Research Jobs 2000-2006/7

Abstract: This research has been undertaken with a view to gain some insight into the working conditions of researchers in Great Britain across all sectors. Information from job adverts has been supplemented by information from 'Economic & Labour Market Review' (previously 'Labour Market Trends'), NOMIS and other sources. In this way we have gained some insight into the number of jobs, the type of employers who use researchers, where the researcher will be based ('Location'), the type of jobs eg 'Officer' or 'Manager', the working conditions incl working hours, salary and period of any contracts. The paper draws attention to the failure to define clearly what characterise researchers as the basis for setting their education and training needs. The paper concludes by suggesting that there is a need for a national body to oversee the development of occupational standards in research, oversee working conditions of researchers and take responsibility for some authoritative research into researchers.

Introduction

The research shown in this report is the result of a long-term investigation into the working conditions of researchers in Great Britain. It is the sole responsibility of the writer and nobody else has been involved. It was originally inspired by a proposal put by members of the Researchers' Lead body to the Economic and Social Research Council in 1997 (RLB, 1997).

This proposal noted that in the early nineties there may have been at least 100,000 people engaged in research as their full-time job or as part of a job and possibly as many as 300,000. It refers to a paper by the Occupational Information Unit of the ONS who had found 119,760 individuals where the terms "research" and/or "development" were used in the census job title and/or in the description of main activities. The proposal referred to previous work that had shown there to be very little reliable information about researchers, their numbers, career profile or "sectoral organizational locations" (RLB, 1997)*. A subsequent inquiry intent to get similar information from the 2001 Census did not produce any comparable result.

The data source for this research has predominantly been job-adverts in the national press and on various websites and the information contained in these. Over time a database has been built up and where no source is given the information has been extracted from this database.

Previous extracts from this research have been published in 'Laria News', the official newsletter of the Local Authorities' Research and Intelligence Association (LARIA), see Moller, 2000, 2001, and 2004.

Since the 1991 Census and since the proposal referred to above was made, with the advent of the internet and the world wide web, information and research has become part of everyday life. Behind every bit of information exposed in the media some research has been undertaken and a researcher has been at work. Central Government and other public bodies increasingly wish their policy making to be based on research and much legislation now contains a section or two on some mandatory research that need to be supplied to Central Government.

In respect of local government this concern for well-founded policymaking has manifested itself in a review published jointly by LARIA and LGA (Local Government Association) entitled 'statutory requirements for research' (Solesbury & Grayson, 2003). With regards to the private sector and the use of research for business

purposes the concern manifested itself in the 'Lambert Review' much of which is about funding of research by business (Lambert, 2003).

Number of Jobs

Table 1 and 2 are summaries of the number of employees within SIC 92 & 2003 72, 73, 74.13 and 74.14. It is assumed that employees in research, knowledge, information and intelligence work and management are embedded within these. They show an increase in the number of such employees of 84% from 576,200 in 1997 to 1,058,800 in 2007. Most of this increase has been in male employment (Table 1), and there has been some change in the ratio of males to females from 1.25 males for every female in 1997 to 1.70 in 2007. In other words number of male jobs has been increasing faster than the number of female jobs.

Table 1: Number of Jobs by Gender

Year	Males	%	Females	%	Total
1997	320.4	55.61	255.8	44.39	576.2
1998	407.2	61.28	257.3	38.72	664.5
1999	415.8	57.30	309.9	42.70	725.7
2000	405.3	55.93	319.4	44.07	724.7
2001	456.0	56.23	354.9	43.77	810.9
2002	488.9	56.52	376.1	43.48	865.0
2003	489.8	56.48	377.4	43.52	867.2
2004	518.7	59.44	354.0	40.56	872.7
2005	508.3	57.96	368.7	42.04	877.0
2006	522.6	58.28	374.1	41.72	896.7
2007	660.9	62.42	397.9	37.58	1058.8

Sources: Derived from Table B15 in October issues of 'Labour Market Trends', 1998-2006. 2007 figures downloaded from Table 6.05, 'Economic & Labour Market Review'.

Table 2: Full & Part Time Jobs

Year	FT	%	PT	%	Total
1997	434.8	75.46	141.4	24.54	576.2
1998	542.0	81.57	122.5	18.43	664.5
1999	588.0	81.03	137.7	18.97	725.7
2000	583.5	80.52	141.2	19.48	724.7
2001	671.7	82.83	139.2	17.17	810.9
2002	728.3	84.20	136.7	15.80	865.0
2003	714.9	82.44	152.3	17.56	867.2
2004	721.5	82.67	151.2	17.33	872.7
2005	700.6	79.89	176.4	20.11	877.0
2006	715.0	79.74	181.7	20.26	896.7
2007	765.7	72.32	293.1	27.68	1058.8

Sources: Derived from Table B15 in October issues of 'Labour Market Trends', 1998-2006. 2007 figures downloaded from Table 6.05, 'Economic & Labour Market Review'.

Table 2 shows that until 2006 most of the overall increase in these jobs was due to an increase in full time jobs. Within the research sector full time jobs accounted for nearly 80% compared to just over 75% in 1997. However, it also appears that in the year 2006 to 2007 there has been a steep increase in the number of full time jobs, but an even steeper increase in the number of part time jobs.

Figure 1 below shows the strength in growth of these jobs relative to all employment. Whereas total employment on an index basis has increased from 100 in 1997 to about 119 in 2007 the employment index for researchers and related fields has increased to 184.

Figure 1: Job Index

Source: As Table 1 & 2

It may also be noted that employment in these fields in 2007 comprised 4.0% of all employment compared to 2.6% in 1997.

Type of Employers

In their employment researchers are heavily dependent on the public sector with private firms only counting for about 19% (18.84%) of the jobs advertised. Each category of employers in the public sector includes fairly predictable names such as many Central Government departments, Unitary Authorities, NHS Trusts and Authorities in all parts of the country etc, see Table 3 below.

Some parts of the public sector appear to be a stable source of research jobs with little difference between the early parts of the period 2002-04 to the later parts of the period 2005-07. District Councils are advertising a steady 3.0% of all jobs. Quangoes have been just over 11% throughout the period. The NHS appears to become somewhat less important in this respect with 5.62% of jobs advertised in the early part of the period, but only 2.04% in the second part of the period.

The category 'Private Firms' includes consultants in market research, large retailers, manufacturers as well as financial advisers and many others. They will do conventional market research, production testing and testing of new products and

appear to have increased their share of advertised research jobs by just over 11% from 14.33% in 2002/04 to 25.51% in 2005/07.

Table 3: Type of Employer

Employer\Year	2002-04	%	2005-07	%	Total	%
Central Government	17	1.95	17	2.89	34	2.33
Charities & Vol Organizations	127	14.56	52	8.84	179	12.26
County Councils	66	7.57	24	4.08	90	6.16
District Councils	26	2.98	19	3.23	45	3.08
Fire & Police Authorities	15	1.72	13	2.21	28	1.92
NHS	49	5.62	12	2.04	61	4.18
Partnerships	39	4.47	21	3.57	60	4.11
Private firms	125	14.33	150	25.51	275	18.84
Quangoes	96	11.01	65	11.05	161	11.03
Regional Authorities	10	1.15	9	1.53	19	1.30
Trade Associations	4	0.46	7	1.19	11	0.75
Trade Unions	4	0.46	3	0.51	7	0.48
Unitary Authorities	165	18.92	60	10.20	225	15.41
Universities & Colleges	88	10.09	107	18.20	195	13.36
Other Public	15	1.72	14	2.38	29	1.99
Other	26	2.98	15	2.55	41	2.81
Total	872	100.00	588	100.00	1460	100.00

Location

The 'Location' of a job is where the post-holder will be based. In most cases researchers will be based at the head quarter of a public body or the private firm. The absolute dominance of London in this respect may therefore not come as a surprise. Since the year 2000 the proportion of research jobs advertised as based in London has remained consistently over 40% (Table 4) and was until 2005 actually increasing. However, there seem to be an emerging increase in the proportion of such jobs advertised as based within Wales & Scotland.

Table 4: Percentage Distribution of Advertised Research Jobs by Types of Area.

Area\Year	2000/01	%	2002/03	%	2004/05	%	2006/07	%
London	205	42.62	231	45.12	246	46.42	181	44.47
Other Metropolitan*)	104	21.62	111	21.68	82	15.47	79	19.41
Regions	166	34.51	157	30.66	180	33.96	118	28.99
Wales & Scotland	6	1.25	8	1.56	11	2.08	16	3.93
Not Stated	0	0.00	5	0.98	11	2.08	13	3.19
Total	481	100.00	512	100.00	530	100.00	407	100.00

*Including Edinburgh, Glasgow, Cardiff and Swansea.

Regionally there is an increase in the proportion of jobs advertised as based within the South East outside London (Table 5). Elsewhere the market for these jobs is

dominated by the two regions with the largest conurbations ie the North West (Greater Manchester & Merseyside) and the West Midlands.

Table 5: Percentage Distribution of Advertised Research Jobs by Geographical Areas

Area\Year	2000/01	%	2002/03	%	2004/05	%	2006/07	%
North East	7	1.46	9	1.76	8	1.51	9	2.21
North West	53	11.02	58	11.33	44	8.30	42	10.32
Yorkshire & Humberside	41	8.52	26	5.08	28	5.28	25	6.14
West Midlands	58	12.06	63	12.30	37	6.98	27	6.63
East Midlands	16	3.33	14	2.73	28	5.28	12	2.95
East	25	5.20	22	4.30	24	4.53	12	2.95
South East (excl London)	35	7.28	44	8.59	54	10.19	44	10.81
South West	20	4.16	23	4.49	34	6.42	15	3.69
Scotland	14	2.91	10	1.95	15	2.83	11	2.70
Wales	7	1.46	7	1.37	1	0.19	16	3.93
London	205	42.62	231	45.12	246	46.42	181	44.47
Not stated	0	0.00	5	0.98	11	2.08	13	3.19
Total	481	100.00	512	100.00	530	100.00	407	100.00

From this analysis it would appear that research is very much a centralized activity and the desire for decentralization that is sometimes expressed by central government and other national bodies is having little effect in this sector of the economy.

Type of Jobs

In the following 'Type of Jobs' is divided into five main categories according to their title in the adverts: Director, Manager, Senior, Officer/Researcher and Other. It is seen from Table 6 that a hierarchy can be derived from the number of vacancies advertised in each category and the pay being offered.

Table 6: Type of Jobs Advertised by Numbers & Expected Remuneration, 2007

Job Title	No	<- Mean £	Salary Min £	-> Max £
Director/Head of	12	55,417	54,699	57,705
Manager	22	37,092	34,260	39,902
Senior	24	32,977	27,171	36,222
Researcher/Officer	70	28,777	25,926	30,452
Others	82	26,469	24,254	28,284

It is therefore not surprising to discover that within this hierarchical division there is also a division of responsibilities. However, this division is not discrete. There are

elements of each separate responsibility within every level and people at each level are expected to support people at every other level. In their job title adverts often combine the words ‘research’, ‘researcher’, ‘analysis’, ‘analyst’ or ’statistician’ with words such as ‘administrator‘, ‘development’, ‘policy’ or ‘strategic’ which implies a function additional to pure research.

Director

People at the level of director may best be summarised as providing the broad all-embracing overview that will move the organization forward and they are therefore required to have substantial experience. The director’s responsibilities will include providing leadership, setting the agenda, develop a programme or a portfolio, manage these and see them through to implementation and thereby contribute to the client’s or customer’s or the organization’s internal policy development.

Internally he/she will train, coach and mentor the subordinates to improve the analytical & research capability of the organization as well as develop best methods of operations and procedures.

Externally there seems to be increasing emphasis on looking for new business targets, looking for funding opportunities, research grants and contracts. He/she must maintain and develop client and customer relationships and build professional networks, develop and implement strategies and policies for knowledge transfer. The director will develop sales plans, identify and maximise business development opportunities and he/she will define, develop, coordinate and implement existing and new areas of research, information and knowledge in line with the organization’s strategy.

Manager

The advertisements for ‘Managers’ expect an approach that is more practical and operate at grassroots’ level. Principally this person will have responsibility for managing and lead staff and teams of people, but he/she may have responsibility in other areas of the organizations activities.

The person described as a ‘Manager’ may also be able to work on his/her own creating, designing, implementing and administering databases, and he/she will coordinate the collection of data input as well as the use of the database. He/She will be expected to promote the organization’s information and data capturing systems, and possibly connect with and communicate their existence and their content to external organizations. The Manager will be expected to report on performance and progress to his/her superiors.

He/She may have responsibility for preparing funding applications and tenders. He/she may be managing funding schemes and offers of grants within certain charities and quangoes. The Manager may be responsible for managing and overseeing the work of external consultants and partners and maintaining a good relationship with their personnel and staff generally.

When the team is carrying out research the Manager will also often be the person who presents reports to the relevant external or internal bodies of people.

Senior

People who have the word ‘Senior’ in their job title typically operate on an intermediate level between officers and managers. Their responsibilities will include some management and being the lead person on studies, project work and programmes, assist in developing the skills of junior colleagues with some supervision and training.

Responsibilities will include development and formulation of proposals for externally commissioned projects, working with and keeping contact with respondents and clients and their staff. Otherwise responsibilities will include provision of information, intelligence, and analytical support, presentation and interpretation of data to superiors.

Officer

The responsibilities of those who are more juniors than directors, managers and seniors are many and varied, but may be best summed up as being of a technical and/or administrative nature. They will include little in the way of providing leadership or management of either projects or people. The responsibility will be the act of carrying out actual research and ensuring the best basis for research in terms of data and information of the right type and quality. Administering the affairs of the research unit and its staff eg by arranging meetings and conferences will be a responsibility at this level as will appropriate response to external enquiries.

Ensuring the right type and quality of data for use by the organization itself or for submission to external bodies such as central government is part of the process of collating data. Keeping up-to-date with professional developments and report to superiors as appropriate.

In more detail responsibilities for collating and managing data, conducting surveys and interviews, researching, monitoring, analysing and disseminating data and information is referred to in many adverts as separate, discrete items or in various combinations. Model building appears to be a specific requirement of financial consultants.

Responsibilities referred to less frequently are: Presentation, giving advice on the use of data, ensuring legal compliance, writing articles for professional and other magazines, researching and drafting briefings and reports, and networking with colleagues in other organizations.

Working Conditions

Weekly Hours

Not all job advertisements refer to the number of weekly hours demanded by employers, the length of an average working week. Where it is referred to, the average since the 2000 has been just over 31.5 hours, but varies from 18 to a maximum of 40 hours per week. Just over half of the advertisements refer to a working week of between 35 and 39 hours, but a small 20% of the jobs advertised are part time and refer to only half that.

Among the users of part-time staff are charities and universities with average weekly hours of 28.2 and 27.2 while Unitary Authorities and other public bodies are close to 37 hours per week.

There does not appear to be any particular trend in the length of the working week.

Contract Period

Some 20% of the adverts refer to a contract period, which has varied from three months to a maximum of five years with the average being about 21 months throughout the period to 2007. A peak appeared in 2005 with an average contract period of 29 months.

A third of the jobs, advertised on fixed term contracts, is advertised by universities. Contract periods at these institutions follow the general pattern described above although the average length appears to be slightly longer at just under 24 months.

Pay

Table 7: Annual Earnings (UK) and Remunerations (Researchers)

	UK	Researchers
1999	£17,702	£22,790
2000	£18,939	£24,877
2001	£19,822	£23,650
2002	£20,610	£24,323
2003	£21,327	£27,634
2004	£22,183	£29,385
2005	£23,389	£29,651
2006	£24,134	£32,026
2007	£24,908	£30,871

Source: For UK Annual Survey of Hours & Earnings (ASHE)
Note: Earnings as given by ASHE, Table 14.7a.
Remuneration as offered in job adverts.

It is seen from Table 7 that annual earnings in United Kingdom, as measured by the Annual Survey of Hours and Earnings, have increased from £17,702 to £24,908 or by

nearly 41%. The average remuneration offered to researchers has increased from £22,790 to £30,871 or 35%. Although this is a smaller increase than nationally overall, the salaries offered in research year on year have nevertheless followed the national trend. This is graphically illustrated in Figure 2 below.

Figure 2: Earnings and Remunerations Index 1999-2007 (1999 ~ 100).

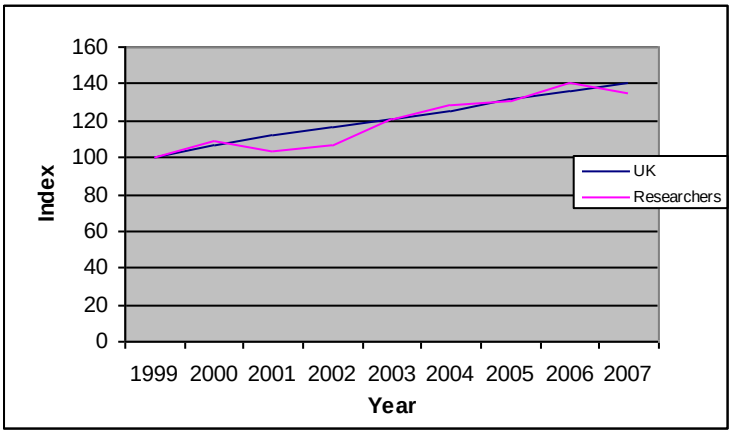

Table 8 shows an increase in the proportion of advertisements for researchers that offer pay of between £21K and £25K until 2002 and there was a corresponding decline in the proportions offering pay outside this bracket. Pay of £20K and below was in 2000 offered by 42.3% of the advertisements falling to 11% in 2007.

Table 8: Distribution of Annual Remunerations

Year\Salary	£6-10K	£11-15	£16-20K	£21-25K	£26-30K	£31-35K	£36-40K	£40K+
	%	%	%	%	%	%	%	%
2000	1.0	8.3	33.0	25.6	18.0	4.5	3.8	5.8
2001	1.7	8.4	26.8	32.9	18.4	7.3	2.2	2.2
2002	1.0	6.3	24.5	38.5	17.7	5.7	2.6	3.7
2003	0.7	3.3	16.4	32.0	22.2	13.1	6.9	5.5
2004	0.0	1.3	10.1	30.7	30.1	11.1	5.9	10.8
2005	0.0	1.9	13.0	25.5	25.5	16.8	7.5	9.9
2006	1.2	0.6	4.2	24.0	25.7	16.8	12.6	15.0
2007	0.5	2.6	7.9	22.1	26.8	18.4	10.0	11.6

After 2002 the proportion of advertisements that offer pay within the bracket of £21-25K is falling as is the proportion that offers £20K or less. By contrast the proportion of advertisements that offer £26K or more increases from 47.7% in 2003 to 66.8% in 2008.

It is seen from Table 9 below that during the period under review some types of organizations are consistently better payers than others. Within the public sector this applies particularly to socalled quangoes which rank 4th or above (on a scale of 1 to 16) in the table. Local Government in the form of Unitary Authorities, County Councils and District councils on the other hand rank no higher than 8 and District

Councils actually have the lowest ranking. Outside the public sector Trade Associations rank 5th or above while private firms offer pay that give them a ranking of 8 or above.

However, as we shall see in the following the picture is more complicated than this. The offices of Central Government, quangoes and other public bodies will often be

Table 9: Average Annual Salary by Type of Employer 2000-2007

Employer\Year	2000/01		2002/03		2004/05		2006/07	
	Rank	Salary	Rank	Salary	Rank	Salary	Rank	Salary
Central Government	2	£31,931	1	£42,702	1	£41,686	13	£28,118
Charities & Vol Organizations	7	£23,967	10	£25,520	9	£28,679	12	£28,773
County Councils	12	£21,665	11	£24,952	15	£25,733	15	£27,301
District Councils	14	£21,137	16	£22,214	16	£22,741	16	£26,200
Fire & Police Authorities	15	£20,930	2	£31,351	10	£28,456	10	£28,950
NHS	10	£22,424	6	£28,108	11	£27,652	5	£32,137
Partnerships	16	£19,030	9	£25,575	8	£28,836	9	£29,372
Private firms	4	£30,569	8	£26,480	5	£32,651	2	£34,664
Quangoes	3	£30,754	4	£30,069	4	£33,400	3	£33,541
Regional Authorities	5	£26,256	14	£24,260	3	£35,577	11	£28,901
Trade Associations	1	£37,769	5	£29,803	2	£40,000	1	£39,002
Trade Unions	6	£24,197	13	£24,411	6	£30,447	6	£30,968
Unitary Authorities	9	£22,684	12	£24,484	12	£27,545	8	£30,468
Universities & Colleges	11	£21,902	15	£23,785	13	£26,924	7	£30,916
Other Public	13	£21,643	7	£27,224	7	£29,419	14	£27,626
Other	8	£23,966	3	£30,907	14	£26,810	4	£33,313

located in London where the general income level and cost of living is high. Local Authorities and Fire & Police Authorities are spread all over the country where in some parts incomes are generally low as is cost of living.

Regional Differences in Earnings

Table 10: Regional Differences

Region	2002		2007	
	Research Salary	Earnings*	Research Salary	Earnings*
North East	£32,741	£20,716	£32,827	£20,411
North West	£22,700	£22,487	£29,434	£22,876
Yorkshire & Humber	£23,482	£21,503	£29,113	£21,952
West Midlands	£19,853	£22,359	£31,471	£22,238
East Midlands	£22,817	£21,772	£28,235	£22,667
East	£25,096	£24,099	£24,582	£26,119
South East	£23,853	£26,499	£31,470	£28,430
South West	£21,395	£22,359	£29,266	£22,498
Scotland	£27,882	£22,016	£28,957	£22,718
Wales	£23,727	£20,758	£28,866	£21,078
London	£26,277	£34,762	£32,561	£36,279

*Source: Annual Survey of Hours & Earnings 2005.

Table 10 above shows the regional variations in the advertised research salaries and how they differ from regional earnings as recorded in the Annual Survey of Hours and Earnings. Research salaries in the London Area were lower than earnings generally in 2007 as in 2002, while they were higher in the North East, the North West, Yorkshire & Humber, the East Midlands and also Scotland and Wales. It may be that this is an effect of nationally agreed pay settlements to which researchers in Local Government, Universities and some other Sectors will be subject.

These differences are illustrated further in Table 11, which compares house prices to research salaries. An average house would in 2007 be out of reach for many researchers in the London area, the South and the East. It will be more easily affordable for researchers in the North, Yorkshire & Humber, and the Midlands, in Scotland and in Wales.

Obviously the affordability factor worsened during the five-year period with house prices increasing faster than salaries. This was particularly the case in the North East and Scotland where house prices more than doubled.

Table 11: Ability to Buy a House, 2005

Region	2002			2007		
	Research Salary	House Price*	Factor	Research Salary	House Price*	Factor
North East	£32,741	£72,797	2.22	£32,827	£149,475	4.55
North West	£22,700	£89,211	3.93	£29,434	£167,405	5.69
Yorkshire & Humber	£23,482	£82,519	3.51	£29,113	£163,520	5.62
West Midlands	£19,853	£108,180	5.45	£31,471	£177,814	5.65
East Midlands	£22,817	£98,601	4.32	£28,235	£168,299	5.96
East	£25,096	£124,264	4.95	£24,582	£196,999	8.01
South East	£23,853	£160,690	6.74	£31,470	£254,968	8.10
South West	£21,395	£135,952	6.35	£29,266	£215,864	7.38
Scotland	£27,882	£77,983	2.80	£28,957	£164,841	5.69
Wales	£23,727	£81,770	3.45	£28,866	£161,977	5.61
London	£26,277	£169,077	6.43	£32,561	£292,432	8.98

*Source: Average of Nationwide & Halifax downloaded from their websites, 2nd quarter of 2002 & 2007.

Quality of Person

In the previous sections I have dealt with the nature of the jobs being advertised in terms of the responsibilities the job holder would be required to undertake, length of contracts, lengths of the working week and the remuneration on offer. In the following I will deal with the qualities demanded of the potential candidates.

Director

Adverts for senior personnel do not often refer to demand for any particular education or qualification. Nor do they stress technical knowledge, but they do stress knowledge

and understanding of the industry within which they work and how this industry and its clients can benefit from research.

As we have seen above they do put considerable emphasis on 'experience'. This will include experience in designing, interpretation and application of both quantitative and qualitative research and operational research and its preparation and presentation. Candidates for such posts must also be able to document experience in management generally and in managing a team and in providing leadership.

Some adverts also stress that the candidates must have an established reputation in research either nationally, internationally or both and possibly documented by writings in reputable professional journals. With the increased emphasis on commercial business an advert can also ask for documented success in securing research contracts and funding.

The skills and abilities a candidate will need as a person are less precise and difficult to document. They are nevertheless particular important for people in senior positions and the presence of such skills may only become apparent in face to face interviews. They include ability internally to create relationships with staff, motivate, communicate, influence and lead and to 'deliver'. Externally they include ability to create effective client and customer relationships. They also include traits such as being imaginative, innovative, entrepreneurial, committed and business minded.

Manager

Where requirements for a particular education is referred to in advertisements for a 'Manager', the demand will often be for a degree or further qualification that gives exemption from examinations by a professional institute such as the Market Research Society. The degree that is demanded will be in Computer Science, Research Methodology or another 'relevant subject'

The subjects, the candidate must have experience in, are many and varied. It includes experience of database and project management, doing queries, analysing, interpreting, report writing, publishing data and research and being a witness at public enquiries; it will include the development and management of research programmes and projects; and it will include experience of managing communication within the organization as well as with external bodies such as in user/supplier relationships. In addition the candidate must have experience of managing people and managing change.

The knowledge required will depend on the sector of which the organization is a part, but will obviously include general issues in management such as risk and change management and management of projects and programmes.

The skills required are of course closely related to the experience, but a particular skill required of Managers are the ability to identify, review, analyse and summarise complex data in clear, concise and creative reports.

The candidate must have expertise and technical understanding and an eye for detail, be logic and a clear thinker; he/she must show motivation, commitment, initiative and

enthusiasm, be flexible, innovative, confident, thorough, creative, calm and relaxed, tactful, diplomatic and an excellent communicator. He/she must be a self-starter and able to work on his/her own as well as be part of a team, able to lead and manage the team. He/she must be able to work under the pressure resulting from a heavy workload.

Senior

Similar to the Manager the demand at the level of Senior will often be for a degree or further qualification that gives exemption from examinations by a professional institute such as the Market Research Society.

Experience and knowledge of the industrial sector in which the candidate will be working as well as of the subject matter is a must for the Senior as well as for the Director and Manager. Some limited experience of project management and contract management is desirable. In depth experience and knowledge of qualitative and quantitative research and statistical techniques and how they can be applied within the sector is a must.

It is often demanded of the Senior that he/she is skilled in both quantitative and qualitative research techniques and will have the ability to analyse and interpret the data collected. Some skills in project and people management is desirable. IT skills are a must.

Ability to lead, motivate, inspire and guide is also desirable and he/she must have an ability to forge productive and effective relationships with good communication skills orally and in writing. The candidate must be ambitious, committed, self-motivated, enthusiastic and confident with the ability to organise his/her own workload.

Officer

For more junior positions the issue of a particular education becomes very important and it is clear that possession of a degree is crucial. It is demanded in about 44% of all adverts for research officers or similar.

The subjects referred to most frequently are economics, social science, politics, research methodology, records management and information governance.

The candidate must have knowledge and understanding of the kind of organization he/she is about to join and the environment in which it operates eg a local authority within the public sector or a market research consultant within the public commercial sector. He/She must have knowledge and understanding of the issues that are the subjects of research. These include transportation issues, education and learning, child care. Knowledge Management and knowledge about Freedom of Information and Data Protection legislation are increasingly referred to. Performance Management and Evaluation are other subjects are increasingly coming into focus.

The issues of which an officer must have experience are many and varied. Not surprisingly research methods and techniques and management of projects and

programmes are referred to most frequently in terms of skills. Experience in the use of computer packages such as Excel, Access and geographical information systems (GIS).

To be able to make full use of a personal computer is clearly an essential requirement of a research officer and with this comes specification for knowledge of particular software packages. Most frequently mentioned is MS Office including its sub-ordinate packages Access, Excel and Word. Other software mentioned are SPSS and geographical information systems (GIS) such as MapInfo.

Personal traits demanded of the candidates reflects the level at which the officer operates, but as for more senior levels self-motivation, confidence, enthusiasm and commitments will be among them. Being organised, accurate and have attention to details are important traits for the prospective research officer. Good communication skills, being a 'team-player' as well as able to work on your own will also be seen as positive.

The Common Elements

In the previous sections we have described the responsibilities that face researchers as well as several other characteristics of the jobs on offer to researchers. We have also described the qualities demanded of candidates.

These descriptions could not have been made if the sources had not revealed that there are many elements of job characteristics and personal qualities that are common to researchers in most of the sectors in which they are working. It is also apparent that these common elements are a substantial part of research as an occupation, but it does not exclude the possibility that they are shared with other occupations. Further research is needed to show to what extent they are shared with other occupations or whether or not they are unique to research or if some are shared with other occupations and if so which.

Some personal qualities are acquired from experience and interaction with colleagues at work. Other qualities are acquired through formal education and training in a variety of institutions and in a variety of other settings. At present these places of teaching, learning, and training are sector-specific. There is no authority with overall responsibility for co-ordinating and setting standards for all researchers in all sectors although there seem to be moves to coordinate teaching, learning and training within the public sector. As a result of this uncoordinated approach different organizations are going their separate ways.

There would be at least five specific benefits in having a national body responsible for common standards applicable to and approved by all sectors:

1. Economies of scale could be accrued from teaching to common standards applicable to all sectors in a few institutions rather than teaching to these same standards in an uncoordinated way in a number of sector specific institutions.

2. A national body could act as a go-between, a mediator and a facilitator in negotiations between different sectors of society and the national economy,

businesses and universities, private and public, in as far as the activity of research is concerned.

3. Testing a common set of standards in many different environments would lead to more robust and therefore more reliable and universally applicable research theories and techniques.

4. A national body would be well placed to promote and coordinate best practice in research across all the sectors in which it forms an essential part of operations.

5. Researchers that have been taught to a common set of standards applicable in many different industrial sectors will have much better career prospects as researchers compared to someone who has been educated in only one sector.

Because of these benefits there ought to be one national body responsible for developing and implementing one set of occupational standards applicable to researchers in all industrial sectors.

Conclusion

Carrying out research, gathering information and intelligence, generally increasing the total fund of our knowledge, manage this and keeping it in some sort of order are activities that increasingly are part of our daily lives as providers or as users. This general observation is supported by evidence that point to an increase in such jobs that is greater than for other types of employment.

Public authorities such as central government support this development in many statements asking for evidence to back policy declarations and by commissioning reviews such as the Lambert Review (Lambert 2003) and the Allsop Review (Allsop 2004) and by giving employers tax credits for research and development. However, it seems there is less willingness to back these incentives with a will to provide researchers with secure jobs in a stable well-paid working environment that also provide a reasonable career path.

Lambert points out that as a share of GDP, overall spending on R & D in the UK has declined steadily over a long period (Lambert 2003, p15). Karfoot and Sykes in their foreword to Solesbury and Grayson (2003) note that within the local government arena there remain a perception that research is, in some way, an optional activity.

A report by a Working Group established within the Social Research Association (SRA) looked at the organization's training activities (SRA 2005) and its role as provider and an organization concerned with education and training in social research more broadly. What this report and the reports referred to above fail to do is to look at the traits, which characterise and define a researcher and distinguishes such a person from people in all other occupations. This must surely be the starting point on which provisions for training and education should be based and which will define where investment should go.

Post Scriptum

This report is to a great extent based on previous reports on the same subject written during a period of relative stability politically and economically. It has been written during the autumn of 2008 when the outlook for the economy nationally and internationally has become increasingly uncertain and these developments may in fact prove to invalidate some of the conclusions of the report in the areas of job numbers and salaries and living conditions. One is reminded of the observation by Karfoot and Sykes (see above) that research sometimes is seen as an optional activity. This could be particularly true during a period of economic uncertainty and in the immediate future it will be harder to persuade employers and funding authorities of the necessity of research and information. A unifying body who can argue the case for a national set of occupational standards could potentially be an important player in this process.

Further Reading:

1. Researchers' Lead Body Working Group: Researching Researchers: A needle in a haystack, unpublished paper, London, ca 1997.

2. Moller, Knud, A Career in Research – What Career? Laria News, No 63, May 2000, pp18-21.

3. Moller, Knud, A Career in Research – An Update, Laria News, No 66, June 2001, p14.

4. Moller, Knud, Researching Researchers, Laria News, No 75, June 2004, p 20.

5. Lambert, Richard, Lambert Review of Business-University Collaboration, Final Report, HMSO, London, December 2003.

6. Tarrin, Brian, 2006 another flat year for UK research, Research magazine e-mail alert, 23 July 2007.

7. Grayson, L, and Solesbury, W, statutory requirements for research, a review of responsibilities for English & Welsh local government, LGA & LARIA, LGA Publications, London, September 2003.

8. Research Careers Initiative (RCI), Final Report 1997-2002, Department of Trade and Industry, London, 2003.

9. Allsop, Christopher, Review of Statistics for Policymaking, Final report to the Chancellor of the Exchequer, the Governor of the Bank of England and the national Statistician, HMSO, London, March 2004.

10. Working Group of the Social Research Association (SRA), Social Research Training, Report prepared for the SRA Executive Committee, London (?), May 2005. (Downloaded from the SRA's website.)

Appendix 1: <u>The Database</u>

The database is being build up from scanning job-adverts wherever they might occur. It is obviously a sample of all the jobs that have been advertised at anyone time, but there has been no attempt to ascertain the size of the sample viz a viz the total number of jobs available in research. Likewise there has been no systematic, organized attempt to stratify the sampling process; rather any relevant advert has been seized upon wherever and whenever it has been found and the data sampled could therefore be scewed in some way. However, there has been an attempt to cast the net as wide as one person's resources allow in an effort to minimise such scewedness.

The database is held in 'Windows Access 2000' and is in two related parts; a main part, which is the subject of the Analysis shown in this paper, and a secondary part, which contain the contact detail of each employer. The main database has 26 fields (51 cells) as shown below. It has been extended from previous versions of this research. Some fields have more than one cell to enable the analyst to capture more than one key issue in each advert.

1) ID Number – the automatic, sequential ID number of each record.

2) Date – date of the job advertisement.

3) Advertiser – name most often of the employer, but sometimes an agent.

4) Employer – name of the employer.

5) Employer ID – the ID number emerging from the separate database of employers.

6) Type of Employer – seeks to categorize employers eg Central Government, Charity, Private Retail, Private Manufacturing, Unitary Authority etc.

7) Job Title – as specified in the advert.

8) Location - the name of the place where the future jobholder will be based.

9) Subject Matter – the description in the advert of what is to be researched.

10) Type of subject – seeking to classify the subjects eg crime, housing, market research etc.

11) Education – the education & qualification, which the advertiser specifies that the jobholder must have to be able to do the job.

12) Profile 1 & 2 (two cells) - the standing within society generally demanded by the employer.

13) Years of Experience – the number of years in which the future jobholder must have gained experienced in a similar working environment.

14) Experience 1 to 4 (four cells) – description of the working environment from which experience would be desirable.

15) Interests 1 & 2 (two cells) – what in the advert is described as the applicant's 'interests'.

16) Knowledge 1 to 4 (four cells) – description of the knowledge the advertiser state as being necessary for the jobholder to do the job.

17) Understanding 1 to 4 (four cells) – description of the areas which the applicant must have an understanding of.

18) Skills 1 to 4 (four cells) – skills demanded of the applicant not referred to elsewhere.

19) Personal Skills 1 to 4 (four cells) – description of the personal attributes and aptitudes, those which cannot necessarily be taught formally, but which a person either have inherently or have gained through experience and maturity such as good communication and being a team player.

20) Computer Skills 1 & 2 (two cells) – mostly the names of those software packages, the jobholder must have experience or knowledge of and ability to use.

21) Responsibility 1 to 6 (six cells) – description of the tasks the jobholder will be responsible for.

22) Weekly hours – number of hours per week, if specified.

23) Contract Period – number of months in the contract if a temporary job.

24) Salary (three cells, Min, Max & Mean) – the figures entered as specified in the advert. If only one figure is specified that is entered in the fields for 'Max' and 'Mean'. If no figure is specified, no figure is entered into the database.

25) Medium – where the advert has been found eg a newspaper, professional magazine or an organizations web-site.

26) Notes – anything else not referred to above, especially issues to do with holiday entitlement, pension entitlement and other special features of the employment conditions. Also included here are non-numerical descriptions of the salary such as 'competetive'.

Appendix 2: Advertising as a Source of Information

In the introduction to the main paper it is mentioned that job adverts formed the main source of information. This appendix describes the criteria for selecting the adverts, the philosophy behind the extraction and categorisation of the information and some of the difficulties.

Criteria

The adverts that were selected for analysis would contain words describing an activity such as analyst, analysis, information, intelligence, knowledge, research, researcher, scientist or statistician either separate, in combination or in combination with other words such as administrator, director, manager, officer, technician or worker. Most often such words would appear in the job title, but sometimes only in the text. It should also be apparent from the text that the implied activity would be a major part of the jobholder's function. The advert should contain some minimum of information about the employer eg whether public, private, a voluntary organization or other and where the jobholder would be based.

Hopefully the reader will have noticed that in the main paper I have sought to draw a distinction between description of the job and description of the kind of person the employer is seeking.

Job Description

The description of the job is an answer to the questions: What do you need to do and what are the constraints? It will include an outline of the functions and responsibilities the jobholder needs to undertake to fulfil the obligations of the job. It will also include an outline of the conditions such as the pay on offer, expected working hours and contract period.

The Person

The description of the person will be in answer to the questions: Who are you and what can you do?

The answer to the first question will include a description of such traits as aptitudes, talents, numeracy, being particular with details, accuracy and presentation, ability to interact with other people (being a 'team player') as well as work on own initiative, business acumen, initiative, creativity, leadership, ability to inspire, ability to persuade etc etc. It may be possible to impress upon people the importance of these traits, but for most candidates they will have been acquired by experience or be part of your 'make up'.

The answer to the second question will depend on what the candidate has been taught either in formal education such as at school, college or university or informally by absorbing the advice of a supervisor in a workshop situation. Also he/she will through the experience of the work situation have acquired skills and knowledge that were not necessarily part of a conscious teaching process.

A Problem

The biggest problem in analysing adverts is that the above descriptions nearly always are very blurred. There is no clear distinction between the requirements of the job and the traits of the best person to meet these requirements and there is no distinction

between education, skills, understanding, knowledge and experience. Because of this lack of distinction it becomes difficult to compare different job adverts in that essentially identically jobs may be described very differently and with a different emphasis on what is required of the person and what is required to do the job. It will therefore in many adverts also become tricky to determine whether the employer is seeking to fill a senior or a junior position.

Location

Analysing adverts it is important to realise how advertisers operate and prioritise. Junior posts may occasionally be advertised in small adverts in the national press, but most of these posts will be advertised in the local press. Conversely senior posts may occasionally be advertised locally, but most will be advertised nationally. Many jobs will only be advertised in the sector specific media.

Obviously even the most conscientious researcher cannot monitor all the media whatever its origin. These properties of advertising will therefore have consequences for the attempt to obtain a sample that is representative of localities, professions and different levels of seniority. However, in order that the sample could be as representative as possible all possible efforts have been made to ensure representation of all regions, all sectors of society and all levels of the employment hierarchy.

Appendix 3: Sources

The search for advertised research jobs has been as wide as it has been possible to make it. Because resources have been limited it has not been possible to scan all media as thoroughly as one would have wished, but each of the titles and websites referred to in the table below has been scanned many more times than the numbers would suggest. The numbers only refer to the number of adverts found. However, some features are apparent.

'The Guardian' newspaper is by far the most important medium for research adverts. However, sometimes very senior positions are also found in 'The Times' or 'Financial Times'. Junior positions on the other hand can often be found in local papers. The third important feature is the increasing importance of the World-Wide Web in advertising jobs and many large organizations now have their own jobs pages.

Medium	No of Adverts	
	2000/03	2004/07
Estates Gazette	29	0
Financial Times	20	14
Jobs North West	0	7
Knowledge Management	9	0
LariaNews, Website & Circulars	9	12
Liberal Democrat News	4	3
Local Papers	59	15
Marketing	33	0
Materials World	0	6
Metro	1	13
new start	29	25
Opportunities	7	5
Planning	99	32
Regeneration & Renewal	55	101
Researchersforum.gov	0	2
research-live.com	0	100
RSS News	13	13
The Guardian	685	497
The Independent	26	6
The Times	11	21
Various websites	2	16
Others	20	49
Total	1111	937