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Research Report

Relationships Between Demographic Characteristics, Job-Seeking Behaviours and Job-Seeking Outcomes Among New UK Graduates

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Summary

This is the second in a series of three research reports resulting from a project funded by the European Social Fund and the University of Bolton which sought to provide information of use in reducing the difference in post-higher education employment rates between White British and ethnic minority UK graduates. The first report dealt with the analysis of a large data set concerning differences in factors which may have an influence upon peoples' job-seeking activities and the types of job that they are likely to target. This second report concerns graduates' job-seeking behaviours and their outcomes, and details how some of the factors considered in the first report relate to these behaviours and outcomes. Both this report and the first report are largely quantitative in nature. However, in a third report we take a more qualitative approach, presenting a small number of case studies viewing things from the employer's perspective. In all three reports discussion of theoretical issues is limited, priority being given to the reporting of a wide range of statistical analyses before we submit more theoretically orientated reports focussing upon selected aspects of the data for journal publication at a later date.

The data considered in the present report was obtained from a sample of 140 UK students graduating from English and Welsh universities in 2004 and 2005 who, shortly before their graduation, provided data via paper questionnaires and, for some participants, via the Internet, relating to their demographic characteristics, their perceptions of the difficulties that would be experienced by people of their ethnicity in obtaining various jobs, and their occupational values. People were also asked to complete a structured diary about their job-seeking activities for up to six months after their graduation.

It was found that a six percentage-point difference exists whereby ethnic minority graduates were less likely to have found jobs six months after graduation. This mirrors the national statistics. However, ethnic minority graduates who did find a job were more likely to have obtained a graduate-level job than the White British graduates, this suggesting that although the headline statistics show an ethnic minority disadvantage in post-HE job-seeking outcomes with respect to employment rates six months after graduation, the picture may not be as discouraging for ethnic minority graduates when quality of job-seeking outcomes for those finding employment is considered.

White graduates were found to make greater use of Job Centres when applying for jobs, and greater use of Job Centres was found to be associated with a lower likelihood of obtaining a graduate-level job. However, despite these two findings, ethnic differences in Job Centre usage were not found to explain the ethnic difference in success in obtaining graduate-level jobs.

While in our first report we found that ethnic minority graduates perceive it as more difficult for someone of their own ethnicity to obtain jobs than White graduates, in the present analyses we found little evidence that perceived difficulties in obtaining jobs had an influence on either job-seeking success or job-seeking methods used. Thus, there was no self-fulfilling prophecy effect whereby perceptions of difficulties led to poorer job-seeking outcomes. Therefore greater ethnic minority perceptions of difficulties do not appear to lead to disadvantage. Also, there was little evidence that ethnic minority graduates were more likely to use their friends and family and / or local community contacts to obtain jobs because of fears of discrimination if they competed more widely in the job market. However, although such evidence was statistically unreliable, there was a small amount of evidence that where ethnic minority graduates do use personal contacts this may result in a disadvantage in terms of status of job obtained compared to similar usage by White graduates. Nevertheless, given that ethnic minority graduates' job-seeking resulted in a greater likelihood of obtaining a

graduate job relative to White graduates, any such effects were more than counterbalanced by other factors.

The data did not bear out the notions that women graduates are likely to enjoy less success in the graduate job market because they fear they will experience gender discrimination in applying for higher status posts or because they stereotype such posts as being more suitable for men. Indeed, in general, few statistically reliable gender differences were found. Thus, for example, although there appeared to be a large amount of Internet usage in making job applications such usage did not vary very much across gender and ethnic boundaries. This suggests that although females have often been shown to be less positively disposed towards using computers than males, and ethnic minority graduates may be disproportionately likely to come from less wealthy social backgrounds and therefore may have less ready access to computers, neither of these differences seems to be having a negative impact upon these demographic groups' use of the Internet for job-seeking. Rather, it is concluded that the increasing tendency of companies to use the Internet for recruitment may actually be helpful in resolving inequalities in access to jobs.

A large number of other findings are discussed, and as concrete illustrations of job-seeking behaviours, descriptions of the job-seeking processes engaged in by four ethnic minority graduates are presented in an appendix.

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Section One: General introduction

With the expansion of British higher education (HE) into a mass education system in the last two decades, when they approach the stage of leaving, many students are likely to view their forthcoming attempts to embark upon a career by entering the job market with foreboding (see e.g. Buckham, 1998). This is likely to be particularly true of students from ethnic minority backgrounds since, despite equal opportunities legislation, UK first destination statistics published by the Higher Education Statistics Agency (HESA) show more unemployment among ethnic minorities. For example, statistics for 2000/2001 showed 11.4% of ethnic minority graduates as still seeking work six months after graduation compared with 6.5% of White graduates (HESA, 2002). Higher ethnic minority unemployment among graduates mirrors the situation for ethnic Pakistani, Bangladeshi and Black Caribbean adults more generally, these groups experiencing '...significantly higher unemployment and lower earnings than Whites' (Cabinet Office Strategy Unit, 2003). There is also evidence that members of some ethnic minority groups may be less likely to obtain employment at a level that is commensurate with their education, and that members of the White majority are more likely than members of other ethnic groups to be in jobs for which they are under-qualified (Battu & Sloane, 2004). Consistent with this, ethnic minority graduates have more difficulty accessing graduate-level jobs than do White graduates (Connor, La Valle, Tackey & Perryman, 1996). Research by the Centre for Higher Education Research and Information (CHERI, 2002) reveals that some part of the labour market disadvantage experienced by graduates from ethnic minority backgrounds and those from less advantaged socio-economic backgrounds is due to educational factors such as institution, subject studied, entry qualifications and degree level. However, even controlling for such factors, socio-economic background, age and ethnicity affect employment prospects (CHERI, 2002).

The work presently described was part of a project examining ethnicity and gender differences between graduating UK students entering the job market, and was carried out with the aim of providing information to parties concerned with reducing the ethnic inequalities previously mentioned. While the reduction of these inequalities is obviously important for improving the life chances of individual ethnic minority graduates, it is also important for societal well-being generally. Further, it is particularly important to study the transition between higher education and work because a person's choice of career made at the start of their working life is likely to be the most important occupational decision they will ever make, and choosing a job with few prospects or a job that constitutes a poor fit with one's personal characteristics, expectations or needs is likely to culminate in job dissatisfaction (Melamed, 1996), and may have detrimental effects far into the future.

In a first report resulting from the project we have reported the results of analyses of a large data set concerning ethnicity and gender differences in perceived difficulties in obtaining a job, occupational values and influences on type of job targeted. Among other things, these results showed that graduating students of both sexes perceive it as more difficult for females than males to acquire jobs, and that graduating Black and Pakistani / Bangladeshi students (but not Indian students) perceive greater difficulty than members of the White majority. Gender stereotyping of jobs was also found to exist, with professional mainly non-person-centred jobs being seen as more difficult to obtain by females and more person-centred jobs being seen as more difficult to obtain by males. Findings involving occupational values included the observation that, females, and to a lesser extent ethnic minorities, attach greater value to equality in the workplace. As would be expected, it was also found that, relative to White graduates, ethnic minority graduates' choices of job to target are more influenced by the experience of, or possibility of, discrimination, and the same was also true for White British females when compared with males from the same ethnic group.

Importantly, the influence of friends, family and community was found to be greater for ethnic minority graduates, and their choices were also said to be more dependent upon geographical constraints and financial considerations.

In this report, which presents and discusses further analyses of data for a subset of the people providing data for the first report, we examine recent graduates' job-seeking behaviours and their outcomes and consider how some of the factors considered in the first report relate to these behaviours and outcomes.

Section Two: The graduates participating

Data was collected for people graduating in both 2004 and 2005. Requirements for participation were that people had to be graduating (or recently graduated) full-time, final year students, and had to be seeking or intending to seek employment in the UK.

Data collection was in two phases. In the first phase people were asked to complete a questionnaire booklet or Internet questionnaire (see below) and offered entry to a simple competition with a total of £350 in three cash prizes as an incentive. In this phase people were also asked whether they would agree to participate in a second phase which involved completing a job-seeking diary for up to six months after their graduation (see below) with a £50 incentive being offered for participation. As would be expected, there was a large drop in the numbers of people participating between the first and second phases of the study, only around 13% of people who participated in the first phase also participating in the second phase. A separate research report deals with the analyses relating to the data set obtained for the first phase only, which was obviously larger than the data set presently considered in terms of the number of graduates involved (see Charlton, Taylor, Ranyard & Hewson, 2006), although two factor analyses reported below did use the data set from the first phase.

A total of 157 people graduating from 13 English and Welsh universities agreed to participate in both phases. However, the analyses reported here excluded groups such as White Europeans and only considered data for the same ethnic minority groupings as those considered by Battu and Sloane (2004). A gender by ethnicity breakdown of these graduates is presented in Table 1. Missing data for some participants also resulted in sample sizes for analyses reported deviating from the total numbers of participants recruited. Because of the low sample sizes for the ethnic minority groups it was necessary to combine them into a single group for the analyses reported. Summarising the figures in Table 1, in the data set analysed, for the White group there were 28 males (mean age on starting university = 21.36 years, SD = 6.34 years) and 89 females (mean age on starting university = 20.70 years, SD = 6.39 years). For the ethnic minority group there were 8 males (mean age on starting university = 24.88 years, SD = 9.76 years) and 15 females (mean age on starting university = 22.20 years, SD = 6.16 years).

Frequencies for socio-economic background across the two main ethnic categorisations in the analyses are given in Table 2. The occupational classifications in this table are those defined by the tripartite classification of the UK Office for National Statistics based upon previous occupation for mature students or occupation of highest household earner for students under 21 on starting their course.

Table 1: Sample sizes by gender and ethnicity of the participants for whom data was analysed.

	Gender		Total
	Male	Female	
Ethnicity			
White British	28	89	117
Indian	4	5	9
Pakistani / Bangladeshi	0	2	2
Caribbean	0	4	4
African	3	3	6
Chinese	1	1	2
Total	36	104	140

Table 2: Frequency statistics for socio-economic background across the two ethnic categorisations for whom data was analysed (percentages within ethnic groups are given in parentheses under the two ethnicity columns).

	Ethnicity		Total
	White British	Minority	
Socio-economic background			
Managerial and professional occupations	62 (53%)	7 (30%)	69 (49%)
Intermediate occupations	18 (15%)	7 (30%)	25 (18%)
Routine and semi-routine occupations	15 (13%)	3 (13%)	18 (13%)
Never worked or long-term unemployed	2 (2%)	2 (9%)	4 (3%)
Not stated or unclear	20 (17%)	4 (17%)	24 (17%)
Total	117	23	140

From Table 2 it can be seen that there were proportionately more people from the most advantaged socio-economic background (managerial and professional occupations) among the White participants compared to the ethnic minority participants and that this was reversed for the second most advantaged background classification (intermediate occupations). The ethnic minority category also included proportionately more people in the never worked or long-term unemployed category.

Section Three: The Materials Used and the Data Collection Procedure

Two types of data were collected. First, psychological and demographic data using questionnaire booklets and/ or Internet questionnaires, and, second, job-seeking methods and outcomes data using a job-seeking diary.

With respect to the booklets / questionnaires, for the 2004 cohort a paper questionnaire booklet was used. The 2005 participants were given the choice of completing either a paper booklet or an Internet-based questionnaire. The contents of these materials differed across the two cohorts. To increase sample sizes, for the 2005 cohort there were only around half as many questions in an initial paper-based questionnaire booklet and an Internet-based questionnaire as there were in the 2004 version. For the 2005 cohort, people who volunteered to take part in the job-seeking phase of the project were sent a further paper booklet containing the questions omitted from the initial booklet / Internet questionnaire so that the data sets for both cohorts were the same.

In the interests of brevity, we confine ourselves here to a description of the questionnaire booklet used for the 2004 cohort. However, in one form or another the 2005 graduates eventually provided the same data.

The questionnaire booklet consisted of six questionnaires. However, only the first three questionnaires are relevant to the present report and therefore we restrict ourselves to a description of these.

The first questionnaire elicited demographic information: gender, nationality, socio-economic background (the occupation of the highest household earner if the participant was 21 years or below on entry to HE, or the participant's previous occupation if they were above 21 on entry), age on commencement of course, HE course details, and self-reported ethnic background.

The second questionnaire consisted of two subsections. One asked people to rate 20 occupations, according to how difficult people thought it currently was in the UK for suitably qualified *men* of their ethnic group to obtain each job. The other asked people to rate the same occupations according to how difficult they thought it was in the UK for *women* of their ethnic group to obtain each job. The 20 occupations were selected from the eight analytic class categorisation in The National Statistics Socio-Economic Classification User Manual (Office for National Statistics, 2004). Six of the occupations (Accountant, Architect, Doctor, Psychologist, Solicitor, and University Lecturer) were drawn from Analytic Class 1, subdivision 1.2 (Higher professional occupations), ten (Air Traffic Controller, Newspaper Journalist, Physiotherapist, Social Worker, Hospital Laboratory Technician, Manager in a Private Company, Paramedic, Sales Representative, and Youth and Community Worker) from Analytic Class 2 (Lower managerial and professional occupations), two (Call Centre Operative and Police Officer) from Analytic Class 3 (Intermediate occupations), one (Small Business Owner) from Analytic Class 4 (Small employers and own account workers), and one (Electrician) from Analytic Class 5 (Lower supervisory and technical occupations). These jobs were selected because it was considered that they represented a spectrum of jobs that participants would be familiar with and that participants would have an understanding of what they entail. The occupations from the different analytic classes were combined and presented in alphabetical order. Responses were on a 5-point rating scale (1 = *Not at all difficult*; 2 = *Not very difficult*; 3 = *Moderately difficult*; 4 = *Very difficult*; 5 = *Extremely difficult*).

Questionnaire Three elicited data on participants' occupational values by virtue of asking them to rate 20 characteristics of occupations according to their perceptions of the characteristics' importance. Ratings were on a seven-point scale with three verbal labels ranging from *Of no Importance*, through *Moderately Important*, to *Extremely Important* defining the lowest, middle and highest points of the scale.

The other instrument relevant to the present report was the job-seeking diary. Graduates completed this for six months after graduating or until they obtained a job which they intended to be their permanent job for the foreseeable future, whichever was sooner. The diary was in the form of a booklet and was in three parts. The first part obtained information on job-seeking methods and contacts with employers and consisted of 25 pages in which graduates recorded the job-seeking method that they used in connection with each job application that they made, the outcomes of these applications, and ratings of possible reasons for any lack of success (if this part of the diary became full, graduates requested another diary). In the second part of the diary, graduates recorded all the time they spent each week looking for employment, to the nearest hour, regardless of whether this resulted in contact with an employer and/or a job application. In the final part, the graduate provided details of any job that they took that they intended to be their permanent job for the foreseeable future (i.e. a job that they did not intend to be a stop-gap job until they could find something better or more suitable).

As previously mentioned, participants were recruited over a two year period. In year 1 (2004) two universities, one pre-1992 university and one post-1992 university, agreed to collaborate with the researching institution in recruitment of their own graduates. People received details about participation by mail from their university, together with a request form for participation to be returned to the researching institution. The paper questionnaires were sent out by and returned completed to, the researchers mainly by post.

A second round of data collection was undertaken in 2005 to increase participant numbers. First, two different universities from the previous year agreed to collaborate with paper questionnaire data collection. Both of these were post-1992 universities, one in the English Midlands and one in London. In these universities, questionnaires were distributed and collected by two paid data collectors per institution. These data collectors were instructed to target a purposive sample (equal numbers of males and females from the four ethnic categories under investigation). Students who expressed an interest in participating and were eligible were presented with the paper questionnaires. Information presented with the questionnaire gave brief details of the purpose of the research, and assurances of confidentiality and anonymity were offered. Those who met the criteria, and decided to participate were offered the option of being entered into a simple competition / prize draw for a cash prize. Second, an institution-wide sweep at the university hosting the research was done, researchers gaining permission to enter classes at the beginning of lectures to distribute and collect questionnaires. Finally, to further increase representative participation, an electronic version of the questionnaire was placed on the Internet. Universities and their careers centres across the UK were supplied with a flyer containing the Web address to pass to their final year students. Students who completed the Web questionnaire submitted their responses simply by clicking an appropriate button on completion.

The graduating students volunteered for the second phase of the study by completing a form along with the first phase questionnaires. They were then sent job-seeking diaries directly by the researchers and asked to commence completion of the diary as soon as they started to look for work and to submit the diary by post either when they found a job that they considered to be permanent or after six months. A slip in the diary allowed participants to request another diary if they filled their initial diary. Six months after graduation, those participants who had not submitted diaries were asked to do so. On receipt of the completed diary / diaries all participants completing diaries were sent a £50 cheque.

Section Four: Findings

In this section we present our findings. Following the logical temporal sequence, in a first subsection we detail our findings for job-seeking behaviours and then in a second subsection move on to consider job-seeking outcomes.

4.1 Predictors of job-seeking behaviours

4.1.1 Relationships between perceived difficulties in obtaining jobs and job-seeking behaviours

US studies show that racial discrimination has a great influence upon career-related behaviours and that it limits the career options that ethnic minorities consider (Swanson & Fouad, 1999). Thus, in this first group of analyses we considered whether a finding in our first research report, that graduating members of ethnic minorities perceive that it is harder for them to get jobs, has implications for the way in which they go about job-seeking. Specifically, one possibility we considered was whether the fact that ethnic minorities perceive themselves to be at a disadvantage in the open job market leads some members of minority groups to restrict their job search activities to ‘word of mouth’ methods (e.g. by canvassing family members, friends and members of their own ethnic community as to the availability of job opportunities). We reasoned that, if this was true, this might restrict the quantity and quality of jobs applied for, and lead to a certain amount of job segregation along ethnic lines. This possibility was thought to be particularly important since, although towards the turn of the millennium there had been some alleviation of the situation whereby members of Caribbean and South Asian communities which first came to Britain after the second world war were largely employed in low status manual jobs, in general, members of these communities still occupy a disproportionate number of lower status jobs (Modood, 1998). Therefore any job opportunities that ethnic minority job-seekers access via their social networks will also have a disproportionate tendency to be low status. Hence, if ethnic minorities were shown to have a greater tendency to use social networks as a means of job-seeking this could result in a cycle which might lock these members of society into lower status jobs. (Note that, although according to the present reasoning White middle class people would be less likely to resort exclusively to social networking to uncover job opportunities, to the extent that they did use such methods, since members of their social network occupy relatively high status jobs, in stark contrast to the situation that exists for most ethnic minority people, this would afford them access to more desirable job opportunities.)

Because it was reasonable to suppose that different perceptions might exist for different types of job, prior to considering relationships between perceived difficulties in obtaining jobs and job-seeking behaviours it was useful to perform Principal Components Analysis (PCA) on the perceived difficulties data for the 20 jobs for which data was collected¹. The PCA was performed upon the own gender responses of participants (i.e. for male respondents, the data for perceptions of the difficulties experienced by males of the respondents’ own ethnicity, and for female respondents, the data for perceptions of the difficulties experienced by females of the respondents’ own ethnicity). Using Kaiser’s criterion, this obliquely rotated (Direct Oblimin) analysis, performed on responses for 287 participants, revealed four components accounting for around 40%, 10%, 8% and 5% of item

¹ Note that the present analysis differs from an analysis reported in the first research report in this series in that the previous analysis involved data from a larger sample on a subset of 10 of the present 20 jobs.

variance, the factors accounting for around 64% of item variance overall. These factors were respectively interpreted as reflecting high status / graduate jobs, caring / socially orientated jobs, non-graduate jobs, and commercial jobs. It is interesting to note that from Table 3, which contains the component correlations, it can be seen that there is a medium sized positive correlation between perceived difficulty in obtaining graduate and non-graduate jobs, this indicating that, to some extent, participants who saw graduate jobs as difficult to obtain also tended to see non-graduate jobs as difficult to obtain.

From Table 4, which shows the (rotated) component pattern matrix loadings for the analysis, it can be seen that although, as is desirable, all variables had at least one high component loading (defined here as loadings greater than +/- .32), there were some complex items: items with more than one component loading highly upon them².

Table 3: Correlations between components in the PCA for perceived difficulties in obtaining 20 jobs.

	High status / graduate	Caring / socially orientated	Non-graduate
High status / graduate	----		
Caring / Socially orientated	.19	----	
Non-graduate	.43	.06	----
Commercial	.27	.13	.29

² While this is not a desirable psychometric property of an instrument where scores for different items are to be summated to form different subscale scores, this was not considered particularly important in the current instance since component scores (calculated using the regression method) rather than summated scores were used (this was the case because summation would have resulted in the derivation of some subscales with undesirably low numbers of items, which, for example, would have been likely to have resulted in low internal consistencies for such subscales).

Table 4: Component pattern matrix loadings for the analysis of own gender responses for perceived difficulties in obtaining 20 jobs.

	Component 1 High status / graduate	Component 2 Caring / socially orientated	Component 3 Non-graduate	Component 4 Commercial	Extraction h^2
Solicitor	.82	.02	.05	-.09	.65
Psychologist	.75	.30	-.05	.02	.65
University lecturer	.75	.09	.04	.03	.76
Architect	.72	-.30	.21	.11	.71
Doctor	.72	.01	.09	-.08	.55
Accountant	.72	-.25	.01	.25	.69
Newspaper journalist	.68	.12	.16	-.07	.58
Physiotherapist	.66	.39	.04	-.02	.61
Air traffic controller	.62	-.38	.13	.24	.58
Nurse	.07	.74	.07	.13	.64
Youth and community worker	-.04	.55	.40	.22	.63
Social worker	.51	.52	-.16	.05	.70
Small business owner	.10	.12	.75	-.17	.58
Electrician	.02	-.34	.74	.08	.72
Hospital laboratory technician	.02	.15	.66	.15	.58
Manager in a private company	.29	-.07	.62	-.08	.61
Police officer	.17	.14	.55	.20	.60
Paramedic	.18	.40	.45	.19	.69
Call centre operative	.10	.12	-.21	.83	.64
Sales representative	-.12	.01	.30	.66	.59

In order to consider whether perceived difficulties in obtaining jobs might influence the types of job seeking-behaviour engaged in, Pearson's r correlation coefficients were computed for the relationships between the component scores for the four types of job shown in the PCA above and the number of times each of eleven specific job-seeking methods listed in the job-seeking diary was used as a percentage of the total number of jobs applied for (see Table 5). Note that a higher score for the perceived job difficulties components indicates the perception of greater difficulty, and that a higher score on the job-seeking methods variables indicates greater use of methods. Similar analyses were also performed for relationships between perceived difficulties and more general job-seeking behaviours: number of applications made and average number of hours per week spent searching for a job. Again, the resulting coefficients are shown in Table 5. None of these coefficients was significant, however several of them were of a size deemed by Cohen (1988) to represent a small effect ($r = .1$), and therefore were not necessarily statistically negligible even though they were non-significant.

Table 5: Pearson's r coefficients for relationships between perceived difficulties in obtaining jobs and job-seeking behaviours for the sample as a whole.

	Type of Job			
	Higher status/ graduate	Caring / socially orientated	Non-graduate	Commercial
<i>Specific job-seeking method</i>				
Speculative phone ^a	-.11	-.14	-.05	.05
Family/friends ^a	-.13	.10	-.17	-.07
Internet ^a	.12	.13	.05	.08
Newspaper/Journal ^a	.10	-.12	.11	-.02
Job Centre ^a	-.10	.10	-.09	-.11
Graduate recruitment fair ^a	-.03	-.03	-.05	.02
Letter / CV ^a	-.03	-.05	-.07	.05
Recruitment agency ^a	-.08	-.09	-.11	-.07
e-mail / CV ^a	-.04	.12	-.07	-.13
Local community contacts ^a	.03	.13	.11	-.01
Other ^a	-.05	-.12	.11	.12
<i>General job-seeking</i>				
Number of job applications ^b	.06	.07	.09	.06
Mean number of hours per week spent searching ^c	.14	.11	.11	.10

^a $N = 129$, ^b $N = 124$, ^c $N = 135$, $p > .05$ in all cases

From the results in Table 5 it can be concluded that perceptions of difficulties in obtaining jobs are not very highly related to the types of job-seeking methods that graduates adopt. It is particularly interesting to note that there was little evidence that perceptions of greater difficulty result in a greater likelihood of using family and friends as an avenue of job-seeking, a situation which, if it existed, might lead to the perpetuation of ethnic minority disadvantage (nevertheless below we report analyses with participants split into White ethnic majority and ethnic minority groups to consider whether ethnicity-specific relationships exist). It is also worth noting that the fact that there are small / negligible correlations between the perceptions of difficulty in obtaining jobs variables and both number of job applications made and average time per week spent job-seeking shows that perceptions of difficulty neither act as a motivator for people to increase their job-seeking efforts, or as a demotivator in making people think that job-seeking is futile.

Table 6: Spearman's rho coefficients for relationships between perceived difficulties in obtaining jobs and job-seeking behaviours for the White subsample only.

	Type of Job			
	Higher status/ graduate	Caring / socially orientated	Non-graduate	Commercial
<i>Specific job-seeking method</i>				
Speculative phone	-.04	-.12	-.07	.05
Family/friends	-.08	.13	-.12	-.03
Internet	.09	.09	.00	-.06
Newspaper/Journal	.18	-.03	.18	.02
Job Centre	-.05	.19	-.12	-.02
Graduate recruitment fair	.07	-.03	.12	.09
Letter / CV	-.10	-.08	-.12	.02
Recruitment agency	-.11	-.07	-.09	.07
e-mail / CV	-.08	.10	-.15	-.11
Local community contacts	.07	.03	.11	.08
Other	-.05	-.23*	.06	.20*
<i>General job-seeking</i>				
Number of job applications ^a	.20*	.09	.09	.06
Mean number of hours per week spent searching ^b	.05	.19	.05	-.10

$n = 108$ apart from ^a $n = 106$, ^b $n = 113$, $*p \leq .05$ ($df = 106$) two-tailed

To examine whether there were any relationships between perceived difficulties in obtaining jobs and job-seeking behaviours that were specific to the White majority and the ethnic minority groups, two sets of Spearman's rho analyses were performed separately for these two groups. Spearman's rho was preferred to Pearson's r for these analyses because scatterplots showed that outliers for some of the variables in the analyses for the ethnic minority group would have had a disproportionate influence upon the magnitude of Pearson's r coefficients given the low sample sizes for this group. To facilitate comparisons across ethnic groups, Spearman's rho coefficients were also calculated for the White group. The results of these analyses are shown in tables 6 and 7.

Table 6 shows that in addition to there being a number of coefficients for the White group which represented small effect sizes, there were three significant coefficients. However, it is difficult to draw conclusions from two of these significant coefficients since these merely showed that for White graduating students increasing perceptions that it was harder to obtain caring / socially-orientated jobs were associated with a slight tendency to make a smaller proportion of applications by methods other than those specifically mentioned on the questionnaire, while perceptions that it was harder to obtain commercial jobs were slightly related to a tendency to make a greater proportion of applications by methods other than those specifically mentioned on the questionnaire. The third significant coefficient showed that perceptions that it was more difficult to obtain a graduate job were slightly related to a tendency to make a greater number of applications. This may indicate that among the White group, graduates' greater perceptions of difficulty with respect to the types of jobs that they were particularly likely to be targeting (graduate-level jobs) resulted in greater job-seeking efforts.

Although Table 7 shows some sizable relationships between perceived difficulties and job-seeking variables for the ethnic minority participants, because of low power associated with small sample sizes the only significant relationship was one whereby people who perceived greater difficulty in obtaining non-graduate jobs used family and friends as a job-seeking method less frequently. Although, the coefficient was non-significant, there was also a medium-sized relationship in the same direction involving higher status / graduate jobs. Thus, overall, this pattern seems to indicate that far from ethnic minorities having a tendency to be disadvantaged by using family and friends (who are disproportionately likely to be able to provide leads only for lower status jobs relative to the rest of the population given their greater probability of having such jobs themselves) when they perceive difficulty in obtaining a specific type of job, they may in fact be less likely to use family and friends in such circumstances. Although we have no such evidence in the present data set, one interpretation of this is that ethnic minorities who perceive difficulties in certain occupational areas refrain from using close contacts because these contacts are not able to give them useful assistance.

Table 7: Spearman's rho coefficients for relationships between perceived difficulties in obtaining jobs and job-seeking behaviours for the ethnic minority subsample only ($n = 21$).

	Type of Job			
	Higher status/ graduate	Caring / socially orientated	Non-graduate	Commercial
<i>Specific job-seeking method</i>				
Speculative phone ^a	-.29	.17	-.24	-.13
Family/friends ^a	-.37	-.04	-.56**	-.25
Internet ^a	-.01	.36	-.07	.16
Newspaper/Journal ^a	.40	-.36	.22	.13
Job Centre ^a	.07	.15	-.07	.15
Graduate recruitment fair ^a	----	----	----	----
Letter / CV ^a	-.13	-.12	-.08	.17
Recruitment agency ^a	-.30	-.10	-.26	-.07
e-mail / CV ^a	.22	.28	.10	-.06
Local community contacts ^a	-.06	.30	-.20	-.39
Other ^a	-.13	-.40	-.01	.00
<i>General job-seeking</i>				
Number of job applications ^b	.33	-.09	.28	.04
Mean number of hours per week spent searching ^c	-.15	-.13	.13	.19

^a $n = 21$, ^b $n = 18$, ^c $n = 22$, ** $p < .01$ ($df = 19$) two-tailed

4.1.2 Ethnicity and job-seeking behaviours

While the above analyses did not show that ethnic minority graduates who perceived greater difficulty in obtaining jobs were more likely to use family and friends in their job searches, it was still useful to consider whether differences in job-seeking methods exist between ethnic majority and ethnic minority graduates (of course, this analysis would take on particular importance if certain methods were shown to be more effective than other methods – see later). In particular, it was thought that because other analyses reported elsewhere (Taylor, Ranyard & Charlton, 2006; Charlton *et al.*, 2006) showed that graduating ethnic minorities perceived that it was more difficult to obtain jobs than the White group did, then ethnic minority graduates might be more inclined to search for jobs within their own ethnic community, using family and friends and local community contacts to circumvent the difficulties they perceive might exist in the wider job market.

Table 8: Descriptive statistics (percentage of times a method was used for a job application), effect sizes (ES) and *t*-test results (mainly two-tailed) for differences in job-seeking methods employed between White ($n = 112$) and ethnic minority graduates ($n = 22$).

Job-seeking method	Ethnic Group				ES <i>d</i>	<i>t</i> -test ($df=132$)	
	White		Minority			<i>t</i>	<i>p</i>
	Mean	SD	Mean	SD			
Speculative phone	2.59	7.67	1.15	4.75	.23	0.85	.40
Family/friends	3.12	8.76	3.90	8.73	-.09	0.38	.35 ^a
Internet	34.51	28.99	38.04	32.26	-.12	0.51	.61
Newspaper/Journal	23.16	26.65	15.40	24.34	.30	1.27	.21
Job Centre	3.50	9.35	0.70	3.28	.40	2.48	.02 ^b
Graduate recruitment fair	0.65	3.68	0.00	0.00	.25	0.83	.41
Letter / CV	6.60	18.39	11.09	20.87	-.23	1.02	.31
Recruitment agency	12.35	21.69	17.20	28.08	-.19	0.91	.36
e-mail / CV	5.30	11.75	5.24	14.77	.00	0.02	.98
Local community contacts	2.83	14.92	4.55	12.79	-.12	0.51	.31 ^a
Other	5.40	14.16	2.74	8.02	.23	0.85	.40

^aone-tailed, ^b $df = 95.52$ (*t*-test does not assume equal variances)

Descriptive statistics for these analyses are provided in Table 8 along with the independent samples *t*-test results associated with these statistics. These analyses showed that the only significant difference was in the percentage of applications made through Job Centres, with White graduates tending to use this method more of the time, this effect being between a small effect size ($d = .2$) and a medium effect size ($d = .5$) as defined by Cohen (1988). Although the directions of differences in means supported the hypotheses that ethnic minority graduates would use family and friends and local community contacts to a greater extent than White graduates, the differences were non-significant and the effect sizes were lower than those considered by Cohen (1988) to be small. On the other hand, the effects whereby the ethnic minority group made more applications by speculative approaches using letters and CVs and the White group made greater use of speculative telephone calls, graduate recruitment fair applications, and newspapers and other journals exceeded Cohen's criterion for a small effect, although again these differences were non-significant and therefore unreliable.

A further group of independent samples *t*-tests were used to analyse ethnic differences in salaries of jobs applied for (where participants quoted a salary range, the mean was used), time elapsed from first job application until attaining a job, and number of applications made until attaining a job. The results of these tests are shown in Table 9. From the table it can be

seen that, contrary to expectations, the mean salary of jobs for which ethnic minorities applied was significantly greater than the corresponding mean for members of the White group. In Cohen's (1988) terms, this constituted a medium effect size (as defined by $d = .5$). On the other hand, it took both longer and a greater number of applications for members of ethnic minorities to obtain jobs. While neither of these latter results was significant, the effect sizes for these two indices were both greater than Cohen's definition of a small effect ($d = .2$).

Table 9: Descriptive statistics, effect sizes (ES) and t -test results (two-tailed) for differences in assorted job-seeking indices for White and ethnic minority graduates.

	Ethnic Group						ES d	t-test	
	White			Minority				t	p
Index	n	Mean	SD	n	Mean	SD			
Mean salary (£)	77	16122	4433	18	19328	5538	-.64	2.63	.01 ^a
Time elapsed (weeks)	90	8.74	10.16	18	13.72	14.17	-.40	1.42	.17 ^b
Applications (number)	94	8.56	7.76	18	11.39	15.63	-.23	1.15	.25 ^c

^a $df = 93$, ^b $df = 20.63$ (t -test does not assume equal variances), ^c $df = 110$

In summary, while, in terms of percentages of all job-seeking methods used by each participant, ethnic minority graduates did use their family and friends and local community contacts slightly more than White graduates, the size of these effects was minimal and the differences were non-significant. There was therefore little evidence supporting the idea that ethnic minorities have a greater propensity to use such methods because, for example, they feel they will be discriminated against if they use other methods which will entail them competing with White graduates in the graduate job market. However, one difference that did exist was that White graduates used Job Centres more. This may be of some importance since Job Centres tend to advertise a preponderance of local jobs of a non-graduate nature. Thus, factors such as demography notwithstanding, greater use of this source of leads by the White majority may make them less likely to obtain graduate jobs. A second finding was that it took longer for ethnic minority graduates to obtain jobs. However, this may not necessarily have been a bad thing: it may indicate greater ambition and a willingness not to settle for less desirable jobs.

4.1.3 Gender and job-seeking behaviours

Although we had no specific expectations about the nature of any gender differences in job-seeking methods, eleven independent samples t -tests were carried-out to investigate whether

any differences existed. The results of these tests (see Table 10) revealed only one-significant difference, with females being more likely to use methods other than those listed, the effect here approaching a medium size. Although other findings were non-significant, it is worth noting that several of the effects equalled or exceeded Cohen's criterion for a small effect. Thus, the effects whereby, relative to females, males made a proportionately greater number of applications via family and friends and recruitment agencies, but proportionately fewer numbers of applications informally by telephone and via graduate recruitment fairs all exceeded .2, although none of these effects was statistically reliable.

Table 10: Descriptive statistics (percentage of times a method was used for a job application), effect sizes (ES) and *t*-test results (two-tailed) for differences in job seeking methods employed between male ($n = 34$) and female graduates ($n = 100$).

	Gender				ES <i>d</i>	<i>t</i> -test ($df=132$)	
	Male		Female			<i>t</i>	<i>p</i>
Job-seeking method	Mean	SD	Mean	SD			
Speculative phone	1.36	4.72	2.69	7.96	-.20	0.92	.36
Family/friends	5.90	11.59	2.34	7.36	.37	1.68	.10 ^a
Internet	32.01	24.32	36.13	31.04	-.15	0.79	.43 ^b
Newspaper/Journal	18.87	28.55	22.91	25.64	-.15	0.77	.44
Job Centre	4.00	7.98	2.71	8.95	.15	0.74	.46
Graduate recruitment fair	0.00	0.00	0.73	3.89	-.27	1.88	.06 ^c
Letter / CV	8.95	21.34	6.79	17.95	.11	0.58	.57
Recruitment agency	16.75	25.97	11.92	21.64	.20	1.07	.29
e-mail / CV	6.36	11.31	4.92	12.57	.12	0.59	.55
Local community contacts	4.53	18.92	2.62	12.83	.12	0.66	.51
Other	1.26	3.89	6.23	15.11	-.45	3.01	<.01

^a $df = 42.42$, ^b $df = 72.27$, ^c $df = 99.00$, ^d $df = 126.86$ (*t*-test does not assume equal variances)

One curiosity of the statistics in Table 10 is that they show that none of the males made applications through graduate recruitment fairs. This resulted in their being no variance in the male data for this variable. Because of this abnormality a non-parametric Mann-Whitney test was also performed. However, this resulted in a conclusion similar to that which can be drawn from the *t*-test which is reported.

Three further independent samples *t*-tests were performed to test for gender differences in mean salary of jobs applied for, time elapsed from start of job-seeking until a final permanent job was obtained, and number of applications made until the final job was obtained. Since, as was mentioned in the Introduction, statistics show that females may be

more inclined to apply for posts in less highly remunerated occupational areas, it was expected that the mean salary of jobs applied for by males would be greater than that for females. However, tests for the other two indices were non-directional. The results of the tests (see Table 11) revealed no significant differences, although the result of the one-tailed test for mean salary of jobs applied was marginal, the effect exceeded Cohen's (1988) criterion for a small effect, and the means showed that, as was expected, the mean salary of jobs applied for by men was greater than that of jobs applied for by women (the difference being £1619).

Table 11: Descriptive statistics, effect sizes (ES) and *t*-test results (two-tailed) for gender differences in assorted job-seeking indices.

	Gender								
	Male			Female			ES	<i>t</i> -test	
Index	<i>n</i>	Mean	<i>SD</i>	<i>n</i>	Mean	<i>SD</i>	<i>d</i>	<i>t</i>	<i>p</i>
Mean salary (£)	22	17974	5918	73	16355	4387	.31	1.39	.09 ^a
Time elapsed (weeks)	24	9.38	7.14	84	9.63	11.92	-.03	0.13	.90 ^b
Applications (number)	26	9.46	7.93	86	8.92	9.88	.06	0.26	.80 ^c

^a*df* = 93 - one-tailed,

^b*df* = 63.15 (two-tailed, *t*-test does not assume equal variances), ^c*df* = 110 – two-tailed

From the above analyses, perhaps the main conclusion that can be drawn is that there are few differences in the way in which men and women graduates go about seeking employment on leaving higher education. However, one difference seems to be that women make use of more diverse methods, given that they were more inclined to use (unspecified) methods other than those which were explicitly identified on the question. Although the evidence was not statistically reliable, there was also a hint that women sought jobs with lower salaries, perhaps because they perceived the possibility of discrimination in more highly remunerated occupational areas. Such an explanation would fit in with other data collected for the present project, which showed that both males and females perceive it more difficult for female job-seekers to obtain jobs – for more on this see Taylor *et al.* (2006) and Charlton *et al.* (2006).

Another observation that flows from both the analysis for gender differences here and for the previous analysis of ethnicity is that the Internet is being used extensively for job applications. But even though ethnic minorities tend to come from less wealthy social backgrounds, the present data shows that this does not appear to result in disadvantage. In fact the ethnicity analysis showed that minorities use the Internet more, although the difference is non-significant. Also, given the large amount of literature showing that males are more positively disposed towards computers (see e.g. Brosnan, 1998) it was interesting to find that

females used the Internet for job applications to a greater extent, although again the difference was non-significant. This supports previous findings that females are just as likely, if not more likely, to use computers as tools as males are (see e.g. Cooper & Weaver, 2003).

4.2 Predictors of job-seeking outcomes

4.2.1 *Demographic factors and job-seeking outcomes*

The analyses involving relationships between demographic factors and job-seeking outcomes sought to test hypotheses concerning four demographic-related variables. First, we sought to identify whether, as would be consistent with national statistics, ethnic minority graduates were less successful in their post-HE job-seeking than White graduates. Second, we examined whether women graduates tended to be less successful than male graduates, because, for example, perhaps they perceive more prestigious jobs as lying within the male domain, or alternatively perhaps because they fear they will be unsuccessful in certain areas because of employer discrimination. Third, we considered whether socio-economic status was related to success, the expectation being that those from higher status backgrounds would fare better. Finally, we considered whether graduates from pre-1992 universities enjoyed more success than those from post-1992 universities.

There were two main job outcome variables, both of which were dichotomous. First, the national statistics referred to in the Introduction concern ethnic differences in unemployment six months after graduation, and therefore we considered differences in the proportions of the White and ethnic minority graduates who were gainfully occupied in any capacity (in graduate, non-graduate or voluntary work, continuing education, etc.) and those who were still seeking work six months after graduation. This job outcome variable is henceforth referred to as Employment Status. The second job outcome variable was more stringent, contrasting graduates obtaining a graduate-level job (whose job search can be considered to have been particularly successful) and graduates who had obtained either a non-graduate job or were unemployed (whose job search can be considered to have been relatively unsuccessful). This job outcome variable is henceforth referred to as Employment Quality. Considering outcomes in terms of whether or not people had obtained a graduate job six months after graduating in addition to in terms of whether people were simply employed or unemployed, was thought desirable since presumably most people entering university do so at least partially with the expectation that obtaining a degree will pay dividends in terms of equipping them to obtain a better job. In considering job-seeking outcomes, parallel analyses are reported for both job outcome variables. Note that, ideally, independent analyses would have been performed for Employment Status and Employment Quality by excluding unemployed people from the Employment Quality analyses and comparing only those graduates obtaining graduate-level and non-graduate-level jobs. However, because of the low sample sizes that would have resulted it was necessary to include unemployed graduates in the less successful category for the Employment Quality variable. It is therefore useful to bear in mind that there is some degree of overlap between the analyses for the two job-seeking outcome variables.

Eight cross-tabular analyses were performed to examine the associations between the two different types of job-seeking outcome and ethnicity, gender, socio-economic status and type of university attended.

The first analysis, for the Employment Status variable, showed that of the 140 people for whom there was relevant data, 104 (89%) of the 117 White graduates were gainfully occupied, and 19 (83%) of the 23 ethnic minority graduates were gainfully occupied. With 13

(11%) of White graduates and 4 (17%) of ethnic minority graduates still seeking work then, this reflected the generally recognised national situation whereby there is greater unemployment of ethnic minority graduates six months after graduation. However, a chi-square test showed no statistically reliable association between ethnicity and employment status ($\chi^2 = 0.71$, $df = 1$, $p = .40$ two-sided), and the effect size ($w = .07$) did not exceed Cohen's (1988) benchmark ($w = .10$) for a small effect size.

A similar analysis for Employment Quality showed that 49 of the 117 White graduates (42% of the White graduates) obtained a graduate job, while of the 23 ethnic minority graduates, 15 (65% of the ethnic minority graduates) obtained a graduate job. The associated chi-square statistic was significant ($\chi^2 = 4.22$, $df = 1$, $p = .04$ two-sided, effect size $w = .17$). Hence, there was a 23 percentage-point difference, with an unexpected reversal of the result for Employment Status occurring in that a greater proportion of ethnic minority graduates obtained graduate jobs. This effect exceeded Cohen's (1988) benchmark for a small effect size. It should be noted that the possibility that this difference existed because more ethnic minorities attended pre-1992 universities was excluded by a chi-square test of association, which showed that proportionately slightly more of the White graduates in the sample for which job outcome data was available had attended such universities as opposed to post-1992 universities.

Analysis examining the association between Employment Status and gender revealed that 7 (19.4%) male and 10 (9.6%) female graduates were unemployed. However, although the effect was greater than that considered by Cohen (1988) to indicate a small effect, the ten percentage-point difference whereby there was greater male unemployment was not quite large enough to yield a significant chi-square test result ($\chi^2 = 2.42$, $df = 1$, $p = .12$ two-sided, effect size $w = .13$).

The Employment Quality by gender analysis showed that of 36 male graduates, 18 (50%) obtained a graduate job, and of 104 female graduates, 46 (44%) obtained a graduate job. The chi-square test showed that this six-percentage point difference did not represent a significant association between gender and job status ($\chi^2 = 0.36$, $df = 1$, $p = .55$ two-sided, effect size $w = .05$), there therefore being no reliable difference in the extent to which males were more likely to obtain a graduate job, and a minimal effect size.

Moving on to socio-economic background, the analysis for Employment Status showed that out of 69 graduates from managerial and professional social backgrounds 8 (12%) were unemployed, of 25 graduates from backgrounds characterised as intermediate occupations 6 (24%) were unemployed, and of 18 graduates from backgrounds characterised as routine or semi-routine occupations none were unemployed. Despite, these seemingly large disparities, particularly the 24 percentage-point difference whereby people from intermediate backgrounds were *more* likely to be unemployed than those from the least wealthy backgrounds, a chi-square test showed a very marginally non-significant association between socio-economic background and Employment Status ($\chi^2 = 5.65$, $df = 2$, $p = .06$ two-sided), and a small to medium effect size ($w = .23$). *Post hoc* power calculations showed power of .58 for the observed effect size, and therefore it can be concluded that while an effect may exist, there was only a moderate chance of significance testing detecting this effect with the current overall sample size ($N = 112$).

Analysis of the association between Employment Quality and socio-economic background showed that of the 69 graduates from a managerial and professional social background 33 (48%) obtained a graduate-level job, of the 25 graduates from a social background characterised by an intermediate occupation 9 (36%) obtained a graduate-level job, and of the 18 graduates from a social background characterised by routine and semi-routine occupations 6 (33%) obtained a graduate-level job. The chi-square test showed a non-significant association between socio-economic status and job status ($\chi^2 = 1.84$, $df = 2$, $p = .40$,

effect size $w = .13$). There was therefore no statistically reliable association between socio-economic status and the extent to which people obtained graduate-level jobs. However, it should be noted that there was a 12 percentage-point difference in success rates between the managerial and professional group and the intermediate occupational background, and a 15 percentage-point difference in success rates between the managerial and professional group and the graduates from a routine and semi-routine occupational background, and that the effect size for the analysis as a whole exceeded Cohen's (1988) definition of a small effect size. Note that at .21 for the observed effect size, the power of this analysis was low and that there was little chance of significance testing detecting this effect with the current overall sample size ($N = 112$). In fact further power calculations showed that a total sample size of 571 is necessary to detect an effect of the observed size with (the generally recommended) .80 power.

The final pair of cross-tabular analyses focussed upon type of university attended. The first analysis, for Employment Status, revealed that of 86 graduates attending pre-1992 universities 11 (13%) were unemployed and of 26 graduates attending post-1992 universities 3 (12%) were unemployed. Given this very small proportional difference, it was unsurprising to find that a chi-square test yielded a non-significant result and that there was a minimal effect size ($\chi^2 = 0.03$, $df = 1$, $p = .87$ two-sided, effect size $w = .02$). There was therefore no evidence that graduates from pre-1992 universities were less likely to be unemployed than those from post-1992 universities.

The university type by Employment Quality analysis showed that of the 86 graduates who had attended pre-1992 universities, 37 (43%) obtained a graduate job, and of the 26 graduates who had attended post-1992 universities, 11 (42%) obtained a graduate job. Again, given these frequencies, it was not surprising to find that a chi-square test showed a non-significant association between type of university attended and job status ($\chi^2 = 0.00$, $df = 1$, $P = .95$ two-sided, effect size $w = .01$). From these results it can be concluded that there was no association between type of university attended and the extent to which people obtained graduate-level jobs, and that, again, there was no evidence that graduates from pre-1992 universities have an advantage over those from post-1992 universities with respect to the quality of jobs they obtained.

Although the samples were small, the above results showing that White graduates were more likely than ethnic minority graduates to be gainfully occupied six months after leaving higher education were consistent with national statistics showing greater unemployment among ethnic minority graduates for the same time frame. At 11% unemployment for the White group and 17% unemployment for the ethnic minority group the six percentage-point difference was similar to the five point difference in the HESA (2002) national statistics (however, low power because of small sample sizes meant that the current analysis did not show a significant association between ethnicity and employment status). On the other hand, when the two ethnic groups were compared in terms of having obtained and not having obtained a graduate-level job there was a significant, 23 percentage-point, ethnic minority advantage, with 58% of the White group not obtaining a graduate-level job but only 35% of the ethnic minority group not obtaining a graduate-level job. While too much emphasis should not be placed on this difference in findings because of the low sample sizes, such differences highlight the necessity of taking into account the exact nature of indices that are being considered when ethnic differences in graduate employment rates are being discussed, and suggest that for some indices ethnic minorities might actually fare better. Thus, for example, in the present instance, while proportionately more ethnic minority graduates were still looking for work six months after graduating, excluding all other categories in calculations, of those ethnic minorities who did find work proportionately fewer had to settle for non-graduate jobs (21% were in non-graduate jobs and 79% were in graduate jobs) than

was the case for the White ethnic majority graduates (where 52% were in non-graduate jobs and 48% were in graduate jobs).

While again low sample sizes were a problem, analyses with respect to socio-economic background showed that people from the more privileged backgrounds (managerial and professional) may be more successful in obtaining higher quality jobs than graduates from less privileged backgrounds (with a background characterised by employment in intermediate or routine and semi-routine occupations). On the other hand, as far as employment status was concerned, there was some evidence that people from intermediate-level occupational backgrounds fared less well in terms of being in employment of any type, particularly with respect to those from more lowly backgrounds. While it may be that one reason for this result is that the latter people would have to take-up employment of any kind (irrespective of whether it was graduate-level), the employment quality analysis does not support such an idea, there being only a three percentage-point difference, in favour of the higher social grouping, in the extent to which people from the two groups obtained graduate-level jobs.

The analyses examining gender differences in job-seeking success did not indicate that women were less successful, either in terms of obtaining employment of any type or in terms of obtaining graduate-level employment. In fact, with respect to the former measure of success, albeit that the evidence was statistically unreliable, there was a small amount of evidence that women fared better. Hence, there was no support for the ideas that women graduates are less successful in post-HE job-seeking, because, for example, they are reluctant to apply for more prestigious jobs owing to perceptions of such jobs as being stereotypically male, or because they fear that their applications for such jobs will be unsuccessful because of employer discrimination.

Finally, graduates from pre-1992 universities did not enjoy more success than those from post-1992 universities on either of the job-seeking outcome measures considered. Also, other analyses showed that attendance at a pre-1992 or post-1992 university was unlikely to account for any effects of gender and SES (but unfortunately, cell sizes were too low to examine this issue in any great depth).

4.2.2 Job-seeking behaviours and job-seeking outcomes

At a general level the examination of relationships between relative frequency of different types of job-seeking behaviour and outcomes was exploratory, there being no hypotheses as to which behaviours would prove most successful. This was entirely the case for the Employment Status variable. However, for the Employment Quality variable, at a more detailed level, it was thought that an interaction might occur whereby use of friends and family and local community contacts would result in relative success for White graduates but relative lack of success for ethnic minority graduates because, for example, the contacts of the former group would be likely to hold positions higher-up in organisations and would be more likely to be employed by well-paying employers with good career structures (such as blue chip companies) than the contacts of the latter group. This was thought to be possible since for historic reasons members of ethnic minorities have tended to occupy less attractive jobs and members of these communities have often found it difficult to break-out of such areas of employment.

Table 12: Descriptive statistics (percentage of times a method was used for a job application), effect sizes (ES) and *t*-test results (two-tailed) for differences in job seeking methods used by unemployed ($n = 16$) and employed ($n = 118$) graduates.

Job-seeking method	Status				ES <i>d</i>	<i>t</i> -test ($df=132$)	
	Unemployed		Employed			<i>t</i>	<i>p</i>
	Mean	SD	Mean	SD			
Speculative phone	6.70	12.90	1.76	6.00	.49	1.51	.15 ^a
Family/friends	1.25	5.00	3.52	9.09	-.31	-0.98	.33
Internet	45.61	24.08	33.66	29.91	.44	1.53	.13
Newspaper/Journal	11.93	12.65	23.24	27.45	-.53	2.79	.01 ^b
Job Centre	1.48	4.25	3.25	9.13	-.25	-0.76	.45
Graduate recruitment fair	0.00	0.00	0.62	3.59	-.24	-0.69	.49
Letter / CV	8.02	12.60	7.24	19.53	.05	0.16	.88
Recruitment agency	5.68	10.88	14.16	23.83	-.46	-2.43	.02 ^c
e-mail / CV	7.10	12.15	5.04	12.28	.17	0.63	.53
Local community contacts	8.63	21.12	2.36	13.38	.35	1.16	.26 ^d
Other	3.60	8.69	5.15	13.89	-.13	-0.44	.66

^a $df = 15.89$, ^b $df = 38.27$, ^c $df = 38.73$, ^d $df = 16.67$ (*t*-tests do not assume equal variances)

To examine the extent to which different job-seeking behaviours were associated with different job-seeking outcomes, two sets of eleven independent samples *t*-tests were conducted, with job-seeking outcomes (for one set of analyses, Employment Status; employed vs. unemployed, and for the other set of analyses, Employment Quality; graduate job vs. no graduate job) as the independent variables and number of times each of the eleven job-seeking methods was used as a percentage of the total number of jobs applied for, as the dependent variables. Note that separate *t*-tests were preferred to MANOVA because of the large number of dependent variables relative to the sample size. The results of the *t*-tests are given in tables 12 and 13. Table 12 reveals that people who were successful in finding employment made significantly more applications based upon advertisements in newspapers and other printed media, and through recruitment agencies than those who were unemployed. In addition to these two observations, it can also be seen that there was also a non-significant but medium-sized effect (defined as $d = .5$ by Cohen [1988]) whereby unemployed people made more applications via speculative telephone calls. Table 13 shows that the only significant differences in job-seeking methods between people who obtained and did not obtain graduate-level jobs were those for applying through the Job Centre and through letter and CV. For each of these two methods, the percentage of applications made by people who were unsuccessful in obtaining a graduate job was greater than for those who were relatively successful. Using Cohen's (1988) effect size definitions, the size of the effect for Job Centre usage can be said

to be approaching a medium effect size, and that for usage of letters and CVs at least an effect size well encompassed within the definition of a small effect (defined as $d = .2$).

Finally it is useful to observe that the tables for both job outcome variables show that for both relatively successful and unsuccessful graduates, by far the most commonly used method was application via the Internet and that there was also a reasonable amount of usage of advertisements placed in newspapers or other printed media.

Table 13: Descriptive statistics (percentage of times a method was used for a job application), effect sizes (ES) and t -test results (two-tailed) for differences in job-seeking methods employed between those not obtaining graduate jobs ($n = 73$) and those obtaining such jobs ($n = 61$).

Job-seeking method	Status				ES d	t -test ($df=132$)	
	No Graduate Job		Graduate Job			t	p
	Mean	SD	Mean	SD			
Speculative phone	1.94	6.63	2.85	8.01	-.12	0.72	.48
Family/friends	2.37	6.57	4.29	10.72	-.22	1.22	.23 ^a
Internet	34.80	27.47	35.44	31.88	-.02	0.13	.90
Newspaper/Journal	22.75	24.77	20.85	28.31	.07	0.41	.68
Job Centre	4.67	10.91	1.08	4.25	.43	2.59	.01 ^b
Graduate recruitment fair	0.59	4.06	0.49	2.33	.03	0.19	.85
Letter / CV	10.31	23.34	3.77	10.32	.36	2.16	.03 ^c
Recruitment agency	9.99	17.71	16.92	27.39	-.30	1.70	.09 ^d
e-mail / CV	5.28	11.70	5.29	12.94	.00	0.01	1.00
Local community contacts	2.15	10.36	4.25	18.41	-.14	0.83	.41
Other	5.13	14.60	4.77	11.81	.03	0.16	.88

^a $df = 95.72$, ^b $df = 96.72$, ^c $df = 102.87$, ^d $df = 99.16$ (t -tests do not assume equal variances)

Two further independent samples t -tests were conducted on total number of job applications made. For the Employment Status independent variable unemployed graduates ($M = 8.24$, $SD = 6.50$, $n = 17$) had not made as many applications as the employed graduates ($M = 10.11$, $SD = 9.58$, $n = 123$), however although the effect size ($d = .23$) was greater than Cohen's (1988) criterion for a small effect ($d = .2$), the t -test result showed that the difference was non-significant, $t(138) = 0.78$, $p = .44$ two-tailed. A parallel test for the Employment Quality independent variable showed that people who had not obtained a graduate job ($M = 10.95$, $SD = 8.81$, $n = 76$) had made more applications than those who had ($M = 8.61$, $SD = 9.70$, $n = 64$), but that, again, the difference was non-significant, $t(138) = 1.49$, $p = .14$ two-

tailed. Nevertheless the effect size ($d = .25$) was greater than Cohen's definition of a small effect.

A final pair of t -tests on job-seeking behaviours took the form of tests comparing mean number of hours per week spent searching for a job. Descriptive statistics associated with the first test, for the Employment Status independent variable, indicated that there was very little difference between the unemployed ($M = 6.76$ hours, $SD = 7.48$ hours, $n = 16$) and employed graduates ($M = 6.25$ hours, $SD = 4.73$ hours, $n = 113$), and this was confirmed by the minimal effect size ($d = .08$) and the non-significant t -test result, $t(16.74, \text{equal variances not assumed}) = 0.27, p = .79$ two-tailed. The similar test for the Employment Quality independent variable showed that the relatively unsuccessful graduates ($M = 6.15$ hours, $SD = 5.27$ hours, $n = 71$) spent marginally less time per week searching than the relatively successful graduates ($M = 6.52$ hours, $SD = 4.96$ hours, $n = 58$), but that the difference was non-significant, $t(127) = 0.41, p = .69$ two-tailed, and the effect size was again negligible ($d = .07$).

Of the eleven job-seeking methods considered, two that were of particular interest in the present context were firstly, use of family and friends, and, secondly use of local community contacts. This was the case since one issue considered to be important at the inception of the project was that, given the possibility that they would have contacts in higher status jobs, use of personal contacts might be advantageous to White graduates in securing them graduate-level employment, but that, because of the generally lower socio-economic status of ethnic minorities in the UK, the personal contacts of ethnic minority graduates would be in lower status jobs, and therefore using these contacts might be less useful in securing graduate-level employment for members of ethnic minorities. To test this hypothesis, two 2×2 between participants ANOVAs were performed separately for the use of family and friends, and use of local community contacts dependent variables, with ethnicity (White Majority vs. Ethnic Minority) and Employment Quality (Graduate Job vs. No Graduate Job) as the between participants factors. Descriptive statistics for both of these analyses are shown in Table 14.

The first ANOVA, for use of friends and family, revealed no significant main effects for ethnicity, $F(1,130) = 0.09, p = .77$, partial $\eta^2 < .01$, and Employment Quality, $F(1,130) = 0.24, p = .63$, partial $\eta^2 < .01$. Neither was there a significant interaction between ethnicity and Employment Quality, $F(1,130) = 0.34, p = .56$, partial $\eta^2 < .01$. Thus, although, as hypothesised, the upper portion of Table 14 shows that the White graduates who obtained graduate jobs used family and friends proportionately more than graduates of the same ethnicity who did not obtain graduate jobs, and that this difference was reversed for the ethnic minority graduates, this interaction was not statistically reliable.

A similar situation existed for use of local community contacts. So again, although the pattern of means in the lower portion of Table 14 was the same as for the first analysis as hypothesised, there were no significant main effects for ethnicity, $F(1,130) = 0.41, p = .52$, partial $\eta^2 < .01$, and Employment Quality, $F(1,130) = 0.13, p = .72$, partial $\eta^2 < .01$, and there was no significant interaction between ethnicity and Employment Quality, $F(1,130) = 1.77, p = .19$, partial $\eta^2 = .01$. Noting that the interaction for this second analysis was not too far from significance, and that there was a lack of power in the analysis because of the low numbers of ethnic minority graduates involved, it was thought useful to calculate effect sizes in terms of Cohen's d with respect to each ethnic group for each dependent variable. Here then, for White graduates the effect size for the difference between people with a graduate job and those without a graduate job with respect to percentage of applications made through family and friends was $d = .25$, and that for percentage of applications made through local community contacts was $d = .22$. For ethnic minority graduates the effect size for family and friends was $d = .02$ and that for local community contacts was $d = .42$. Thus, apart from the

difference between ethnic minority graduates that obtained and did not obtain graduate jobs concerning the use of family and friends (which although in the correct direction was minimal), each of the four effects was in the direction hypothesised and of a size considered by Cohen (1988) to equate to at least a statistically small effect ($d = .2$), and that for the use of local community contacts by ethnic minorities bordered on a medium effect size ($d = .5$). There was, then, some evidence in favour of the hypothesis that use of personal contacts by ethnic minorities may result in disadvantage in the labour market.

Table 14: Descriptive statistics for the ethnicity by Employment Quality ANOVAs for differences in the extent to which family and friends, and the local community were used in the job application process (as a percentage of number of applications made by each person).

	No Graduate Job			Graduate Job		
	<i>n</i>	<i>M</i>	<i>SD</i>	<i>n</i>	<i>M</i>	<i>SD</i>
<i>Family and friends</i>						
Ethnic Group						
White	65	2.17	6.52	47	4.43	11.08
Ethnic minority	8	4.03	7.20	14	3.83	9.75
<i>Local community</i>						
Ethnic Group						
White	65	1.39	8.98	47	4.81	20.45
Ethnic minority	8	8.33	17.82	14	2.38	8.91

To summarise the foregoing results, the analysis of differences in job-seeking methods between people obtaining and not obtaining graduate jobs showed that the only statistically reliable differences were for use of Job Centres and use of a speculative approach by letter and CV, both of which tended to be associated with being less successful. For Job Centres at least this seems reasonable given that jobs that are available via this avenue often tend to be lower grade jobs. While people who obtained graduate jobs tended to make slightly more use of family and friends and local community contacts, neither of these results was reliable, although the result for family and friends constituted a small effect. However, the ethnicity by Employment Quality analysis hinted that there may be something to the idea that White graduates are advantaged in the labour market by using their personal contacts, whereas members of ethnic minorities may be disadvantaged (although there were no significant interactions).

Another of the above results worth commenting on is that people who did not obtain graduate jobs made more applications than the relatively successful graduates. Although this finding was non-significant, the effect size was greater than Cohen's (1988) definition of a small effect. Were this finding shown to be robust, it would be open to at least two interpretations. It might simply be that better candidates need fewer applications to get better jobs, or it might be that people who produce a small number of applications produce well targeted high-quality applications, and because of their quality these applications are more likely to be successful.

For the Employment Status variable, there were two reliable differences in the job-seeking methods of graduates who were employed and unemployed six months after graduation: relative to those who were unemployed, employed graduates made more applications via advertisements in newspapers and other printed media, and via recruitment agencies.

4.2.3 Perceived difficulties in acquiring a job and job-seeking outcomes

The next set of relationships we looked at was whether graduates' perceptions of the difficulties that a person of their gender and ethnicity would have in obtaining jobs were related to job-seeking outcomes. Again, two parallel analyses were performed for the Employment Status and Employment Quality variables. Here, it was not necessarily thought that employment status would be affected by perceived difficulties because the analysis of job-seeking behaviours showed that there was no relationship between perceptions of difficulty in obtaining jobs and effort put in to job-seeking in terms of both number of job applications made and average time per week spent job-seeking. However, for employment quality it was thought that a self-fulfilling prophecy effect might occur whereby greater perceived difficulties could be related to lesser success in terms of not obtaining a graduate-level post because greater perceptions of difficulty might tend to restrict people to looking for lower-level jobs.

Using the component scores from the principal components analysis of the gender-specific perceived difficulties in obtaining jobs data previously reported in the subsection examining relationships between perceived difficulties in obtaining jobs and job-seeking behaviours, a first MANOVA, for employment status, was performed in order to examine differences in perceptions of difficulty in getting jobs between the graduates who were employed and those who were not employed. Factor scores from the previously mentioned factor analysis of the perceived difficulties data were dependent variables. The MANOVA showed a negligible and non-significant multivariate effect, $F(4,130) = 0.00$ (rounded), $p = .98$, partial $\eta^2 < .001$. This reflecting non-significant univariate effects for all variables; high status / graduate jobs, $F(1,135) = 0.01$, $p = .92$, partial $\eta^2 < .001$; caring / socially orientated jobs, $F(1,135) = 0.09$, $p = .76$, partial $\eta^2 < .001$; non-graduate jobs, $F(1,135) = 0.04$, $p = .85$, partial $\eta^2 < .001$; and commercial jobs, $F(1,135) = 0.20$, $p = .65$, partial $\eta^2 < .001$. Table 15 contains the descriptive statistics associated with this analysis and demonstrates the negligible differences in the means.

The second MANOVA with Employment Quality as the independent variable and, again, factors scores for perceptions of difficulty in getting the four types of job as the dependent variables, showed a non-significant multivariate effect, $F(4,130) = 1.13$, $p = .34$, partial $\eta^2 = .03$. This reflecting non-significant univariate effects for all variables; high status / graduate jobs, $F(1,133) = 0.11$, $p = .75$, partial $\eta^2 < .001$; caring / socially orientated jobs, $F(1,133) = 1.99$, $p = .16$, partial $\eta^2 = .02$; non-graduate jobs, $F(1,133) = 0.58$, $p = .45$,

partial $\eta^2 < .001$; and commercial jobs, $F(1,133) = 0.16$, $p = .69$, partial $\eta^2 < .001$. The descriptive statistics for this analysis are shown in Table 16.

Table 15: Descriptive statistics for the MANOVA for differences in perceived difficulty in obtaining jobs (factor scores) between unemployed and employed graduates.

	Unemployed ($n = 17$)		Employed ($n = 118$)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Type of job				
High status / graduate	-.17	0.91	-.20	1.03
Caring / socially orientated	-.04	0.92	-.12	1.00
Non-graduate	-.21	0.93	-.16	0.98
Commercial	.02	0.82	-.09	1.01

Table 16: Descriptive statistics for the MANOVA for differences in perceived difficulty in obtaining jobs (factor scores) between people with and without graduate jobs.

	No Graduate Job ($n = 73$)		Graduate Job ($n = 62$)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Type of job				
High status / graduate	-0.22	0.99	-0.17	1.05
Caring / socially orientated	0.00	0.93	-0.24	1.04
Non-graduate	-0.11	0.95	-0.24	1.00
Commercial	-0.11	0.99	-0.04	0.99

The results for both job outcome variables, then, showed that the extent to which graduates perceived it difficult for someone with their demographic characteristics to get different types of job made little difference as to whether they were unemployed or in some type of gainful employment, or whether they managed to obtain a graduate-level post or not. As mentioned previously, given the previous results showing no relationships between perceived difficulties and job-seeking efforts, the former results for employment status were unsurprising. However, the latter results for employment quality added to this showing that there seems to be no self-fulfilling prophecy effect whereby perceptions of difficulties leads graduates to aim low in the job market.

4.2.4 Occupational values and job-seeking outcomes

Although there was little rationale for conducting analyses examining relationships between occupational values and job-seeking behaviours, it was possible to conceive of the possibility that occupational values might have a bearing upon the nature of jobs that people sought and eventually obtained. However, prior to this, in order to reduce the number of dimensions to be considered, the occupational values data was factor analysed using Principal Axis Factoring (PAF), with Direct Oblimin (oblique) rotation. With a sample size of 1203 participants (which included all graduates who participated in the project as a whole), five factors accounting for around 41% of item variance were identified. Factor correlations (see Table 17) showed that the oblique rotation was warranted. From the factor loadings in Table 18, Factor 1 (which accounted for around 19% of variance) was interpreted as workplace equality, Factor 2 (around 10% of variance) as social concerns, Factor 3 (around 6% of variance) as conferment of social status, Factor 4 (around 4% of variance) as low stress and Factor 5 (3% of variance) as personal attribute match.

Table 17: Correlations between factors in the PAF for occupational values.

	Workplace equality	Social concerns	Conferment of social status	Low stress
Workplace equality	----			
Social concerns	.09	----		
Conferment of social status	.11	.19	----	
Low stress	-.23	-.33	-.25	----
Personal attribute match	.36	.00	.12	-.09

In the analyses reported subsequently factor scores derived from the factor analysis of occupational values were used as variables. This was preferred to a summation procedure because at least some of the subscales resulting from such a procedure would be likely to have had low internal consistencies owing to low numbers of items.

Table 18: Factor pattern matrix loadings for the PAF of occupational values.

	Factor 1 Workplace equality	Factor 2 Social concerns	Factor 3 Conferment of social status	Factor 4 Low stress	Factor 5 Personal attribute match	Extraction h^2
A low level of sexism in the workplace	.85	.09	-.08	-.05	-.10	.70
A low level of racism	.74	.08	-.05	-.04	.01	.57
A safe working environment	.62	-.03	.02	-.16	.11	.52
Top positions accessible to all	.44	.00	.19	-.07	.03	.29
A job in which you are part of the community	.16	.57	-.08	-.06	.14	.42
A mixture of people from different ethnic groups in the occupation	.28	.50	.02	-.02	-.03	.37
The opportunity to work with family members or friends	-.19	.50	.03	-.22	-.06	.39
Socially useful	.27	.36	.04	-.10	.15	.33
A job done mainly by someone of your own sex	-.23	.32	.05	-.21	-.15	.26
High status	-.05	.06	.79	.12	-.01	.60
High income	.03	-.25	.72	-.17	.02	.59
Managing others	.03	.35	.43	.17	.07	.33
A fashionable job	-.14	.23	.35	-.28	-.15	.37
Having high control over your workload	.17	-.04	.31	-.23	.06	.25
A job that is easy to obtain	.00	.11	-.05	-.61	-.03	.42
Low stress	.12	.03	-.07	-.55	-.01	.34
Flexible working hours	.03	.08	.07	-.50	.10	.33
High job security	.14	-.09	.13	-.41	.14	.28
A job that enables you to use your talents and abilities	.18	-.05	.06	.11	.73	.67
A job related to your degree subject	-.13	.05	-.02	-.08	.48	.21

No specific hypotheses were forwarded with respect to occupational values and the Employment Status variable (i.e. whether differences in occupational values would have an impact upon whether people were employed or unemployed at the end of the six month post-graduation period). On the other hand, given the nature of the factors emerging from the factor analysis, it was thought that two ways in which occupational values might be related to Employment Quality could be that people who set greater store by conferment of social status would be more likely to obtain graduate jobs because they would have greater motivation to obtain such jobs than people who were less concerned in having a job which confers high social status, and that people who put a greater value on obtaining a low stress job would be less likely to obtain graduate jobs because they would not want the pressure that may go with a graduate-level job. A third way in which it was thought that the two groups of graduates might differ involved the personal attribute match factor: people who place greater value on getting a job which matches their personal attributes should be more likely to obtain graduate jobs since such jobs should be more likely to be obtained by people who have a relevant degree, and who apply for jobs relevant to their degree.

To examine differences in occupational values between people who were employed and unemployed six months after graduating a single factor MANOVA was performed with Employment Status as a between subjects factor, and mean scores on the occupational values subscales as dependent variables. The results of the MANOVA showed that there was a significant multivariate effect, $F(5,76) = 3.82, p < .01$, partial $\eta^2 = .20$, for Employment Status. Univariate tests showed that this effect was attributable to significant effects for both importance of equality in the workplace, $F(1,80) = 7.80, p = .01$, partial $\eta^2 = .09$, and match with personal attributes, $F(1,80) = 10.46, p < .01$, partial $\eta^2 = .12$. The means in Table 19 show that the employed graduates placed a greater emphasis upon both of the aforementioned occupational values than the unemployed graduates did. Univariate tests for the three other occupational values were all non-significant: importance of social concerns, $F(1,80) = 0.14, p = .71$, partial $\eta^2 < .001$, importance of conferment of social status, $F(1,80) < 0.01, p = .98$, partial $\eta^2 < .01$ and importance attached to the job being low in stress, $F(1,80) = 0.68, p = .41$, partial $\eta^2 = .01$.

Table 19: Descriptive statistics for the MANOVA for differences in occupational values between the two Employment Status groups.

	Unemployed ($n = 12$)		Employed ($n = 70$)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Occupational value				
Equality in the workplace	5.13	1.07	6.03	1.02
Social concerns	3.30	1.63	3.43	1.01
Conferment of social status	4.12	1.26	4.13	0.92
Low stress	4.40	0.91	4.68	1.12
Match with personal attributes	4.54	1.30	5.69	1.11

For the Employment Quality variable, again a single factor MANOVA was performed with Employment Quality (graduate job vs. no graduate job) as a between subjects factor, and mean scores on the occupational values subscales as dependent variables. The MANOVA revealed a significant multivariate effect, $F(5,76) = 2.65, p = .03$, partial $\eta^2 = .15$, with univariate tests showing a significant effect for importance of a match with personal attributes, $F(1,80) = 8.11, p = .01$, partial $\eta^2 = .09$, a marginally non-significant effect for importance of conferment of social status, $F(1,80) = 3.70, p = .06$, partial $\eta^2 = .04$, and non-significant effects for importance of equality in the workplace, $F(1,80) = 0.01, p = .94$, partial $\eta^2 < .001$, importance of social concerns, $F(1,80) = 0.18, p = .68$, partial $\eta^2 < .001$, and importance attached to the job being low in stress, $F(1,80) = 0.37, p = .55$, partial $\eta^2 = .01$. From Table 20 it can be seen that graduates who were relatively successful in the labour market attached more importance to having a job which matched their personal attributes than those who were relatively unsuccessful. With respect to the marginally non-significant result for conferment of social status, again it can be seen that the relatively successful graduates attached more importance to this aspect of occupations.

From these analyses it was concluded that of the three ways in which it was thought that relatively successful and unsuccessful graduates might differ with respect to their occupational values, the above results did reflect the supposition that people who place greater value on getting a job which matches their personal attributes are more likely to be successful, since graduate jobs are more likely to go to people who have a relevant degree and who apply for jobs relevant to their degree. Although the result was marginally non-significant, conferment of social status was also valued more highly by successful graduates as had been thought likely. However, while relatively unsuccessful graduates were shown to have a slightly greater preference for low stress job characteristics this finding did not approach significance.

Table 20: Descriptive statistics for the MANOVA for differences in occupational values between the two Employment Quality groups.

	No Graduate Job ($n = 48$)		Graduate Job ($n = 34$)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Occupational value				
Equality in the workplace	5.90	1.05	5.88	1.12
Social concerns	3.45	1.19	3.35	0.99
Conferment of social status	3.95	1.01	4.36	0.86
Low stress	4.70	0.89	4.54	1.33
Match with personal attributes	5.22	1.23	5.96	1.03

Although the results for the Employment Status independent variable were of less theoretical and applied interest than those for Employment Quality, it is worth noting that graduates who were employed six months after graduation deemed equality in the workplace

and the match of jobs with their personal attributes to be more important than those who were unemployed at the same point in time.

4.2.5 Do differences in Job Centre usage explain the ethnic difference in Employment Quality?

The bivariate analyses for Employment Quality showed that there was an association between ethnicity and labour market success, with, against expectations, ethnic minority graduates enjoying greater success in obtaining graduate-level jobs. The analyses also showed that percentage of job applications made through Job Centres and by speculative approaches using a letter and CV were associated with relative lack of success. Finally, graduates who considered it important that a job should match their personal attributes were more successful. In an earlier part of the report, analyses also revealed an ethnicity difference in percentage of job applications made through Job Centres (but not in speculative approaches using a letter and CV) with White graduates using Job Centres more. While not contained in this report, an analysis contained in the first report in the series showed no difference between White graduates and ethnic minority graduates with respect to the importance of a job's match with personal attributes when job-seeking. Given these findings, of all the variables considered, only percentage of job applications made through Job Centres was a possible candidate for explaining the ethnic difference in employment quality outcome. To assess whether this variable provided an explanation, a partial correlation analysis was performed. The first-order partial correlation coefficient with Job Centre usage partialled out of the relationship between ethnicity and Employment Quality attained a value of $r(131) = .14$ ($p = .11$ two-tailed). This coefficient was not substantially smaller than the zero-order Pearson's r correlation between ethnicity and Employment Quality, $r(132) = .16$, $p = .06$ two-tailed (note that, in contrast to the earlier marginally significant relationship, in this analysis the zero-order relationship between these two variables was marginally non-significant, because of the slightly smaller sample size). It can therefore be concluded that Job Centre usage did not have much of a role in explaining the relationship between ethnicity and quality of employment obtained³.

Section Five: General conclusions

Although many conclusions were drawn when discussing results in the previous section, this final section of the main report draws together some of the more important points made.

The major observation upon which the present project was based was that, in terms of whether graduates are in employment six months after graduation, ethnic minority graduates are less successful in the job market after leaving higher education than White graduates. A difference of roughly the same size as that found in the national statistics was reflected in the present data set, although the effect was not very great in statistical terms and the difference was not large enough to be statistically significant with the present sample sizes.

In addition to the variable contrasting unemployed graduates with gainfully employed graduates, a second outcome variable took the form of one contrasting people who obtained a

³ Although it was not technically correct to conduct correlational analyses on these data, these statistics are reported in the interests of brevity, since the conclusions that resulted from a more complicated hierarchical logistic regression analysis conducted to answer the same question were the same as those for the analysis reported here.

graduate job with those who did not. Here, ethnic minority graduates were found to be disproportionately *more* likely to have obtained graduate jobs six months after graduating.

The difference in findings with respect to the two above job-seeking outcome indices suggests that while the headline statistics show an ethnic minority disadvantage in post-HE job-seeking outcomes in terms of ethnic minority graduates being more likely to be unemployed six months after graduation, the picture may not be as discouraging for ethnic minority graduates when quality of job-seeking outcomes is considered.

Apart from the above result for the ethnic minority advantage in obtaining graduate jobs, there were no large and statistically reliable differences concerning gender, socio-economic background, or type of university attended (pre- or post-1992) with respect to either employment status (whether people were gainfully employed or not) or employment quality (whether or not they had a graduate job). Although it has to be borne in mind that the analyses reported in this paper involved rather small samples, the most interesting observation made here was that the evidence did not bear out the notions that women graduates are likely to enjoy less success in the graduate job market because they fear they will experience gender discrimination in applying for higher status posts or because they stereotype such posts as being more suitable for men.

When relationships between job-seeking methods and job-seeking outcomes were considered, the only statistically significant differences were that gainfully employed graduates had made greater use of recruitment agencies and newspapers and other printed media relative to those who were not employed, and that people who did not obtain graduate jobs made more use of Job Centres. These results may suggest that the former two methods of job-seeking are useful if a graduate simply wants a job of any type and that using Job Centres is not a particularly good method of finding graduate jobs, as would seem intuitively the case.

Analysis of ethnic differences in job-seeking methods showed that there was little evidence that ethnic minority graduates were more likely to use their friends and family and / or local community contacts to obtain jobs because of fears of discrimination if they competed more widely in the job market. Also, while in our first report we have shown that ethnic minority graduates perceive it to be more difficult for someone of their own ethnicity to obtain jobs than do White graduates, in the present analyses we found little evidence that perceived difficulties in obtaining jobs had an influence on the job-seeking methods used. For example, perceptions of greater difficulty do not appear to make people more likely to use members of their family or friends when finding posts to apply for. However, although the evidence was not statistically reliable, differences in effect sizes in separate analyses for the two ethnic groups for relationships between employment quality (graduate job or no graduate job) and usage of personal contacts showed that ethnic minority graduates' use of such contacts may result in a slight disadvantage compared to similar usage by White graduates. In summary, there was not much overall support for the idea that ethnic minority graduates are disadvantaged in their job searches because their perception that it will be more difficult for them to obtain a job leads them to use personal contacts who, because they have a disproportionate tendency to be in lower status jobs, are not well placed to provide good job opportunities. But there was some support for the final link in this casual chain: the idea that ethnic minorities' usage of personal contacts may put them at a disadvantage relative to the White majority. Of course, given that ethnic minority graduates' job-seeking resulted in a greater likelihood of obtaining a graduate job relative to White graduates, any such effects were obviously more than counterbalanced by other factors.

As an addendum to the above observations concerning perceptions of difficulties in obtaining jobs, it is also useful to recall that, irrespective of demographic characteristics, there

was no self-fulfilling prophecy effect whereby perceptions of difficulties lead to poorer job-seeking outcomes for either of the two types of outcome considered.

The only ethnic difference in job-seeking methods that existed was that White graduates were more likely to make applications using Job Centres than ethnic minority graduates. Given that greater use of Job Centres was associated with a lesser likelihood of obtaining a graduate job and that White graduates were also less likely to obtain graduate jobs, an obvious interpretation would be that because graduate jobs are less likely to be advertised in Job Centres, White graduates' greater use of Job Centres put them at a disadvantage. However, there was little support for such an assertion, the relationship between ethnicity and finding a graduate job diminishing only slightly when Job Centre usage was statistically controlled.

Consistent with the fact that White graduates were more likely to use Job Centres and the above characterisation of the types of jobs that are available in Job Centres, ethnic minority graduates also sought higher salaries. As was also true of the finding that ethnic minority graduates obtained proportionately more graduate jobs, this does not support the notion that ethnic minority graduates target lower status jobs because they perceive themselves to be at a disadvantage in the job market. However, we plan to check whether demographic factors and types of subject studied can explain this (for example, it may be that the ethnic minority graduates were disproportionately based in London where salaries are higher, and / or that the ethnic minority graduates tended to study academic disciplines that equipped them for applying for posts in more highly remunerated occupations).

In general, there was an absence of gender differences in the job-seeking methods used by the graduates. However, the data showed that across all gender and ethnic groups there was a large amount of Internet usage during job-seeking. The fact that no differences existed in usage of this method was encouraging since it might have been assumed that females and ethnic minorities would be placed at a disadvantage by the increasing usage of the Internet as a recruitment tool by all types of organisation. So, far from the increasing tendency of companies to use the Internet for recruitment being a factor that might possibly exacerbate inequalities in access to jobs, the present evidence suggests that such a trend may help to level the playing field.

In ending this report, it is important to note that for the purposes of the present analyses involving the employment quality variable any graduate who did not obtain a (self-declared) graduate-level job was categorised as being relatively unsuccessful. Whether any particular graduate themselves sees their taking up of a job that does not require a degree as meaning that they have been unsuccessful is a different matter. In fact, entering employment at a non-graduate level does not necessarily make for medium-term / long-term problems. Aiming low can be a useful strategy in that people of graduate calibre can often rise quickly in a company if they prove their worth. So this might be a useful strategy for people who find it difficult to compete in the graduate job market either because they lack self-confidence, or do not fit the perceived demographic profile that might be expected by employers of graduates (e.g. white, middle class, with the lack of any pronounced regional or foreign accent). Of course, any graduate intending to pursue such a strategy should ensure that there are sufficient prospects for promotion within companies or organisations to which they apply for employment.

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Appendix

Descriptions of Selected Cases

Although useful for obtaining insight into overall patterns of job-seeking behaviours, the quantitative analyses that form the bulk of this report do not provide much detail of job-seeking behaviours at an individual level. The case descriptions of the four ethnic minority graduate job-seekers contained in this appendix are therefore provided for those readers with an interest in considering some individual patterns of behaviour.

In selecting the cases for this appendix it was considered useful to include profiles of graduates from different minority ethnic groups, although no comment is made on the extent to which these profiles shed light upon the reasons why the graduates' job searches were more or less successful than those of others⁴. In the interests of brevity outcomes of job applications that did not reach the interview stage are not explicitly mentioned.

In considering the graduates' job-seeking behaviours, both the data from the quantitative and qualitative data from job-seeking diaries and the quantitative data from other questionnaires is considered (although data on occupational values is not considered because it was missing for a number of the people chosen). With respect to quantitative data from both sources, using the data set as a whole (i.e. using the combined data for all ethnic majority and ethnic minority groups) we calculated graduates' *z*-scores for various measures, and for each participant profiled we focussed upon variables where *z*-scores exceeded +/- 1.00 (i.e. scores which were greater or less than one standard deviation from the mean for the whole data set). The *z*-scores, and for some variables the raw scores that the *z*-scores represent, are presented in Tables A1 to A5.

Graduate 1: A female Black Caribbean graduate who obtained a graduate-level post.

This person was 37 years old upon entering her BSc Sociology course at a post-1992 university in London. She gained entry to university with a certificate in Urban Community Studies and a Diploma in Race and Racism, and had been a manager of a children's home prior to entering university. She was the first person in her family to have undertaken an HE course, intended to live in her own home upon graduating (as opposed, for example, to living with her parents), and considered herself to be working class. She graduated with an upper second class degree. Upon leaving university she did not intend to target any specific type of job. Her degree subject was of some relevance to all of the jobs she had applied for. All of the jobs were in the London area, and apart from one post were at graduate-level and largely in the public sector. Her first four applications were for jobs as a personal advisor, fund programme manager, job network officer and behavioural support worker. These jobs offered salaries which tended to be in the £20,000 - £30,000 range (and her *z*-score data in Table A1 show that overall she tended to apply for jobs with higher salaries than most other participants, probably because of her previous experience), and had been advertised in newspapers or other paper media. Subsequent to lack of success with these applications she registered with four recruitment agencies with the aim of obtaining employment in the area of social care (in fact, the *z*-score data in Table A2 shows that she had a greater tendency to use

⁴ It was originally intended to include the profiles of relatively successful and unsuccessful ethnic minority graduates paired for gender and ethnicity in this appendix. However, after the pairs were formed and the case studies were written and shown to the graduates concerned, two of the less successful graduates (i.e. graduates who did not graduate-level jobs) failed to give permission for their case studies to be included in a document that was to be made publicly available and therefore it was necessary to exclude these cases.

recruitment agencies than most other participants). Contact with one of these agencies resulted in an interview for a graduate-level post as a housing support worker dealing with anti-social behaviour (salary unknown), but this did not result in a job offer (apart from the job she obtained, from all of the applications made this was the only post for which she was invited for interview). In addition to using recruitment agencies, she still persisted with other job search methods and applied for a post as a local authority research officer (salary £20,000) via a newspaper advertisement and a post as a director of a community action project (salary £30,000) via the Internet. Two weeks after making her first job application, and after making ten job applications, via a recruitment agency, she was successful in obtaining a job as a housing officer with a housing association in her home town area (London) at a salary of £24,000 per annum.

Relative to the sample as a whole, the z-score data in Table A4 shows that while she did not think that her age or gender were responsible for her failure to obtain jobs that she applied for, she did think that her ethnicity and religion may have been problematic. This was the case even though her data on the perceived difficulties in obtaining a job questionnaire (see Table A3) indicated that she was not particularly extreme in her perceptions that someone of her gender and ethnicity would find it difficult to get a graduate job. In fact she thought that it would be particularly easy for someone with her gender and ethnicity characteristics to get a caring / socially orientated job. But given that she did not score particularly highly as far as any of the possible non-demographic reasons for failure to secure jobs were concerned (being under- or over-qualified, quality of applications, interview performance or lack of experience: see Table A5), her ethnicity and religion seemed to be particularly salient to her as reasons for not obtaining the posts she applied for.

To summarise, the fact she thought that her gender and ethnicity might be causing problems in gaining employment did not deter this person from persevering in applying for jobs with a reasonably high status and reasonable salaries (this is likely to have been attributable to the fact that she had been a mature student and had held a responsible job prior to entering university and was therefore not prepared to apply for low-grade employment), and this behaviour paid off, with success in obtaining a graduate-level job coming quite quickly, albeit as the result of a lot of effort.

Graduate 2: A male Indian graduate who obtained a graduate-level post.

This graduate was aged 18 when he started his BA Economics and Management course at a pre-1992 university in West Yorkshire. His highest earning parent was an accountant, and both of his parents had attended university, but the graduate thought of himself as working class. He entered university with A' levels. After graduating he intended to share rented private accommodation, and obtain employment in the advertising industry in an accounts management department. Subsequent to graduating with an upper second class degree, all of the posts that this person applied for were for non-public sector companies in London. The first two posts applied for were graduate-level jobs in accounts management discovered on the Internet, the first one at a salary of £18,000, and the second at an unknown salary. The next three applications were for posts in advertising, which appear to have been less relevant to this person's degree subject. Two of these jobs were accessed through a recruitment agency and one was accessed through a newspaper or other printed media. The first advertising post was an advertising trainee which offered a salary of £16,500 and did not require a degree. The other two advertising posts were both at graduate-level, one as a trainee advertising executive (salary £18,000) and one in television advertising sales (salary unknown). Although an interview was obtained for the former of these two jobs, he did not attend the interview

because he did not want the job. Next he applied for a post as a Junior Analyst that he found on the Internet (a non-graduate-level post with an unknown salary) but the vacancy had already been filled when his application was received. The next two applications were to two companies offering non-graduate-level jobs in event staffing, both of which were sought out using a speculative approach by telephone (these two applications made over the telephone constituted over one-fifth of his job applications, and this relatively high proportionate use of the telephone is reflected in his rather high z -score for this activity shown in Table A2). The rate of pay for the first of these jobs was £6 per hour with an estimated salary of £12,480 per annum, and the pay for the other post varied (although it was not stated in the person's job seeking diary, it seems likely that these two jobs only offered employment on an irregular basis). Job offers were received for both of these posts, however, shortly after these offers, five weeks after first applying for a job, and after nine job applications, using a speculative approach by letter and CV he obtained and accepted a graduate-level job in his home area (London) as a television assistant on a salary of £16,500 per annum.

Examination of the z -scores concerning this person's opinions as to why he failed to obtain jobs that he applied for showed that he did not consider that his demographic profile was particularly problematic (see Table A4) and this was also true for the non-demographic reasons (see Table A5). In fact, this person seemed particularly confident that his interview performance was not letting him down. In general the aforementioned lack of concern about the possibility that his demographic characteristics might have been responsible for him not obtaining jobs was reflected in the perception of difficulties in obtaining jobs data (see Table A3) which showed that, apart from his perception that people of his gender and ethnicity might have problems getting caring socially / socially orientated jobs (a perception that was not relevant to his job search given the types of job that he was targeting), this person did not see any particular problem with people like himself getting jobs.

In summary, this person persisted in applying for the types of job that he intended to target upon leaving university, while, when it became apparent that success might not come quickly, also being prepared for less regular lower-level work to tide him over until he had achieved what he set out to (which he ultimately did). Also, this case illustrates the value of a speculative approach and perseverance. With respect to this latter point, part of the reason behind this person's ultimate success may have been the amount of job seeking he did, the relevant z -score in Table A1 showing that he was quite highly placed in the distribution of people with respect to the number of hours per week he devoted to job-seeking.

Graduate 3: A female Pakistani graduate who obtained a graduate-level post.

This person was aged 19 when she commenced her BSc Business Management and Marketing course at a pre-1992 university in London. Her highest earning parent was a Mechanical Engineer, she entered university with A' levels and at least one of her siblings had previously entered HE. She did not think of herself as belonging to any specific social class. She did not have any specific ideas about the type of work that she would target when she left HE, and it was not known whether she planned to live at home or elsewhere. Subsequent to graduating with an upper second class degree she made ten job applications. The amount of time per week she spent searching for jobs was rather low compared to other graduates (see Table A1). Of the nine posts she applied for before she was successful, all were in London, and she learned of six posts via the Internet and three via newspapers or other paper media. Her use of the Internet in this respect was comparatively high compared to that of the graduates as a whole (see Table A2). Six of the applications involved public service jobs, three of them being with local authorities (two graduate-level posts as an Administrative

Clerk / Officer at salaries of £18,000, and one graduate-level post as a Referrals Officer at a salary of £18,000, and one of them being a graduate-level post in national government as an Executive Officer (salary again £18,000). The other two public service jobs were both graduate-level posts with non-public sector organisations; one as a Primary Learning Mentor (salary £21,000) and one as a School Home Support Assistant (salary £18,000). The three non-public service posts applied for were varied; one was a non-graduate post as a part-time administrator (salary £14,000) with a company whose business is unknown, one was with a nationally known private sector employment agency as a Trainee Recruitment Consultant (it is unknown whether this was a graduate-level job, salary £18,000), and one was for a place on the graduate training scheme of a nationally known supermarket (salary £21,000). She obtained an interview for this latter post, but was unsuccessful. However, three weeks after starting her job search she obtained a post as a teacher at an Islamic girls' primary school within her home area (London) with an unknown salary, a job which she had first seen on the Internet.

The quantitative demographic data (Table A4) showed that although she seemed to be confident that her age was not a factor in preventing her getting the job that she was unsuccessful in applying for, she thought that her ethnicity was particularly problematic (and also her religion too, but to a less extreme extent). This was consistent with the data on perceptions of difficulty in obtaining a job, which placed her perceptions of the difficulties that would be experienced by someone of her own gender and ethnicity as being above the mean for all four of these factors (Table A3), and showed that these perceptions were particularly salient as far as caring / socially orientated and high status graduate jobs were concerned. However, this latter perception did not deter her from applying for graduate-level posts. She also held the opinion that both the quality of her job applications and her performance in interviews might be important factors in her failure to obtain jobs that she applied for.

Summarising, this graduate appears to have perceived that her ethnicity was likely to be an issue when applying for jobs, although this did not deter her from applying for a range of positions. When she failed to get many responses she applied for (and obtained) a job in her own religious community.

Graduate 4: A female Pakistani graduate who did not obtain a graduate-level post.

This person had again entered HE at the age of 19, when she enrolled in a BSc Honours Psychology course at a post-1992 university in London. Her father was a market trader, no members of her family had previously entered HE, and the graduate thought of herself as working class. Entering university with A' levels, she did not have any firm ideas about the type of work that she planned to go into when she left university, and it was not known whether she planned to live at home or elsewhere. Leaving university with an upper second class degree, all of the posts that this person applied for were seen on the Internet (hence her high *z*-score for this job-seeking method in Table A2) and the first seven were in London. Only the first post (a graduate-level post as an Assistant Psychologist at an NHS Trust, salary £14,275 per annum) was closely related to her degree. On failing to obtain an interview for this job she applied for a number of educational posts in London through educational employment agencies; daily paid Special Needs Assistant post (daily pay £50.00 - £65.00, whether this was graduate-level is unknown), graduate-level Classroom Assistant (£7.00 per hour), and graduate-level Learning Support Assistant post (£7.00 per hour). Subsequently, she applied for an unspecified post through or with (this was unclear in the diary) a more general London-based recruitment agency (salary £30,000) per year, before applying for a graduate-

level job as a Social Work Assistant (pay £7.50 – 10.50 per hour) using a Health and Social Care Recruitment Agency. After applying for another graduate-level Teaching Assistant post in London (salary unknown), she then used the same educational recruitment agency that she had used to apply for most of the other educational posts in London to apply for a graduate-level job as a Primary Support Assistant in Derbyshire (pay £45 per day). Following the lack of success of all these efforts she applied for six posts with her home area local authority (in Buckinghamshire); part-time, non-graduate-level, Library Assistant (salary £12,873 – 15,201 pro rata, number of hours unspecified), non-graduate-level Learning Support Assistant (salary £7,092 – 8,374), non-graduate-level Library Shelver (salary unknown), graduate-level Learning Support Assistant (salary £12,000 – 18,000), non-graduate-level, Administration Assistant (salary unknown). Finally, after applying for 14 jobs in approximately 20 weeks, an application to her local authority for a non-graduate job as a receptionist on a salary of £12,000 per annum was successful. She first became aware of this post via the Internet and this appears to be the only post for which an interview was forthcoming.

With respect to her opinions as to why she failed to obtain posts that she applied for, the quantitative data for demographic reasons (see Table A4) showed that she considered all four attributes (her age, ethnicity, gender and religion) to be particularly relevant. Such opinions were also reflected on the difficulties questionnaire where her responses showed that she thought that someone of her gender and ethnicity would find it particularly difficult to obtain caring / socially orientated, non-graduate and commercial jobs, but not high status graduate jobs. The data also showed that she considered both the quality of her job applications and lack of experience to be instrumental in her failure to obtain posts that she applied for.

Summing-up, after initially persisting in applying for a number of posts that were somewhat related to her degree but failing to obtain any of these posts, and being prepared to look outside her home area in doing this, this person eventually seems to have settled for applying for a series of non-graduate posts in her home area, which ultimately resulted in some degree of success.

Table A2: Job search methods used by case study participants (continued overleaf)

	Percentage of Applications									
	Phone		Family & Friends		Internet		Newspaper etc		Job Centre	
	%	z	%	z	%	z	%	z	%	z
Graduate										
1. Caribbean Female (graduate post)	0	-0.32	0	-0.40	9	-0.92	45	0.98	0	-0.36
2. Indian Male (graduate post)	22	2.34	0	-0.40	33	-0.11	11	-0.34	0	-0.36
3. Pakistani Female (graduate post)	0	-0.32	0	-0.40	70	1.13	30	0.39	0	-0.36
4. Pakistani Female (non-graduate post)	0	-0.32	0	-0.40	100	2.14	0	-0.77	0	-0.36

Table A2 (continued): Job search methods used by case study participants

	Percentage of Applications											
	Recruitment Fair		Speculative Letter /CV		Recruitment Agency		e-mail/CV		Local Community		Other	
	%	z	%	z	%	z	%	z	%	z	%	z
Graduate												
1. Caribbean Female (graduate post)	0	-0.20	0	-0.43	45	1.41	0	-0.43	0	-0.22	0	-0.38
2. Indian Male (graduate post)	0	-0.20	0	-0.43	22	0.39	11	0.55	0	-0.22	0	-0.38
3. Pakistani Female (graduate post)	0	-0.20	0	-0.43	0	-0.58	0	-0.43	0	-0.22	0	-0.38
4. Pakistani Female (non-graduate post)	0	-0.20	0	-0.43	0	-0.58	0	-0.43	0	-0.22	0	-0.38

Table A3: Gender specific perceptions of difficulty in obtaining jobs for case study participants (z-scores).

	Type of Job			
	High Status (Graduate)	Caring / Socially Orientated	Non- Graduate	Commercial
Graduate				
1. Caribbean Female (graduate post)	0.85	-2.31	-0.14	-0.27
2. Indian Male (graduate post)	-0.25	1.25	-0.48	-0.03
3. Pakistani Female (graduate post)	1.24	1.11	0.89	0.70
4. Pakistani Female (non-graduate post)	0.74	1.32	2.69	4.83

Table A4: Demographic reasons for not obtaining jobs among case study participants

	Mean raw scale scores (<i>R</i>) and <i>z</i> -scores of means							
	Age		Ethnicity		Gender		Religion	
	<i>R</i>	<i>z</i>	<i>R</i>	<i>z</i>	<i>R</i>	<i>z</i>	<i>R</i>	<i>z</i>
Graduate								
1. Caribbean Female (graduate post)	2.00	-0.23	2.33	1.35	2.00	0.88	2.00	1.32
2. Indian Male (graduate post)	2.00	-0.23	1.80	0.58	1.00	-0.59	1.00	-0.43
3. Pakistani Female (graduate post)	1.00	-1.11	2.13	1.05	1.13	-0.40	1.75	0.88
4. Pakistani Female (non-graduate post)	4.83	2.26	2.33	1.35	2.67	1.86	2.83	2.77

Table A5: Non-demographic reasons for not obtaining jobs among case study participants

	Mean raw scale scores (R) and z-scores of means									
	Under Qualified		Quality of Application		Over Qualified		Interview Performance		Lack of Experience	
	<i>R</i>	<i>z</i>	<i>R</i>	<i>z</i>	<i>R</i>	<i>z</i>	<i>R</i>	<i>z</i>	<i>R</i>	<i>z</i>
Graduate										
1. Caribbean Female (graduate post)	3.67	0.54	2.33	-0.34	3.00	0.92	-----	-----	5.67	0.83
2. Indian Male (graduate post)	3.25	0.24	3.80	0.83	1.20	-0.67	1.00	-1.61	3.40	-0.75
3. Pakistani Female (graduate post)	3.00	0.06	4.75	1.59	1.38	-0.51	7.00	2.01	5.38	0.63
4. Pakistani Female (non-graduate post)	3.33	0.30	4.50	1.39	2.50	0.48	-----	-----	6.17	1.18