

Access to what: analysis of factors determining graduate employability

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PREFACE

This report is the first output of a project entitled *Access to what? How to convert educational opportunity into employment opportunity for groups from disadvantaged backgrounds*. The project is being funded by the Higher Education Funding Councils for England, Scotland and Wales, Universities UK, the Commission for Racial Equality, the Council for Industry and Higher Education, the Higher Education Careers Services Unit and the Open University.

The aim of the project is to improve the employment prospects of students from socially 'disadvantaged' groups. The present report provides a detailed analysis – based on survey data and HESA statistics – of the factors determining graduate employability and how these affect the employment prospects of students from lower socio-economic backgrounds, from ethnic minorities and mature students. The second phase of the project is exploring the policies and practices needed to create greater equity in the graduate labour market. The final report of the project is expected to be published early in 2003.

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EXECUTIVE SUMMARY

1 Introduction

- 1.1 Data on graduate employment have been analysed in order to investigate the relationship between employment outcomes and various forms of 'social disadvantage'. A series of intervening variables have been identified which appear to be related to positive employment outcomes for graduates from 'disadvantaged' backgrounds.
- 1.2 Data sources were (i) the UK data set (N=4340) from an international survey of the graduate cohort of 1995, contacted 4 years after their graduation, (ii) HESA data on the same cohort.
- 1.3 The effects of socio-economic background, ethnic background and age on graduate employment were all considered. Employment outcomes included both objective factors (e.g. salary, level of job, incidence of unemployment) and subjective factors (e.g. job satisfaction, appropriateness of job).
- 1.4 The project distinguishes between direct and indirect effects of the background variables. Direct effects occur when graduates from disadvantaged backgrounds experience labour market disadvantages compared with their peers from similar courses at similar institutions and with similar degree results. Indirect effects of background variables occur when graduates experience disadvantage because of educational factors - such as the subject studied, institution attended or entry qualifications - which are systematically related to the background variables.

2 The effects upon employment outcomes of socio-economic background, ethnic background and age

- 2.1 In general, the findings support other studies which indicate that success in the labour market is to some extent associated with the background characteristics of the graduates. However, there are differences according to the various dimensions of employment success. There are also gender differences in the effects of background characteristics.
- 2.2 In the case of lower socio-economic background (as measured by parental occupation and parental education), both men and women graduates from lower socio-economic backgrounds received lower average salaries than graduates from more advantaged social backgrounds; £1500 a year in the case of men and £1000 a year in the case of women. They were also less likely than other graduates to perceive their jobs as ones for which a degree was necessary or to expect salary increases. In addition, male graduates from these backgrounds were more likely to have experienced a period of unemployment and were less likely to be in managerial and professional jobs than their middle-class counterparts. Women did not, however, appear to experience these additional disadvantages.
- 2.3 In the case of ethnic background, Asian men were less likely than other male graduates to characterise their jobs as ones which provided good opportunities to use their knowledge and skills. This was not the case, however, for Asian women who were also more likely to have a graduate job and to find their work challenging. Asian graduates of both genders were more likely than other graduates to be in managerial or professional jobs although these positive employment outcomes were not reflected in higher salaries or greater job satisfaction. In general, HESA data indicated that graduates from ethnic minorities face greater difficulties in obtaining an initial job but are not less likely than other graduates to be in graduate level jobs. Substantially higher proportions of graduates among each black minority group and among both Indian and Pakistani groups were still seeking employment or training (without having any other main activity) six months after graduation. The same was true for Bangladeshi men. However, unemployment levels were only slightly above those of white graduates for Chinese and other Asian groups, and among Bangladeshi women.
- 2.4 The effects of age appear to vary. Male graduates who entered higher education after the age of 24 experienced greater disadvantages in the labour market than their counterparts who were between 21 and 24 at entry to higher education. In fact, the latter age group experienced certain labour market advantages

compared with younger graduates, being more likely to be in a graduate level job and to be more satisfied with their job. The differences are broadly similar for female graduates.

3 **Direct and Indirect effects**

3.1 Like other graduates, graduates from socially-disadvantaged groups do less well in the labour market in part because of the institutions they attend, the subjects they study, the class of degree they obtain and their entry qualifications to higher education.

3.2 Our analyses suggest that the larger part of the labour market disadvantages experienced by older graduates and graduates from lower socio-economic backgrounds can be attributed to the above factors.

3.3 Nevertheless, our analyses also show that socio-economic background, age and ethnic background have an effect on employment even when the other factors are controlled for. Moreover, the effects are mainly in the same direction. New sources of disadvantage, relative to other groups in society, are added to existing ones.

3.4 Thus, controlling for the effects of other factors (i.e. indirect effects) the following can be attributed to the direct effects of the graduate's age and/or background:

- (i) For male graduates, parental education had a significant impact on income (nearly a 10% difference according to whether both parents were graduates or had left school at the minimum leaving age); they were also less satisfied with their jobs;
- (ii) First generation female graduates were only half as likely to feel that their qualifications were necessary for their jobs (compared with graduates who had graduate parents);
- (iii) Asian males were more likely to remain unemployed for at least a six month period; this was true for male graduates from Bangladeshi, Pakistani and Indian origins; it was also true for male graduates from black African, black Caribbean and 'other' black backgrounds; Bangladeshi men were also more likely to work in a non-graduate job;
- (iv) Black females were less satisfied with their jobs than other female graduates; and six months after graduation, female graduates from Bangladeshi, Pakistani, Indian, Chinese, black African, black Caribbean, 'other' black and 'other' Asian backgrounds were all significantly more likely to be unemployed than graduates from the ethnic majority;
- (v) Entering higher education after the age of 24 appeared to have a series of negative effects for both male and female graduates: increased risk of unemployment, poor career prospects, less likely to achieve a 'graduate level' job.

The picture was not entirely negative. Graduates who entered higher education between the ages of 21 and 24 appear to be doing quite well in the labour market. Asian women do better in terms of level of job than their white British counterparts. But overall, the negative picture remains. Background disadvantages can still be converted into employment disadvantages, relative to other groups of graduates, even when the effects of institution, subject and degree class have been taken into account.

3.5 In fact, our analysis finds that background factors (socio-economic background, ethnic background, age) interact with educational factors (subject studied, institution attended) to create distinctive patterns of disadvantage. For example, going to a pre-1992 university gives labour market advantages to most types of graduate except for women from lower socio-economic backgrounds. To take another example, studying a vocational subject generally can provide advantages in the labour market for all graduates but we also find evidence that graduates (especially male graduates) with non-vocational degrees are able to compensate for their subject disadvantage if they are from advantaged socio-economic backgrounds.

3.6 In other words, factors such as type of institution and subject of study act as intervening variables with a differential effect upon the employment prospects of graduates from different types of background. Undoubtedly, employment prospects for some graduates would be improved by studying a different subject at a different institution. But, whether or not such a course of action is a realistic option, there are other less dramatic intervening variables which can also have a positive effect upon employment outcomes. These are the focus of the next section.

4 Interventions in the cycle of disadvantage

4.1 We have looked at the effects upon employment outcomes of a range of higher education experiences, of approaches to the job-seeking process, and of features of the employment situation. These are all areas where policy interventions are, in principle possible. Would such interventions actually improve the employment prospects of graduates from disadvantaged backgrounds?

4.2 The main intervening factors which we examined were: work experience and term time working, extra-curricula activities, overseas experiences while in higher education, job-search techniques (the timing and the techniques used) and employer characteristics (large/small, public/private). We examined the effects of the factors first, on graduates as a whole and second, on the disadvantaged groups which are the subject of this study.

4.3 *Effects on all graduates*

4.3.1 For graduates as a whole, there are measurable employment benefits to be gained from experiencing a substantial period of work experience during your time in higher education, especially if you are taking a non-vocational course. On the other hand, working during term-time appears to have mainly a small negative relationship to employment outcomes. Involvement in extra-curricular activities was related to successful employment outcomes (especially for women) as was some kind of overseas study or work.

4.3.2 An early start to the job search appears to be associated with employment success. But it also appears better to leave it until well after graduation rather than to start it at the same time as studying for finals. Job search techniques especially associated with successful employment outcomes were (in rank order): using contacts established through employment undertaken during the course of study; contacting employers without knowing about a vacancy; seeking assistance from teaching staff (numerous benefits but only for women); using the institution's careers service; using personal connections; applying for an advertised vacancy; being approached by an employer.

4.3.4 As far as employer characteristics are concerned, positive employment outcomes are associated with working for medium or large-sized employers. Although private employers are likely to provide higher salaries, other employment features e.g. level of job and job satisfaction, appear more favourable in the public sector.

4.4 *Effects of intervening factors on graduates from disadvantaged backgrounds*

4.4.1 For the older group of 'mature graduates' (25+ on entering higher education) work experience during higher education is not associated with the employment benefits it provides other students. Older students are more likely to work long hours during term-time (at least 10 hours per week) and, as for other students, term-time working has a negative association with successful employment outcomes. For mature students, involvement in extra-curricular activities (which is at a much lower level than for other students) is not associated with employment success. Similarly, overseas experiences – before or during higher education – are not associated with successful employment outcomes for older graduates. Timing of the job search does not appear to have an impact on the employment prospects for older graduates. However, the technique of 'contacting employers without knowing about a vacancy' is associated with employment success for older graduates. Yet such graduates employ this approach less often than other graduates. They are somewhat more likely than other students to visit the careers office of their higher education institution. Type of employer and size of employer affect the employment prospects of older graduates in much the same way as they do the prospects of other graduates.

4.4.2 For graduates from lower socio-economic backgrounds, a number of intervening factors appear to be associated with positive employment outcomes. Such graduates experience even greater benefits from work experience than others do. They are more likely than others to work during term-time, and such work is associated with even greater disadvantages in the labour market than it is for other graduates. Extra-curricular activities have a beneficial association with employment but students from lower socio-economic backgrounds are less likely than others to be involved in them. An early job search is beneficial but job-search techniques which benefit others, i.e. contacting employers without knowing about vacancies and using personal contacts, are less effective for these graduates. Graduates from lower socio-economic

backgrounds are less likely to work for private sector employers, but there are no strong or systematic associations between type of employer and employment success for these graduates.

4.4.3 A comparable analysis for ethnic minority graduates was not possible because of sample size.

4.5 Table 1 provides a summary of the association between successful employment outcomes and a variety of potential ‘intervening’ factors from the higher education experience, the approach to job search and the characteristics of the employer. It is clear that some factors which appear to benefit other groups of students do not appear to benefit mature students or students from lower socio-economic backgrounds. Instead, already advantaged groups appear to be piling up additional advantages at the further expense of disadvantaged groups. This is because students from disadvantaged backgrounds have less access to these potentially beneficial intervening factors.

Table 1: Factors which are associated with successful employment outcomes

	All	Older graduates	Lower socio-economic groups
Work experience in HE	✓	*	✓
Absence of term-time working	✓	✓	✓ *
Extra-curricular activities	✓	*	✓ *
Overseas experiences in HE	✓	*	*
Early job search	✓	*	✓
Techniques of job search	✓	✓ *	*
Private employer	✓/X	✓/X *	*
Medium/large employer	✓	✓ *	✓

(✓ = positive effect X = negative effect * = limited access to the positive factor)

4.6 Considerable caution is necessary, however, in interpreting these data. Factors which are associated with employment success for students in general may contain lessons for students from disadvantaged groups, even if these same factors appear not to have been important for this sample of graduates. It must also be emphasised that a statistical association does not necessarily imply causality. Our analyses have controlled for the effects of some factors but many others are outside the scope of our analysis. Not least of these are the attitudes and aspirations of the students themselves. We wonder, for example, whether the apparent effectiveness of certain job search methods lies less in the methods themselves than in the light they throw on the ambitions and motivations of the students.

5 Conclusion

5.1 The research reported here supports the findings of other studies which indicate that success in the labour market for graduates is to some extent associated with the background characteristics of graduates.

5.2 Socio-economic background, ethnic background and age all have indirect effects upon employment through their association with factors such as institutional type, subject of study, entry qualifications and degree classification. But they also appear to have direct effects. Even when the influence of the above factors is controlled for, graduates from lower socio-economic backgrounds, ethnic minorities and older graduates do less well in the labour market than their peers (although better than their peers who did not go into higher education).

5.3 Some additional factors have been identified which appear to be associated with success for all graduates. Not all of these may benefit all types of student equally, but they are suggestive of practical interventions which policy makers could make to bring a greater degree of equity to the graduate labour market.

5.4 In the second phase of the project, the research team is working with four universities to investigate whether there are institutional policies and practices that can help produce a more ‘level playing field’ for graduates from disadvantaged backgrounds when they enter the labour market.