

Bulletin

Institute for
Employment
Research

GENDER DIVISIONS IN THE LABOUR MARKET¹

Gender differences in graduate transitions from higher education to employment

Introduction

Gender differences in UK labour market participation and career development are well-documented. Despite equal opportunities legislation and initiatives, it remains the case that men predominate in the higher status, higher skilled, most highly-rewarded jobs. Although women constitute a growing majority in the labour force, their employment remains more occupationally and sectorally concentrated than men's, more often part-time, more often nearer the job than the career end of the occupational spectrum and more often in contingent employment (IER 1996). Whether nature, nurture or culture are seen to be the predominant force behind such differences, it is clear that, historically, women's lower investment in education and training and their lower rates of economic activity, related to family-building responsibilities, have been significant contributory factors. It is also clear that highly-qualified women have been most likely to conform to 'male' work history patterns of employment continuity (Martin and Roberts 1984, Corti, Lawrie and Dex 1995).

It has long been recognised that a simple comparison of labour market participation by gender obscures the diversity and complexity of both the male and female workforces and tends to reinforce stereotypes rather than clarify the dynamics of the labour market. As higher proportions of the labour force have been acquiring

educational and occupational credentials, it has become increasingly polarised between the well-qualified and secure and those confined to the relative unpredictability of the secondary labour market. The thesis has recently been advanced, on the basis of considerable labour market analysis, that – while female and male economic activity rates have converged somewhat – women's employment patterns have become *more* polarised than men's, reflecting the *essentially-gendered* heterogeneity of the female workforce (our emphasis) (Hakim 1996). An increasing proportion of women appear to have been opting for voluntary childlessness or to balance family responsibilities and a continuous career, but the majority of women continue to give priority, at the expense of employment and career investment, to child-rearing. Whether these differences reflect essentially-gendered orientations (Hakim *ibid.*) or enforced choices made within particular contexts (Crompton with Le Feuvre 1996) is an interesting question for labour market researchers and policy-makers because it has implications for employment and social welfare policies.

The *Great Expectations* survey recently carried out by the Institute on behalf of the Association of Graduate Careers Advisory Services (AGCAS) and the Higher Education Careers Services Unit (CSU) provides an interesting source of data with which to embark upon an exploration of these issues. Over 5000 final year students at twenty-one UK universities completed detailed postal questionnaires in their final undergraduate term, investigating their experience of degree programmes, their future aspirations and expectations, their

¹ This Bulletin has been prepared by Dr Kate Purcell and Jane Pitcher, Institute for Employment Research, University of Warwick, Coventry CV4 7AL. Telephone: 01203 524188. Fax: 01203 524241.



approaches to job-hunting and their perceptions of the graduate labour market. In addition, focus group discussions were convened with groups of respondents immediately after finals, to explore some of the qualitative issues which could not be fully covered by the survey.*

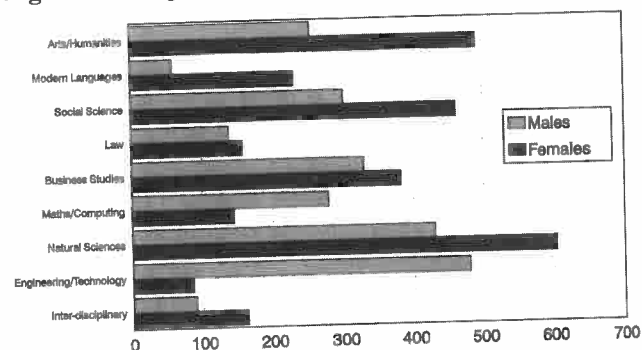
The study was sponsored with a view to obtaining the student perspective on the value of an undergraduate degree and the graduate opportunities available. The accelerating move from an elite to a mass higher education system has involved an unprecedented increase in the number of graduates entering the labour market, with an increasingly diverse range of subject and disciplinary specialisms, from a wide range of higher education institutions. It is clearly the case that the ability range is likely to be wider in a population which represents around 30 per cent of an age cohort (as is the case with this year's new graduates) than when graduates represented less than 10 per cent of each cohort, as they did in the 1960s. On the other hand, the undergraduate population is altogether more heterogeneous than in previous generations, with increasing numbers of mature students, part-time students and students from sub-sectors of the population under-represented in higher education. Perhaps most significantly, there has been an increase in the participation of women in higher education. In 1979/80, the ratios of male to female were 58:42 for full-time and 87:13 for part-time undergraduate students (CSO 1995). In 1995/6 these respective ratios had changed to 50:50 and 39:61 (HESA 1996).

Possession of a degree in previous generations was generally associated with labour market advantage (Dolton et al. 1990, Green and McKnight 1996), for women as well as for men, but even among the most highly-qualified, women's participation is lower than men's. Hakim (1996:133) alleges that 'Higher education qualifications may be acquired to ensure a girl marries a partner of at least equal status rather than with a view to acquiring marketable skills for long-term employment'. This study enables us to explore the extent to which highly-qualified women at the transition from education to employment resemble their male peers in attitudes to and experience of higher education and the transition to employment. Can we already identify incipient 'career planners,' 'drifters' and 'homemakers,' as an American longitudinal study of young women classified the members of their sample (Shaw and Shapiro 1987)? We did not investigate marriage or family-building plans in the survey, but we did explore the reasons why students chose to study particular courses, the skills they believed they had acquired, their job-search activity and their career orientations.

Characteristics of the sample

The sample is essentially of full-time undergraduates who completed their studies in June 1996, although a small number of students completing standard undergraduate programmes on a part-time basis were also included. As in the UK student population as a whole, men and women in the sample were differently represented throughout the academic range. Figure 1 shows their distribution according to the subject and discipline areas of their courses.

Figure 1 Subject area by gender



In terms of gender distribution and gender ratios in subject/discipline areas, the sample appears to be reasonably representative of the population from which it was drawn, comparing the distributions with those published in HESA statistics for all undergraduates in 1995/6 (HESA 1996). Women predominated substantially in Modern Languages, Arts & Humanities, Interdisciplinary and Social Science courses. They were also in the majority in Law, Business Studies and (in our sample, though not in the 1995/6 undergraduate population as a whole) in Natural Sciences. Men predominated dramatically in Engineering & Technology and Mathematics & Computing. It is important to bear these patterns in mind when considering gender differences in occupational orientations, because subject choice has a significant impact on transferable skills acquired as well as subject expertise, and has implications for the opportunities available to graduates when they enter the labour market.

Women were less likely to have completed single discipline courses, more likely to have studied joint-discipline courses, considerably less likely to have classified their course as vocational and less likely to have spent a sandwich year in employment (although they were more likely to have spent a year working or studying abroad). To some extent, these differences reflect subject choice, but if we consider differences *within* subject areas, there are interesting gender patterns. For example, males in most subject areas are more likely than women to regard

their courses as vocational, but women who have elected to study Engineering & Technology and Interdisciplinary courses are significantly more likely than men to do so. Women who studied Law responded remarkably similarly to males throughout the range of questions asked about career plans and choices.

Respondents were asked about reasons for choosing courses and to identify their main reason, and these main reasons were classified into 'hedonistic' - referring to enjoyment of the subject or course, 'pragmatic' - where future career considerations were taken into account, and 'fatalistic' - where the choice had been made mainly on the basis of expediency or on the advice of someone else. The majority of undergraduates had chosen their courses on the basis of 'hedonistic' reasons, but while over a third of men claimed to be motivated by pragmatism, only a quarter of women did. However, similar proportions of males and females claimed to have had clear expectations of what they would do when they had completed their courses, although men were slightly more likely to have had had *some* idea, and they were also more likely to be following these original plans.

Student debt was an influence on the options perceived as available to respondents at the end of their courses and we wondered whether there were gendered differences here. Table 1 shows repayable debt which they expected to have on graduation. A higher proportion of males than females tended to have debts, although this varied by subject/discipline. Males also tended to have higher debts, except in the case of Modern Languages students, where the female average debt was greater. Despite this, females were more likely to report that debt would affect their post-graduation options (35 per cent as opposed to 30 per cent of males).

Table 1 Repayable debt, by subject/discipline and gender

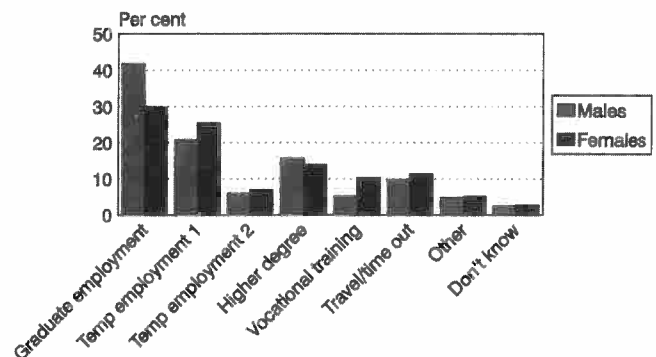
Subject/discipline	Males		Females	
	% who had debts	Average debt *	% who had debts	Average debt *
Arts & Humanities	73.4	2929	68.8	2760
Modern Languages	67.8	2918	63.8	3014
Law	72.6	3461	67.7	3297
Social Sciences	79.7	3244	76.1	2852
Business Studies	69.9	3081	70.9	2866
Maths & Computing	67.7	2862	60.7	2373
Natural Sciences	71.1	3110	68.5	2521
Engineering & Technology	69.5	3210	68.6	2686
Interdisciplinary	84.4	3372	73.0	2537
Total	73.6	3121	69.7	2751

n = 5228 * rounded to nearest £.

The next stage

A higher proportion of men than women were expecting to enter employment related to their longer-term career (see Figure 2), with a slightly higher proportion also intending to register for a full-time higher degree course. In the subject areas of Engineering & Technology, Business Studies and Mathematics & Computing, a majority of men were intending to enter graduate employment. Employment was also a high priority for women students in these subject areas. As is consistent with other findings (National Graduate Survey, 1995, which indicates that female students are more likely to take short-term 'stop-gap' jobs), a significant proportion of women were planning to enter temporary employment while deciding on a future career, especially those in Social Sciences, Modern Languages and Business Studies. The option of vocational training was much more popular with female than male students, with 10 per cent of women compared with 5 per cent of men intending to undertake some form of vocational training. A slightly higher proportion of women intended to travel or take time out (11.3 per cent compared with 9.7 per cent of men). The higher proportions of women students intending to take time out or travel were in the study areas of Natural Science, Social Science and Business Studies. The fact that a higher proportion of women than men expected to take temporary employment to enable them to pay off debts, reinforces the finding that women are, or feel themselves to be, more constrained by debt.

Figure 2 Expectations of male and female students after completing their course



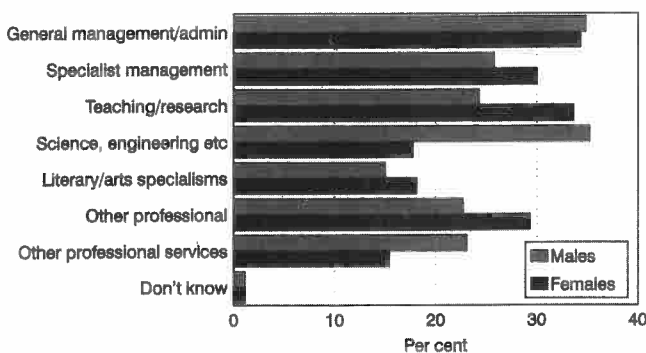
Note: Graduate employment=employment related to longer-term career; Temp employment 1=temporary employment while considering longer-term career; Temp employment 2=temporary employment while paying off debts.

Turning to job search behaviour, a slightly higher proportion of male than female students had applied for 'graduate' jobs by May 1996. This varied by subject area, however, with significantly higher proportions of women than men in Mathematics & Computing, Modern

Languages and also a slightly higher percentage in Arts & Humanities having applied for jobs related to their longer-term career plan. Of those seeking employment, a higher proportion of males than females began their job-search before January 1996 (46 per cent compared to 37 per cent) and males had, on average, applied for more jobs than females had by the time of the survey.

Students were asked about the types of job they expected to apply for. There are certain predictable differences between men and women, with a far higher proportion of male than female students going for science, engineering or environmental specialist occupations, due largely to the relatively high numbers of men studying subjects related to these occupations. Women have tended to select teaching and/or research as being occupations they would consider working in (see Figure 3). The proportions indicating general management and administration, however, are very similar. Thus, while certain gendered occupational patterns may still be discerned, male and female graduates generally have very similar expectations. Were these expectations to be realised in actual jobs, we might expect to see an increasing transformation in the gender composition of managerial occupations, as more graduates of both sexes enter this area of employment.

Figure 3 Types of job that students expected to apply for



Note: Specialist Management includes Personnel Management, Retail Management; Science, Engineering or Environmental specialist occupations include Electronics Engineer, Biologist, Scientific Officer; Literary, Artistic and Sports professions include Journalist, Stage Manager; Other Specialist Professional occupations include Solicitor, Social Worker, Librarian; Other Professional Services include Advertising Executive, Systems Analyst.

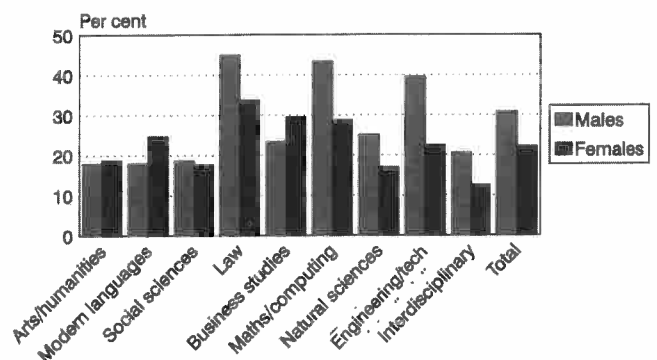
The respondents were asked whether they had a clear idea of the career they would like to develop within the next five years and how to achieve their ambitions. Males were slightly more likely to say that they broadly knew what they wanted to do and how they would achieve it (34 per cent, compared to 29 per cent of females), but females were only slightly more likely to deny having a vision of

their future career, being slightly more likely than men to claim to broadly know what they want to do and have some idea of how to achieve it. Women who had had clear expectations at the outset of their course were, not surprisingly, more likely than other women to have clear career plans at the end of it, as were women who had chosen their courses for 'pragmatic' reasons. The two categories overlap, but are far from identical.

Jobs obtained

The offers of employment at this time do not always reflect the job search activity, with far more men than women in Mathematics & Computing, Law and Engineering having been offered jobs (see Figure 4). In fact, the only subject areas where a higher proportion of women had been offered employment were Modern Languages, Business Studies and, to a lesser extent, Arts & Humanities. When looking at the kinds of jobs Modern Language students were intending to enter at the time of the study, it is clear that these are on the whole characteristic of 'Milkround' jobs for both women and men: for example, management trainee, marketing, accountancy trainee. It should, of course, be borne in mind that this study was undertaken at a time when students had not yet completed their degree and thus their expectations of being able to obtain graduate employment were still likely to be relatively high.

Figure 4 Proportion of job applicants who had been offered employment related to their longer-term career plans, May 1996

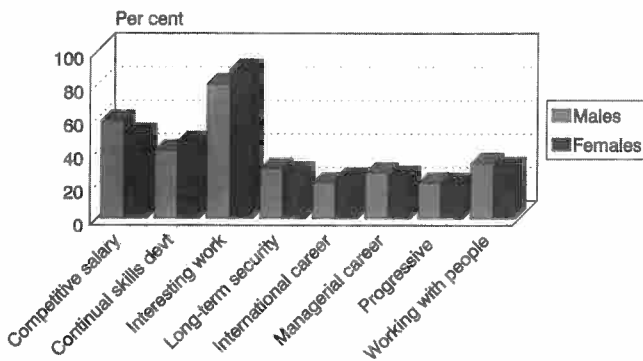


What graduates want from employment

While the majority of students considered 'interesting and challenging work' to be more important in applying for employment (more than 80 per cent in the case of both men and women: see Figure 5), with 'competitive salary' being important to a smaller, though nonetheless significant proportion, there are interesting differences according to gender and subject area. Proportionately more women than men rated interesting work, with the reverse being the case for competitive salary. Gender differences

were notable among Modern Languages, Mathematics & Computing, Social Sciences and Engineering & Technology students, where a considerably higher proportion of men than women emphasised competitive salary. In Engineering & Technology, Social Sciences and Arts & Humanities, continual skills development was also proportionately of greater importance to women than men. In most subject areas, a gender difference in priorities regarding work may be discerned, to a greater or lesser extent. In the case of Law, however, although there is quite a strong difference between men and women when it comes to the importance of interesting and challenging work (80 per cent male students compared with 89 per cent female students), the attitude of the two sexes towards competitive salary and continual skills development is remarkably similar, with a very slightly higher proportion of women than men judging this to be an important characteristic.

Figure 5 Characteristics important to students in applying for employment



Note: Interesting work=interesting and challenging work; Managerial career=opportunities to reach managerial levels; Progressive=progressive and dynamic organisation; Working with people=working with people you would enjoy socialising with.

Gender patterns may also be perceived in students' salary expectations (Figures 6 and 7). In most subject areas, a higher proportion of female than male students expected their gross salary on commencing employment to be £14,000 per annum or less. Such differences are particularly marked in Social Sciences, Natural Sciences, Mathematics & Computing and Engineering. Only in the area of Modern Languages did more male than female students expect their salary to be in this band. In terms of the higher salary band of more than £18,000, men's expectations were proportionately higher than women's in similar subjects: Mathematics & Computing, Engineering and Social Sciences. In Law, interestingly, a higher percentage of women than men (21.7 per cent compared with 16.7 per cent) expected their starting salary to be over £18,000. Thus, although in general female students'

expectations reflect gender differentials in actual earnings (Elias and Gregory, 1994), female Law students again differ from the norm. Looking at salary expectations against the jobs students consider applying for, in all cases a higher proportion of women than men expect a salary of £14,000 or less, with a higher proportion of men than women expecting a salary of more than £18,000. Selecting out only those with a 'pragmatic' orientation to course choice did not eliminate, but rather amplified, gender differences in salary expectations

Figure 6 Male students' salary expectations

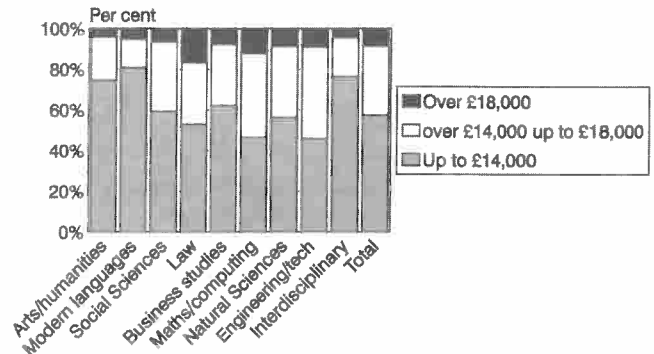
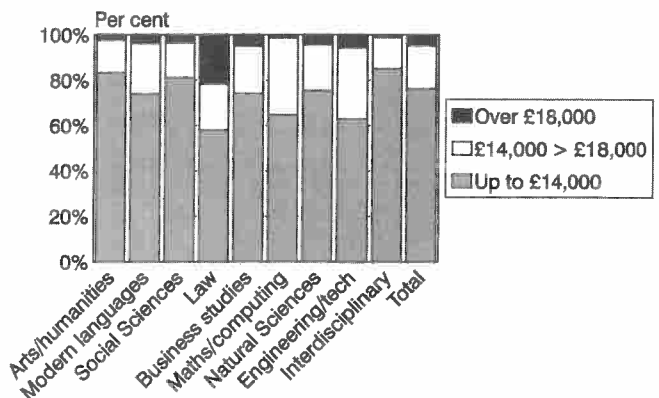


Figure 7 Female students' salary expectations



Conclusion

On the basis of this limited evidence, there is clearly heterogeneity among both the male and female graduating populations. We found traditionally-gendered distinctions between male and female patterns of behaviour and expectations, on average, but the overlap between males and females, particularly when subject/discipline is controlled for, indicates that gender is a very crude indicator on which to base recruitment decisions or predictions of career development. Established differences in subject choice show signs of erosion as women enter higher education in higher numbers and, in most subject/discipline areas, higher proportions than men.

Overall, women were less likely to regard their courses as vocational, less likely to have chosen them for 'pragmatic' career-orientated reasons and slightly less likely to have embarked upon them with ideas about what they would do when they had obtained their degrees. They appeared also to be slightly less likely to have a clear career orientation when asked about the next five years. This may be seen as indicative of a lower capacity for career planning, or of greater occupational flexibility. Does this make them 'drifters' or signify greater adaptability? They had, on the whole, lower debts than their male peers and paradoxically, appeared to be more constrained by them. Does this indicate a lower capacity for risk, or greater responsibility?

Women began their job-search, on average, somewhat later than men and had applied for fewer jobs – but the average differences were very small and varied considerably by subject/discipline. They were less likely than men to be applying or intending to apply for jobs related to long-term career development immediately after completing their courses and less likely to have obtained job offers during the 'Milk Round'. Perhaps most dramatically, their average earnings expectations were considerably lower than the men's. A small but significant proportion of women, however, had high earnings expectations, had obtained job offers and had clear career plans.

It was clear in the focus group discussions held after finals, however, that the majority of women who participated in them aspired both to career development and satisfactory family relationships, as did the men. A follow-up survey of those respondents who attended universities in England is already being undertaken and we hope to go back to the full sample within the next two years to establish career trajectories beyond first destinations. Further evidence is required in order to determine whether these early indications of career orientation, in both women and men, are correlated with propensity to development and employment continuity, or are modified in the light of opportunities encountered.

* The findings from this project are fully reported in *Great Expectations: the new diversity of graduate skills and aspirations*, by Kate Purcell and Jane Pitcher, published by the Higher Education Careers Services Unit (CSU) and obtainable from CSU Ltd, Armstrong House, Oxford Road, Manchester M1 7ED (price £35.00 including postage).

References:

- CEL (1995) *The national graduate survey*. Glossop: CEL.
- Corti, L, H. Lawrie and S. Dex (1995) *Highly Qualified Women*, DE Research Series 50, Sheffield: Employment Department.
- Crompton, R. with N. Le Feuvre (1996) 'Paid Employment and the Changing System of Gender Relations' in *Sociology*, Vol. 30, No. 3, pp. 427-443.
- Dolton, P.J., G.H. Makepeace and G.D. Inchley (1990) *The Early Careers of 1980 Graduates: Earnings, earnings differentials and postgraduates study*, Department of Employment, Research Paper No. 26.
- Elias, P and M Gregory (1994) *The changing structure of occupations and earnings in Great Britain, 1975-1990*. Sheffield: Employment Department.
- Green, A. and A. McKnight (1996) 'Changing Distribution and Composition of the Highly Qualified', Institute for Employment Research (mimeo).
- Hakim, C. (1996) *Key Issues in Women's Work* Athlone: London & Atlantic Higherlands, NJ.
- HESA (1996) *Data Report: Students in Higher Education Institutions 1995/6*, Cheltenham: Higher Education Statistics Agency.
- IER (1996) *Review of the Economy and Employment: Labour Market Assessment 1996/7*, Coventry: Institute for Employment research, University of Warwick.
- Martin, J. and C. Roberts (1984) *Women and Employment: A Lifetime Perspective*, London: Department of Employment/Office of Population, Censuses and Surveys.
- Shaw, L.B and D. Shapiro (1987) *Women's Work Plans: Contrasting Expectations and Actual Work Experience*, Monthly Labor Review, 110/11:7-13.

Review of the Economy and Employment: Labour Market Assessment 1996/97

ISSN 0265 9387 £70.00

Published by the Institute for Employment Research
For details Tel: 01203 524127 or Fax: 01203 524241