower	Upper			Lower	Upper			Lower	Upper			Lower	Upper
% With disability in group (ref. <7%)	NS				**				NS				**			
[7%-12%[	-				NS	1.43	0.98	2.10	-				**	1.46	1.17	1.82
12% or more	-				*	0.65	0.43	0.99	-				NS	0.86	0.64	1.17
% BME students in group (ref. <10%)	**				*				**				*			
[10%-25%[	NS	0.99	0.76	1.29	*	0.65	0.48	0.89	NS	0.78	0.51	1.18	NS	1.24	1.00	1.55
[25%-40%[	**	2.62	1.56	4.39	*	0.61	0.42	0.89	NS	1.26	0.70	2.28	*	1.47	1.07	2.02
40% or more	NS	0.68	0.41	1.13	*	0.70	0.50	0.99	**	9.17	3.52	23.88	NS	1.56	1.00	2.44
% Male in group (ref. <22%)	NS				*				**				NS			
[22%-25 %[	-				NS	0.93	0.69	1.27	**	5.26	2.90	9.54	-			
25% or more	-				*	0.75	0.57	0.98	NS	1.31	0.72	2.37	-			

Independent variables	HEI Type															
	Pre 1992 <sup>ii</sup>				Post 1992 <sup>iii</sup>				HE/FE College <sup>iv</sup>				Consortia <sup>v</sup>			
	sig	Adj Odds Ratio	95% CI		sig	Adj Odds Ratio	95% CI		sig	Adj Odds Ratio	95% CI		sig	Adj Odds Ratio	95% CI	
			Lower	Upper			Lower	Upper			Lower	Upper			Lower	Upper
Female vs. Male	NS				*	1.24	1.04	1.49	*	1.38	1.02	1.89	**	1.40	1.16	1.70
Age (ref. <25 years)	**				NS				*				NS			
25-34	**	0.60	0.47	0.78	-				**	1.93	1.26	2.94	-			
35 years or more	**	0.47	0.35	0.62	-				NS	1.38	0.91	2.11	-			
Any disability (vs. none)	**	0.55	0.39	0.76	**	0.56	0.44	0.70	*	0.61	0.40	0.92	**	0.65	0.50	0.85
BME (vs. white)	**	0.39	0.30	0.52	**	0.54	0.44	0.65	**	0.47	0.33	0.66	**	0.50	0.38	0.62
Education (ref. 'O' level/ NVQ2/ NCL)	NS				NS				*				NS			
NVQ3 or 4/ 'A' level	-				-				NS	0.72	0.44	1.16	-			
Diploma	-				-				NS	1.01	0.59	1.71	-			
Degree	-				-				*	0.60	0.37	0.96	-			
Constant	**	5.08			**	5.28			*	0.23			**	1.68		

NS: Not Significant, \*: Significant on p-value<0.05, \*\*: Significant on p-value<0.005, NI: not included.

---

<sup>i</sup> 9789 cases included in analysis. Nagelkerke  $R^2= 0.066$ . Omnibus Test: Chi-square=448.695, p-value=0.000. Hosmer and Lemeshow test; Chi-square=23.01, p-value=0.003

<sup>ii</sup> 2450 cases included in analysis. Nagelkerke  $R^2= 0.115$ . Omnibus Test: Chi-square= 188.202, p-value= 0.000. Hosmer and Lemeshow test; Chi-square=12.25, p-value=0.114

<sup>iii</sup> 3176 cases included in analysis. Nagelkerke  $R^2= 0.083$ . Omnibus Test: Chi-square=187.536, p-value=0.000. Hosmer and Lemeshow test; Chi-square=14.57, p-value=0.068

<sup>iv</sup> 1211 cases included in analysis. Nagelkerke  $R^2= 0.134$ . Omnibus Test: Chi-square=116.7, p-value=0.000. Hosmer and Lemeshow test; Chi-square=16.58, p-value=0.036

<sup>v</sup> 3950 cases included in analysis. Nagelkerke  $R^2= 0.075$ . Omnibus Test: Chi-square=156.8, p-value=0.000. Hosmer and Lemeshow test; Chi-square=13.127, p-value=0.108