

IMMIGRANT JOB SEARCH IN THE UK

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Abstract

Most immigrant groups in the UK experience higher unemployment rates than otherwise similar UK born whites. Empirical research to date has attributed this finding to discrimination, lack of English Language fluency and the (non-) transferability of skills acquired before immigration. In this paper, we investigate how the job search methods of unemployed white and ethnic minority immigrants, and their success in exiting unemployment, compare with the UK born, using the panel element of the Quarterly Labour Force Survey, pooled over 1997-2001. We condition, amongst other things, on some observable immigrant characteristics and discuss the policy implications of our findings.

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1. Introduction

It is now well-established that many immigrant groups, particularly from some of the largest ethnic minority groups in the UK, are significantly more likely to report being unemployed than otherwise similar UK born whites. Moreover, Shields and Wailoo (2002) have shown that the nature of this unemployment is predominantly involuntary. Amongst the explanations explored to date are theories related to discrimination, variations in English Language fluency and the (non-) transferability of skills acquired outside the UK (see Hatton and Wheatley Price, 1999).

Blackaby *et al.* (1997, 1999) using the 1991 Census and annual Labour Force Surveys¹ respectively, examine the determinants of the white / ethnic minority differences in unemployment rates in the UK using Oaxaca-type decomposition methodologies. They find that characteristic differences can explain the majority of the unemployment rate gap for Africans and the Irish, whilst differential rewards to these characteristics are the primary cause amongst Bangladeshis, Indians and Pakistanis. The variations in the size of the latter component are attributed to a number of factors including different amounts of discrimination, the contrasting response of ethnic minority groups to discrimination, greater amounts of non-assimilation by some groups and variations in endowments of unobserved characteristics (Blackaby *et al.* 1997, 1999).

However, important omitted variables, such as English language fluency, detailed information on qualifications and work experience gained abroad and, since the samples contain 16-24 year olds, ethnic differences in the take up of higher education (see Modood and Shiner, 1994) may also account for some of the unexplained component. Furthermore, Thomas (1997) has argued that a reduced willingness to commute on the part of ethnic minorities may explain 20% of the ethnic difference in the average duration of unemployment spells, but that different cultural attitudes to work have no impact (Thomas, 1998).

Importantly, the focus on ethnicity, as the sole distinguishing characteristic, fails to adequately allow for possible variations between and within ethnic groups according to immigrant status, country of birth, years since immigration or English Language fluency. Shields and Wheatley Price (2001, 2002) have provided direct evidence on the employment and earnings benefits of the latter, based on information in the Fourth National Survey of Ethnic Minorities (see Modood *et al.*, 1997). In particular, they report that a lack of English language fluency reduces average predicted employment probabilities by 20-25 percentage points for ethnic minority immigrants in the UK. Dustmann and Fabbri (2000) and Leslie and Lindley

¹ The definition of unemployment used in the 1991 Census, although close to the International Labour Office (ILO) definition (see footnote 2), makes no time restriction concerning responses to when job search activity was last undertaken. This leads to a higher response rate to this question and therefore higher reported rates of unemployment in comparison to the ILO definition used in the LFS.

(2001) also find that English language fluency enhances employment prospects and reduces unemployment rates, respectively, by a similar order of magnitude using the same data source.

Wheatley Price (2001) shows that the unemployment rates of recent immigrants are more than double those of their respective averages. White immigrants, after only 10-15 years, experience unemployment rates similar to those of UK born whites, whereas the unemployment probabilities of ethnic minority immigrants never converge to those of UK born white. Ethnic minority immigrants experience a more severe unemployment problem when they first arrive, which diminishes rapidly to about 14% after about 15-20 years. Hence, for both groups of immigrant workers, there is some evidence that the adjustment process, outlined by Chiswick (1982) and Chiswick and Hurst (1998), is valid in the English labour market. Furthermore, there are wide variations in the unemployment experience of immigrants, even after controlling for observable factors. In particular, remaining country of birth differences may be attributable to the quality of education obtained abroad, the transferability of human capital acquired before migration and variations in the distribution of unobserved characteristics.

A further potential explanation for differential unemployment rates between immigrants residing in the UK and the UK born may arise from differences in their job search behaviour and the success of these methods. So far a lack of suitable longitudinal data has hindered the empirical exploration of this area. However, in this paper, we are able to investigate the job search activities of ILO unemployed² amongst these groups, and their relative success in (re-)entering employment, by utilising the panel element of the Quarterly Labour Force Survey of the United Kingdom, pooled over 1997-2001. We explore hypotheses initially suggested by Chiswick (1982) in his model of immigrant employment adjustment that we outline in Section 2. In section 3 we describe the construction of our dataset, the main characteristics of the resultant samples and the job search strategies of the ILO unemployed. Section 4 describes our empirical approach and discusses our main results. Some initial conclusions are drawn in Section 5.

2. Key Hypotheses

The standard model of job search suggests that individuals engage in a process of acquiring information about potential employment activities (Mortensen, 1986). In particular, job seekers are concerned with how the rewards from different job offers compare with their reservation wage and which job search strategies yield the best job offers. However, different job search methods and intensities give rise to

² According to the internationally recognised standard devised by the International Labour Office (ILO), a person is unemployed if they are of working age, without a paid job, are available to start work in the next two weeks and have either looked for work at some time in the previous four weeks, or are waiting to begin employment which has already been secured (see Sly, 1994, technical note). The total number of such males, as a percentage of the economically active male population is the ILO unemployment rate.

suitable job offers for any particular individual with varying costs and efficiency. Furthermore, individuals will not be uniform in the effectiveness of their job search or their preferences for search intensity. As in this study, a number of papers³ have been primarily concerned with the nature of the job search process, amongst the unemployed, and its effectiveness in achieving subsequent employment. Empirically, research in this area seeks to examine whether various individual and household characteristics, personal labour market history and job preferences influence the choice of job search strategy and the probability of a successful employment outcome. The results help to inform policymakers with a view to improving future job matching.

Given the primary focus of this paper, on differences in the job search behaviour and outcomes between immigrant and UK born unemployed individuals, there are a number of additional hypotheses we wish to examine. These arise primarily from Chiswick's (1982) model of immigrant job search behaviour, which discusses the importance of an adjustment process (as immigrants adapt to the prevailing labour market conditions of the host country and become familiar with the different institutional framework) and the particular characteristics of the foreign born. Immigrants are assumed to carry with them human capital, in the form of formal schooling and labour market skills, acquired in their country of birth. These skills do not transfer perfectly across national borders due to the different characteristics of each country's labour market (Chiswick, 1978).

In addition, the knowledge acquired in the source country by the immigrant, concerning the labour market in the destination country of choice, is assumed to be imperfect. The sources of information, often previous immigrants from the same origin country, may be biased and incomplete. Therefore immigrants (especially the small number who are refugees) are unable to prepare adequately for employment in the destination labour market and are thus at a disadvantage, compared to otherwise equivalent native born males, when they enter it.

As with other new entrants to the labour market, immigrants are unlikely to have already arranged employment and are therefore more likely to be unemployed. Thus, they will need to engage in job search activity, which is likely to be less effective than that of equivalent natives since immigrants may suffer from a lack of appropriate language skills. They also may have little knowledge of the local labour market institutions, job opportunities or the specific nature of many jobs. An obvious initial job search strategy is to make use of friends, extended family and previous immigrant networks in order to access paid employment.

³ See, for example, Holzer (1998) for the US, Osberg (1993) for Canada, Gregg and Wadsworth (1996) for Britain, and more recently, Boheim and Taylor (2001) for Britain, Addison and Portugal (2002) for Portugal and Weber and Mahringer (2002) for Austria.

One consequence of the lack of knowledge of local labour market conditions for immigrants is that they are unaware of where the most profitable job opportunities lie. This results in greater uncertainty about the job offers they receive, providing an incentive for immigrants to engage in more job search activity than the native born, who are able to evaluate job offers more accurately. Thus immigrants might be expected to sacrifice more resources during the job search process in order to understand the local labour market better and find more profitable job opportunities. Since time is one of the most important resources for job search, immigrants, on average, would be expected to initially spend less time in employment, and more time in job search from unemployment, than natives. Alternatively, it may be the case that immigrants search more intensively than equivalent native born unemployed individuals.

Additionally, from the employer's perspective, the suitability of immigrants as employees may be hard to judge. This is more likely the less similar is the country of origin to the UK, especially in terms of its economic structure and educational system. The greater their uncertainty, the lower will be employer's estimates of the benefits from hiring foreign born workers with a resultant lower distribution of wage offers received by the immigrant job seekers. Furthermore, many foreign born workers may not be fluent communicators in the English language, which could severely limit the value, to the employer, of such employees (Dustmann and Fabbri, 2000; Leslie and Lindley, 2001; Shields and Wheatley Price, 2001, 2002) and restrict their ability to successfully undertake certain jobs.

Over time, through investments in location-specific human capital, immigrants would be expected to adjust to the host country's labour market conditions by acquiring the necessary knowledge and employer-desirable skills. This would enable them to increasingly accept employment opportunities that match their aspirations and spend less time in job search from unemployment. Furthermore, employers will be able to assess an immigrant's productivity more accurately and will make fewer hiring mistakes. These adjustments suggest that immigrant workers would, as their duration of residence in the UK increases, become as effective in their job search as the native born. Indeed Daneshvary *et al.* (1992) find evidence that immigrants in the US are using job search information to the same extent as the US born just 12 years after immigration.

3. Sample Description

3.1 Source of sample

Our sample is derived from the Quarterly Labour Force Survey (QLFS) of the United Kingdom. The Labour Force Survey has been undertaken since 1973. Its primary purpose is to collect internationally comparable employment and unemployment data at a regional and national level for the UK. The questionnaire covers areas such as economic activity, education and training, household structure, qualifications, job search behaviour and working environment. At the beginning of 1992 a quarterly element was introduced, for Great Britain. The total number of households successfully questioned each quarter is approximately 64,000, amounting to some 167,000 persons. Each household is questioned for five successive surveys, so that if the household is first surveyed in Spring (interviews conducted between March and May) of one year (wave 1) interviews will be attempted with them each successive quarter (waves 2, 3 & 4) until (and including) the Spring of the following year (wave 5). Hence, each respondent may be observed in the sample up to 5 times (in all 5 waves) but only 20% of the sample is refreshed each quarter (wave 1 are the new entrants).

The panel element of the QLFS has been relatively under-utilised in empirical work and is the only substantial source of detailed longitudinal data on the labour market activity of immigrants in the UK.⁴ We constructed a series of 16 overlapping panel datasets, beginning with those individuals who are first successfully interviewed in the Spring QLFS of 1997 (between March and May of that year) and following them through to the Spring QLFS of 1998. The next panel was first sampled during the Summer QLFS of 1997 and was followed until the Summer QLFS of 1998. Our final panel comprises individuals whose first interview was conducted on the Winter QLFS of 2000 and who completed their potential duration in the panel in the Winter QLFS of 2001.

3.2 Description of sample

The specific sample we utilise comprises males, aged 24-65, who are resident in the United Kingdom and not engaged in full-time education. We select those who report currently experiencing a spell of ILO unemployment at least once, during their time in one of the QLFS panels described above, and who report country of birth information. The resultant sample of 46756 observations is based on 12016 individuals, who are present for an average of 3.89 quarters (or waves).

⁴ The British Household Panel Survey, used in Boheim and Taylor (2001), yields a sample of 655 males, who experience an unemployment spell and for whom job search strategy information is available. Immigrants would constitute a small subset of this sample.

Those who were born outside the UK and report their ethnicity as white – termed white immigrants – account for 2189 (4.7%) of the observations and 610 (5.1%) of the individuals and are present in the sample for 3.59 quarters on average. White immigrants comprise three main groups – those immigrants with British nationality (40.6% of all white immigrants), those born in the Irish Republic (18.5%) and Other immigrants (40.8%). Ethnic minority immigrants, who report their ethnicity as other than white, represent 3042 (6.5% of the total sample) observations based on 757 (6.3%) individuals who appear an average of 4.02 times in the sample. The main groups of ethnic minority immigrants are: - Indians (21.4% of ethnic minority immigrants), Pakistanis (19.6%), Bangladeshis (9.6%), Black Caribbeans (10.8%), Black Africans (12.9%) and Other ethnicity immigrants (25.6%).

Just over half the total sample (55.5%) was present in all five waves of their panel. This proportion is lower (43.6%) for white immigrants but higher (63.1%) for ethnic minority immigrants. The proportion of the sample that report currently being unemployed in any spell is on average 54.3% (55.4% for white immigrants; 55.6% for ethnic minority immigrants). This proportion declines gradually with duration in the panel reflecting both attrition and exits from unemployment. In wave 1 the proportion experiencing unemployment is 58.9% (62.2% for white immigrants; 64.4% for ethnic minority immigrants whilst at wave 5 it is 50.6% (51.0% for white immigrants; 46.9% for ethnic minority immigrants).

The sample means for the UK born, white immigrants and ethnic minority immigrants are presented in Table A1 in the Appendix. They illustrate the main features of our sample, many of which are in common with the usual findings for the respective populations. The age distribution of immigrants is slightly younger than that of the UK born, whilst the ethnic minority immigrants in our sample are more likely to be married and have a greater number of children than UK born or white immigrants. Immigrants, who report ILO unemployment at least once in our sample, are more likely to be found in the highest and lowest qualification groups, whilst ethnic minority immigrants are substantially more likely to possess no qualifications at all compared to the equivalent UK born sample. Immigrants are geographically concentrated in London, with a large proportion of white immigrants also found in the South and many ethnic minority immigrants located in the Midlands. The immigrants in our sample have, on average, been in the UK for over 20 years and most completed their full-time education before entering the UK. It is important to note that a substantial minority of interviews (approximately 30% of our observations) are conducted by proxy in the QLFS, primarily with the partner of the actual respondent. Finally, it is clear that our sample is evenly drawn from interviews conducted during the four seasonal quarters of the year, but that the first and last year of surveys used are underrepresented in the data due to the way our panels have been drawn. Year, quarter and proxy controls are included in all our regressions reported below.

3.3 Main Job Search Method Used

Table 1 reports the proportion of each group in our sample (of those currently unemployed), who used various job search methods as their main method of looking for any form of employment or self-employment in the four complete weeks prior to interview. The category Job Centre covers the three methods of visiting a Job Centre/ Job Market or Training and Employment Agency Office, visiting a Careers Office or visiting a Job Club. Adverts / Newspapers includes the three methods of advertising for jobs in newspapers, journals or on the internet, answering advertisements in newspapers, journals or on the internet and studying situations vacant columns in newspapers, journals or on the internet. The next two categories represent just one method each of applying directly to an employer and of asking friends, relatives, colleagues or trade unions about jobs. The final category covers six other methods of job search namely: - having your name on the books of a private employment agency, wait for the results of an application for a job, looking for premises or equipment for a job, seeking any kind of permit to be able to do a job, trying to get a loan or other financial backing for a job or business and doing anything else to find work.

Amongst the UK born job search via adverts and newspapers is the commonest main method of job search (38.2% of responses) closely followed by the Job Centre category (33.0%). Applications direct to employers, enquiries via friends and contacts and other methods each account for approximately 10% of the ILO unemployed sample. White immigrants are less likely than the UK born to use Job Centres as the main methods of job search whilst Irish immigrants and White Other immigrants are substantially less likely to look for work with the aid of adverts and newspapers. This latter finding maybe to partially due to lack of fluency in reading English amongst some of these immigrants. Interestingly, Irish immigrants are much more likely to job search through friends, family and other contacts (17.7%) than the UK born, which is not the case for the other white immigrant groups. Ethnic minority immigrants utilise Job Centres and friends, family and other contacts to a much greater extent, and adverts and newspapers to a much lesser extent, than the UK born or white immigrants. Again lack of English language fluency may explain much of the adverts / newspapers finding as the least fluent groups, Bangladeshi, Pakistani and Indian immigrants use this method the least. Bangladeshis are far more likely to make direct approaches to employers and utilise friends, family and other contacts than all other groups.

Amongst both sets of immigrants, those having completed full-time education before immigration are associated with a greater use of Job Centres whilst those who completed their full-time education in the UK are most likely to use adverts and newspapers as their main method of job search and more commonly

approach employers directly. The use of friends, family and other contacts is greater amongst those who finished their education in the UK amongst white immigrants but the opposite is the case for ethnic minority immigrants. Amongst white immigrants recent arrivals are less likely to use adverts or newspapers as their main job search method but are more likely to approach employers directly than migrants who have resided in the UK for more than 10 years. Increasing years since migration is associated with an increased use of adverts and newspapers and a decline in direct approaches to employers and the use of friends, family and other contacts as the main method of job search amongst ethnic minority immigrants.

3.4 All Job Search Methods Used

In Table 2 the percentage of individuals who report using each of the main categories of job search, as any one of their methods, is presented for the sample of observations of those who are currently ILO unemployed. Also, in the right hand column, the average number of total methods used is given. This latter factor is often taken to be one measure of search effort or search intensity. For the UK born adverts and newspapers are the most popular method of job search, utilised by over 90% of the sample, followed by Job Centres (80.5%), friends, family and other contacts (64.7%), other methods (60.4%) with direct approaches to employers being the least used method (56.4%). The UK born report using an average of 4.64 (out of a maximum of 14) job search method categories. This is substantially greater than both immigrant groups who use approximately 4.3 methods each on average. Consequently, all white immigrants are less likely to use each category of job search method than the UK born. This is also generally the case for ethnic minority immigrants with the exception that they are more likely to use friends, family and other contacts than the UK born. The latter finding is driven entirely by Pakistani and particularly Bangladeshi immigrants since Indian, Black Caribbean and Black African immigrants are no more likely to use this method than the UK born. Irish immigrants are also more likely to job search through contact networks, as well as via Job Centres, than British or Other white immigrants.

Interestingly, using Adverts and Newspapers as a method of job search is substantially lower amongst those groups who would be expected to have lower levels of English language fluency, namely Bangladeshi, Pakistani, Indian, Black African and white Other immigrants, compared to the UK born. Having completed full-time education in the UK, which would also be expected to be associated with increased levels of English language fluency, increases the chances of using adverts and newspapers and Other methods as a job search method for immigrants, compared to those who were educated entirely abroad. In addition, ethnic minority immigrants with some UK education are more likely to use of direct approaches to employers than those without any UK education. A UK education also is associated with

the use of a greater number of job search methods, more especially in the case of ethnic minority immigrants where the gap is an average of 0.65 additional methods. Immigrants who migrated in the previous ten years are least likely to use Job Centres or adverts or newspapers as their main job search method with their use, as any form of job search method, increasing consistently with duration of residence in the UK.

3.5 Success of Main Job Search Method

In Table 3 the success of our sample of ILO unemployed in achieving employment is examined, according to their reported main method of job search. Unfortunately, our data does not allow us to confirm whether this method was the one that resulted in the acceptable employment offer. Furthermore, we restrict our sample to those who were present in all five waves of their QLFS panel. Clearly some of the ILO unemployed who exit the panel may do so if they have moved to take up a job offer, but we are unable to observe whether or not this is the case.

Over 33% of the UK born who were ILO unemployed the first time they were interviewed for the QLFS have entered work by the time of their next interview, three months later. This percentage rises to 55.6% at the point of interview approximately 12 months later. Interestingly, white immigrants as a whole are more successful in exiting unemployment in the short run, with 39.1% reporting being in a job 3 months after initial interview, but over the longer period a smaller proportion (51%) are found in employment compared to the UK born. However, ethnic minority immigrants are as likely to exit unemployment over a three and twelve month period as the UK born.

The use of Job Centre as main job search method is associated with the least employment success of any method, over the short run (26.8%) and the long run (47.4%), amongst the UK born. The most successful method category is Other, with two-thirds of all the ILO unemployed exiting that state, followed by the use of friends, family and other contacts, adverts and newspapers and direct approaches to employers. Amongst white immigrants the use of friends, family and other contacts is highly successful in the short run (58.3% entering work) and this success is maintained over the longer time horizon. For these immigrants Job Centres appear to be particularly unsuccessful in helping achieve employment over the long run, whereas using adverts and newspapers and direct approaches to employers is much likely to be associated with employment 12 months later, than with being in work three months down the line. However, due to the small number of observations in each category considerable caution should be exercised in generalising the white immigrants, and indeed the ethnic minority immigrant, results presented here.

Amongst ethnic minority immigrants who initially experience ILO unemployment direct approaches to employers appear to be the most successful main method of achieving employment in the short run, but the least successful over the long run. All other methods are associated with a much greater proportion of employment outcomes over a twelve-month time horizon than is the case over just three months. Job Centres appear to be far more successful, as a method of job search, in the long run for ethnic minority immigrants than was the case for white immigrants. In contrast, the use of friends, family and other contacts is much more likely to be associated with employment after 3 months amongst white immigrants than amongst ethnic minority immigrants.

4. Estimation and Results

4.1 Main Job Search Method

We fit a multinomial logit model of main job search method used to our sample of currently ILO unemployed UK born and immigrant males using Job Centre as the base category. The estimated marginal effects, together with an indication of their level of statistical significance, are reported in Table 4. In addition to the standard individual and unemployment spell characteristics usually included in similar empirical studies, we additionally allow for potential differences between the various immigrant groups and the UK born using a number of categorical variables. Furthermore, we interact variables indicating whether full-time education was completed abroad and years since immigration with the broad immigrant groups to explore whether these factors impact separately on the choice of main job search method.

Age appears to have little association with choice of job search method except that older men are more likely to use adverts or newspapers as their main method, as compared to Job Centres. Married and co-habiting men are significantly more likely to use adverts or newspapers, friends, family and other contacts as well as other methods, but less likely to make direct applications to employers, in comparison to single men and the use of Job Centres. Education has a large marginal effect on choice of job search method with those men with the highest levels of qualification being significantly more likely to use adverts and newspapers and other job search methods, but less likely to engage in direct applications to employers or make use of contact networks. However, those who have only been unemployed for a short time are significantly more likely to use the latter methods than those who have been out of work for over twelve months. Interestingly, those search for full-time employment as an employee are found to use Job Centres as their main method of job search, after other relevant characteristics have been controlled for.

Irish immigrants and white Other immigrants, when compared to UK born whites, are more likely to engage in direct applications to employers or use other job search methods rather than use Job Centres

as their main method, as found in the descriptive analysis reported in Table 1. Controlling for other characteristics it is still evident that Bangladeshi, Pakistani and Indian immigrants prefer not to job search using adverts or newspapers, perhaps due to language difficulties, but rather engage in direct approaches to employers. Bangladeshi immigrants and, to a lesser extent Irish immigrants, make significantly more use of friends, family and other contacts than they do of Job Centres, which is also not the case for other groups of immigrants. Amongst all white and South Asian immigrants direct applications to employers is significantly less likely to be the main job search method if they completed their education abroad. For Black immigrants with foreign qualifications the adverts and newspapers and contact networks methods are significantly less likely to be used. Amongst South Asian immigrants it is also the case that as the duration of stay in the UK increases direct approaches to employers becomes less likely to be the main method of job search.

4.2 All Job Search Methods Used

In Table 5 we report the estimated marginal effects from the separate random effects probit models of whether or not any job search method is ever used by the currently ILO unemployed men in our sample. In contrast to the main job search method results, the probability of ever using a Job Centre, or enquiring of friends, family and other contacts or using other job search methods, declines significantly with age. Furthermore, direct approaches to employers are reported significantly less by over 54 year old men. Married and cohabiting men are again significantly more likely to use adverts or newspapers, friends, family and other contacts as well as other methods, as a job search method than single men, who are more likely to Job Centres. However, marriage and co-habitation is associated with an increased use of direct approaches to employers as one of many job search methods, whereas the opposite was the case as far as main job search method was concerned.

The possession of qualifications significantly reduces the probability of using a Job Centre, and increases the likelihood of using other methods and direct approaches to employers, as one of several methods of job search. The latter finding was not evident in the main job search method results. Previous employment prior to the current unemployment spell, and searching for full-time employment as an employee, are associated with an increased use of all job search methods, except the other category. However, who have recently become unemployed are significantly less likely to make use of Job Centres or adverts and newspapers, than the long-term unemployed. Rather, all those who have been unemployed for less than twelve months are significantly more likely to engage in direct approaches to employers or

utilise contact networks, as one of their job search methods, compared to those who have been unemployed for longer.

All white immigrant groups are significantly and substantially less likely to ever make use of a job centre than white who are UK born, even after controlling for highest educational qualification level. This is also true to a lesser extent amongst Indian immigrants. White immigrants are also generally less likely ever to use all other methods of job search than UK born whites. Again we find that Bangladeshi, Pakistani and Indian immigrants are significantly less likely to search for employment using adverts or newspapers, compared to UK born whites, in this case even as just one of many forms of job search. Indian immigrants make significantly less use of friends, family and other contacts, whilst Black African immigrants are more likely to utilise this method than the base category. White immigrants who completed their education abroad are significantly more likely to make use of Job Centres, but less likely to make use of contact networks than UK born whites. However, friends, family and other contacts are significantly and substantially more likely to be used as a job search method by South Asian immigrants, who completed their education abroad, as well as adverts and newspapers to a much lesser extent. Black immigrants with foreign qualifications appear to make direct applications to employers to a significantly lesser extent than UK born whites. Increased time in the UK since immigration significantly increases the probability of both white and South Asian immigrants using Job Centres, adverts and newspapers, contact networks and other methods as a means of job search.

4.3 Number of Job Search Methods Used

In Table 6 we report the incidence rate ratios resulting from fitting a negative binomial random effects model of the number of job search methods used. The report results indicate that job search effort or intensity is greatest amongst younger age groups and declines substantially amongst over 54 year olds to about 85% of that of 24-34 year olds. Males who are married or co-habiting and those with educational qualifications search significantly more intensively than single men or those with no qualifications. Having a limiting long-term illness is associated with a significantly reduced search effort. Those men who were working before the current unemployment spell or who are looking for a full-time job as a paid employee expend more search effort, than their respective base categories, as do those who have been unemployed for less than twelve months.

All immigrants utilise a smaller number of search methods than the UK born. However, once other characteristics are controlled for, only all the white immigrants groups and Indian and Bangladeshi immigrants expend a statistically significant lower level of search effort. Interestingly, those immigrants who

completed their education abroad are no more or less likely to search as intensively for work as the UK born. However, as all immigrant groups increase their years of stay in the UK the number of job search methods utilised increases significantly.

4.4 Success of Main Job Search Method

The results from our discrete time unemployment duration model are reported in Table 7.

5. Conclusions

In this paper we have conducted an initial investigation into whether there are substantial differences in the job search behaviour between ILO unemployed UK born and immigrant males, aged 24-65 and residing in the UK, as would be predicted by Chiswick's (1982) model of immigrant employment adjustment. Furthermore, we have explored the possibility that the success of these different strategies, in terms of achieving employment three months later or being in work twelve months after the initial interview, differs between immigrants and the UK born. Our empirical analyses are based on data drawn from the panel elements of the Quarterly Labour Force Surveys conducted between March 1997 and February 2002.

Our findings provide some evidence that choice of job search method and the success of job search strategies may contribute to the higher ILO unemployment rates amongst immigrants residing in the UK compared to the UK born. Lack of English language fluency may provide one explanation since those immigrant groups known to have the lowest levels of fluency are least likely to use the most common main method of job search, namely adverts and newspapers, which is also consistently associated with a substantial proportion of successful employment outcomes. It appears to be the case, therefore, that policies designed to improve the average English language fluency of the immigrant population in the UK may lead to more efficient job search by such groups and reduce their unemployment incidence.

Moreover, the use of this method of job search increases with time spent in the UK suggesting that immigrant job search behaviour becomes more similar to that of the UK born, and hence any differential impact on unemployment rates will diminish, as their duration of stay in the UK increases. Only some immigrant groups, notably Bangladeshi men, make significantly greater use of friends, family and other contacts as their main method of job search, which appears to be a reasonably successful strategy for the ILO unemployed who use it. Interestingly, the most successful job search method appears to be the Other category about which we know the least due to sample size problems. Clearly a more detailed exploration of these methods is called for.

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TABLE 1: Main Method Of Job Search Used By Current ILO Unemployed

Percentage	Job Centre	Adverts Newspaper s	Direct to Employer	Through Friends	Other	Missin g
UK Born	33.0	38.2	7.8	10.1	9.4	1.6
White UK Born	33.1	38.3	7.8	10.0	9.2	1.5
Ethnic Minority UK Born	26.7	33.6	11.1	10.7	15.5	2.4
White Immigrants	28.1	35.6	9.0	11.2	14.4	1.8
Irish Immigrants	27.0	30.0	11.8	17.7	13.0	0.4
White British Immigrants	28.1	42.8	3.9	9.5	14.1	1.5
White Other Immigrants	28.6	32.4	11.8	9.3	15.2	2.7
Completed education in the UK	26.9	55.5	11.4	12.7	13.4	1.7
Completed education abroad	29.5	37.1	7.8	9.0	14.8	1.8
< 10 years since migration	30.0	30.0	13.0	10.8	15.3	1.0
10 – 20 years since migration	15.0	40.1	12.9	16.3	11.6	4.1
21 – 30 years since migration	33.5	36.9	7.3	6.4	14.2	1.7
> 30 years since migration	27.5	37.5	7.4	12.3	13.7	1.6
Ethnic Minority Immigrants	39.0	26.9	9.2	14.9	9.5	0.6
Indian Immigrants	32.7	28.9	7.7	15.6	13.9	1.2
Pakistani Immigrants	47.0	24.2	9.2	13.0	6.6	0.0
Bangladeshi Immigrants	31.6	11.6	24.5	28.4	3.9	0.0
Black Caribbean Immigrants	42.7	34.6	3.8	8.6	9.7	0.5
Black African Immigrants	38.0	32.1	5.5	12.7	11.0	0.8
Completed education in the UK	33.4	34.9	10.3	13.2	7.9	0.0
Completed education abroad	41.7	23.0	8.6	15.7	10.3	0.1
< 10 years since migration	39.0	17.9	12.8	20.5	8.9	0.1
10 – 20 years since migration	35.4	24.3	10.2	17.7	11.9	0.0
21 – 30 years since migration	47.1	28.1	8.7	10.7	5.4	0.0
> 30 years since migration	36.4	34.2	6.3	11.5	10.9	0.0
Other / Missing	29.1	32.8	12.7	13.1	7.1	1.0

Notes: Authors' own calculations based on samples drawn from the 1997-2001 Quarterly Labour Force Surveys of the United Kingdom. All figures are the percentage of ILO unemployed, from each group, whose main method of job search is the category indicated.

TABLE 2: All Methods Of Job Search Used By Current ILO Unemployed

Percentage	Job Centre	Adverts Newspaper s	Direct to Employer	Through Friends	Other	Total Number of Methods (1-13)
UK Born	80.5	90.7	56.4	64.7	60.4	4.64
White UK born	80.8	90.9	56.3	64.7	60.1	4.63
Ethnic Minority UK born	79.6	87.3	60.2	66.9	72.9	5.09
White Immigrants	68.5	84.3	52.7	58.3	58.9	4.29
Irish Immigrants	76.4	86.9	53.6	64.1	58.4	4.31
White British Immigrants	66.5	89.2	52.1	56.7	62.1	4.46
White Other Immigrants	66.4	78.8	52.7	56.8	56.5	4.13
Completed education in the UK	69.5	87.3	52.7	58.9	63.3	4.43
Completed education abroad	66.8	81.5	54.0	59.4	55.7	4.16
< 10 years since migration	63.0	77.5	52.5	57.5	56.3	4.04
10 – 20 years since migration	66.6	85.7	57.1	62.5	48.9	4.27
21 – 30 years since migration	71.7	86.3	61.4	57.5	68.7	4.61
> 30 years since migration	71.3	88.2	48.8	60.6	59.5	4.31
Ethnic Minority Immigrants	78.1	81.1	52.4	70.0	55.6	4.30
Indian Immigrants	78.5	80.2	55.8	65.5	64.6	4.44
Pakistani Immigrants	84.1	79.8	52.7	76.7	50.4	4.38
Bangladeshi Immigrants	83.9	73.5	58.1	83.2	40.0	4.08
Black Caribbean Immigrants	74.1	89.2	49.7	64.3	53.5	4.09
Black African Immigrants	68.4	82.7	45.6	62.4	61.6	4.31
Completed education in the UK	80.2	83.6	61.5	70.7	61.5	4.74
Completed education abroad	77.1	79.8	47.9	69.7	52.5	4.09
< 10 years since migration	72.3	75.9	50.6	73.8	52.1	4.12
10 – 20 years since migration	78.8	77.9	56.6	64.1	61.5	4.24
21 – 30 years since migration	86.8	84.3	59.1	76.9	59.5	4.79
> 30 years since migration	77.6	84.7	48.1	66.4	52.9	4.22
Other / Missing	72.0	81.4	55.7	70.1	58.4	4.47

Notes: Authors' own calculations based on samples drawn from the 1997-2001 Quarterly Labour Force Surveys of the United Kingdom. All figures are the percentage of ILO unemployed, from each group, who report using each category as one of their job search methods, except for those in the right hand column, which are mean values of the total number of job search methods used by each group.

TABLE 3: Success Of Main Method Of Job Search Used By Current ILO Unemployed

	T + 3 months	T + 12 months
White UK Born		
All Methods	33.2	55.6
Job Centre	26.8	47.4
Adverts / Newspapers	32.2	58.6
Direct to Employer	33.3	56.3
Through Friends / Family	37.5	60.9
Other	43.2	67.0
White Immigrants		
All Methods	39.1	51.0
Job Centre	29.7	36.8
Adverts / Newspapers	31.9	61.4
Direct to Employer	29.4	50.0
Through Friends / Family	58.3	63.6
Other	52.0	52.2
Ethnic Minority Immigrants		
All Methods	31.9	56.0
Job Centre	30.5	58.1
Adverts / Newspapers	28.5	57.9
Direct to Employer	37.0	44.4
Through Friends / Family	32.1	53.6
Other	38.5	53.8

Notes: Authors' own calculations based on samples drawn from the 1997-2001 Quarterly Labour Force Surveys of the United Kingdom. All figures are the percentage of those, from each group, who report being ILO unemployed in wave 1 of their QLFS panel, and who report being in work when interviewed 3 months or 12 months later. Figures based on only those individuals who were ILO unemployed at wave 1 and remain in the panel for all 5 waves.

TABLE 4: Main Job Search Method Used: Estimated Marginal Effects From A Multinomial Logit Model

	Job Centre	Adverts	Direct	Friends	Other
Age 35-44	-0.019	0.021**	0.006	0.004	-0.012
Age 45-54	-0.017	0.024**	-0.001	0.008	-0.015
Age > 54	-0.034	0.076***	-0.017	0.005	-0.031*
Ethnic Minority UK born	0.028	-0.073***	0.039**	0.004	0.001
Irish Immigrant	-0.184	-0.050	0.089***	0.038*	0.108***
White British Immigrant	-0.034	0.008	-0.058	0.031	0.053*
White Other Immigrant	-0.051	-0.115	0.090***	0.007	0.069**
Indian Immigrant	0.054	-0.311***	0.131**	0.074	0.052*
Pakistani Immigrant	0.127	-0.284***	0.138**	0.035	-0.017
Bangladeshi Immigrant	0.076	-0.400***	0.236***	0.154***	-0.066
Black Caribbean Immigrant	0.005	0.030	-0.020	-0.008	-0.007
Black African Immigrant	-0.018	-0.011	-0.003	0.067	-0.036
Other / Missing	-0.006	-0.073	0.057***	0.034*	-0.012
Completed education abroad * white immigrant	0.047	0.026	-0.042*	0.001	-0.032
Years since migration * white immigrant	0.002	-0.001	-0.001	-0.001	-0.001
Completed education abroad * South Asian immigrant	0.042	-0.032	-0.061**	0.015	0.037
Years since migration * South Asian immigrant	0.001	0.007	-	-0.001	-0.003*
			0.004***		
Completed education abroad * Black immigrant	0.186	-0.208***	0.001	-0.030*	0.051
Years since migration * Black immigrant	0.001	0.002	-0.001	-0.001	-0.001
Married/Cohabiting	-0.083	0.074***	-	0.007*	0.003*
			0.001***		
Widowed/Divorced/Separated	0.025	0.006	0.01	-0.010*	-0.015**
Dependent child aged < 5	0.037	-0.020**	-	0.001	-0.003
			0.016***		
Number of children	0.001	-0.010	0.004	0.001	0.004
Limiting long-term illness	0.002	0.031*	-0.005	-0.015*	-0.013*
Degree or equivalent qualification	-0.320	0.230***	-0.004*	-0.028*	0.121***
Higher vocational qualification	-0.163	0.164***	-0.022*	-0.069**	0.090***
'A' level or equivalent qualification	-0.082	0.052***	0.002**	-0.021	0.048***
'O' level or equivalent qualification	-0.085	0.088***	-0.015	-0.030	0.042***
Other qualification	-0.042	0.038***	0.005**	-0.017	0.016***
Renting accommodation	0.074	-0.067***	0.010*	0.015*	-0.031***
Working before unemployment spell	-0.004	0.012	0.009	-0.003	-0.014*
Unemployed 0-3 months	-0.047	-0.073	0.027***	0.027***	0.065***
Unemployed 4-6 months	-0.026	-0.032	0.008*	0.010*	0.040***
Unemployed 7-12 months	-0.028	-0.018	0.018***	0.006*	0.022**
Searching for full-time employment	0.068	-0.009***	0.020	-0.014***	-0.064***
Proxy respondent	0.061	-0.023***	-	-0.011*	-0.003***
			0.024***		
Constant	-0.001	0.202***	-	-0.045***	-0.064***
			0.092***		
Log likelihood (0)			-21577		
Log likelihood			-20102		
Chi-squared			2950		

Notes: Authors' own calculations based on samples drawn from the 1997-2001 Quarterly Labour Force Surveys of the United Kingdom. Standard errors adjusted for repeated individual observations. *** is significance at the 1% level, ** is at the 5% level and * is at the 10% level. Note that no significance level is calculated for the base category (Job Centre) in the model. Region of residence, year and seasonal controls were also included in the model. The omitted categories are Age < 35, White UK born, Single, No dependent child aged < 5, No limiting long-term illness, No qualifications, House owner, Not working before current spell of unemployment, Unemployed > 12 months, Searching for other than full-time employment, Individual was respondent at interview.

TABLE 5: All Job Search Methods Used: Estimated Marginal Effects From Separate Random Effects Probit Models

	Job Centre	Adverts	Direct	Friends	Other
Age 35-44	-0.009	0.006	0.007	-0.009	-0.008
Age 45-54	-0.021**	0.006	-0.013	-0.025**	-0.043***
Age > 54	-0.091***	-0.008	-0.098***	-0.067***	-0.120***
Ethnic Minority UK born	-0.002	-	-0.000	0.062***	0.004
		0.026***			
Irish Immigrant	-0.224***	-0.105**	-0.030	-0.137*	-0.106
White British Immigrant	-0.242***	-0.045	-0.058	-0.131**	-0.108*
White Other Immigrant	-0.165***	-	-0.006	-0.085*	-0.107**
		0.100***			
Indian Immigrant	-0.078*	-	-0.038	-0.165**	-0.155**
		0.148***			
Pakistani Immigrant	-0.037	-	-0.019	-0.010	-0.199***
		0.145***			
Bangladeshi Immigrant	-0.034	-	0.003	0.070	-0.261***
		0.130***			
Black Caribbean Immigrant	-0.060	-0.006	0.097	0.063	0.105
Black African Immigrant	-0.056	-0.005	0.074	0.113*	0.155**
Other / Missing	-0.054**	-	0.023	0.060**	-0.062**
		0.089***			
Completed education abroad * white immigrant	0.055*	0.012	-0.023	-0.069*	0.014
Years since migration * white immigrant	0.005***	0.002*	0.002	0.005**	0.004**
Completed education abroad * South Asian immigrant	0.024	0.003*	-0.014	0.140***	0.080**
Years since migration * South Asian immigrant	0.004***	0.002***	0.001	0.003*	0.003*
Completed education abroad * Black immigrant	-0.003	0.021	-0.187***	-0.061	-0.078
Years since migration * Black immigrant	0.002	-0.001	-0.001	-0.001	-0.002
Married/Cohabiting	-0.053***	0.019**	0.037***	0.022*	0.049***
Widowed/Divorced/Separated	-0.026***	0.007	-0.003	0.011	0.032**
Dependent child aged < 5	-0.002	-0.012	-0.005	-0.004	-0.018
Number of children	-0.003	-0.006**	0.006	0.015***	0.006
Limiting long-term illness	-0.016**	-0.002	-0.025***	-0.015*	-0.024***
Degree or equivalent qualification	-0.155***	-0.002	0.063***	-0.073***	0.348***
Higher vocational qualification	-0.094***	0.016	0.057***	-0.048***	0.334***
'A' level or equivalent qualification	-0.049***	0.021***	0.090***	0.024**	0.206***
'O' level or equivalent qualification	-0.033***	0.030***	0.078***	0.011	0.200***
Other qualification	-0.023***	0.015**	0.069***	0.015	0.136***
Renting accommodation	0.055***	0.008	-0.001	0.032***	-0.052
Working before unemployment spell	0.035***	0.025***	0.018**	0.029***	-0.002
Unemployed 0-3 months	-0.021**	-	0.056***	0.027***	0.115***
		0.019***			
Unemployed 4-6 months	0.006	-0.006	0.068***	0.026**	0.116***
Unemployed 7-12 months	0.005	-0.002	0.042***	0.034***	0.067***
Searching for full-time employment	0.107***	0.056***	0.117***	0.080***	0.006
Proxy respondent	-0.002	-0.013**	-0.038***	-0.031***	-0.057***
Constant	0.158	0.149	-0.111	0.052	-0.551
Log likelihood (0)	-6546	-4225	-9938	-9113	-9125
Log likelihood	-5704	-3794	-9077	-8262	-8309
Chi-squared	1685	863	1723	6009	1631

Notes: Authors' own calculations based on samples drawn from the 1997-2001 Quarterly Labour Force Surveys of the United Kingdom. *** is significance at the 1% level, ** is at the 5% level and * is at the 10% level. Region of residence, year and seasonal controls were also included in the model. The omitted categories are Age < 35, White UK born, Single, No dependent child aged < 5, No limiting long-term illness, No qualifications, House owner, Not working before current spell of unemployment, Unemployed > 12 months, Searching for other than full-time employment, Individual was respondent at interview.

TABLE 6: Number of Job Search Methods: Negative Binomial Random Effects Model

	Incidence Rate Ratios
Age 35-44	0.983*
Age 45-54	0.967***
Age > 54	0.853***
Ethnic Minority UK born	1.001
Irish Immigrant	0.829***
White British Immigrant	0.835***
White Other Immigrant	0.836***
Indian Immigrant	0.893*
Pakistani Immigrant	0.908
Bangladeshi Immigrant	0.859**
Black Caribbean Immigrant	0.873
Black African Immigrant	0.915
Other / Missing	0.946*
Completed education abroad * white immigrant	1.040
Years since migration * white immigrant	1.004***
Completed education abroad * South Asian immigrant	0.971
Years since migration * South Asian immigrant	1.004*
Completed education abroad * Black immigrant	0.940
Years since migration * Black immigrant	1.004*
Married/Cohabiting	1.041***
Widowed/Divorced/Separated	1.005
Dependent child aged < 5	0.995
Number of children	0.993
Limiting long-term illness	0.960***
Degree or equivalent qualification	1.188***
Higher vocational qualification	1.225***
'A' level or equivalent qualification	1.169***
'O' level or equivalent qualification	1.145***
Other qualification	1.110***
Renting accommodation	1.023***
Working before unemployment spell	1.038***
Unemployed 0-3 months	1.059***
Unemployed 4-6 months	1.080***
Unemployed 7-12 months	1.065***
Searching for full-time employment	1.118***
Proxy respondent	0.961***
Log likelihood (0)	-65654
Log likelihood	-51515
Chi-squared	1274
LR Test RE versus Pooled Model, χ^2	1134 (p=.000)

Notes: Authors' own calculations based on samples drawn from the 1997-2001 Quarterly Labour Force Surveys of the United Kingdom. *** is significance at the 1% level, ** is at the 5% level and * is at the 10% level. Region of residence, year and seasonal controls were also included in the model. The omitted categories are Age < 35, White UK born, Single, No dependent child aged < 5, No limiting long-term illness, No qualifications, House owner, Not working before current spell of unemployment, Unemployed > 12 months, Searching for other than full-time employment, Individual was respondent at interview.

TABLE A1: Sample Means

	UK Born	White Immigrants	Ethnic Minority Immigrants
Age 24-34	.334	.363	.283
Age 35-44	.248	.241	.321
Age 45-54	.243	.234	.229
Age 55-65	.174	.162	.167
Single	.204	.245	.167
Married/Cohabiting	.572	.579	.717
Widowed/Divorced/Separated	.224	.176	.116
Dependent child aged < 5	.130	.147	.306
Number of children	.604	.597	1.16
Limiting long-term illness	.225	.223	.235
Renting accommodation	.493	.599	.515
Degree or equivalent qualification	.106	.139	.121
Higher vocational qualification	.062	.039	.032
'A' level or equivalent qualification	.275	.204	.134
'O' level or equivalent qualification	.160	.093	.083
Other qualification	.151	.291	.339
No qualifications	.245	.233	.291
Resides in London	.084	.384	.523
Resides in the South	.243	.237	.097
Resides in the Midlands	.159	.081	.193
Resides in the North East	.182	.067	.092
Resides in the North West	.112	.060	.079
Resides in Wales/Scotland/ N. Ireland	.221	.172	.016
Years since migration	-	23.2	20.9
Completed education abroad	-	.552	.669
Proxy respondent	.317	.268	.311
Spring Quarter (March – May)	.256	.253	.249
Summer Quarter (June – August)	.250	.260	.253
Autumn Quarter (Sept. – Nov.)	.249	.248	.255
Winter Quarter (Dec. – Feb.)	.246	.239	.243
1997 QLFS	.108	.100	.108
1998 QLFS	.270	.258	.254
1999 QLFS	.257	.274	.249
2000 QLFS	.230	.246	.253
2001 QLFS	.135	.122	.136
Number of Observations	40998	2189	3042
Number of Individuals	10456	610	757

Notes: Authors' own calculations based on samples drawn from the 1997-2001 Quarterly Labour Force Surveys of the United Kingdom. For dummy variables, the values shown are the proportion of the sample for which the value is one.