The Social Networks of Older Workers

Dr Kaberi Gayen, Dr Robert Raeside and Professor Ronald McQuaid

Employment Research Institute
Napier University
Craiglockhart
Edinburgh
EH14 1DJ

eri@napier.ac.uk
http://www.napier.ac.uk/depts/eri/research/equal.htm

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Research Objective

This document reports on a study by the Employment Research Institute of Napier University, Edinburgh on the social networks of older workers. The main objective of this research was to determine if the social networks, that is, the networks of friends and acquaintances etc., of older people (50 to state pension age), influence their employment.

A *social network* is the "set of personal contacts through which [an] individual maintains social identity and receives emotional supports, material aid and services, information and new social contacts" Walker *et al* 1977: 35). Thus, a social network is a set of actors that may have relationships with one another, where relationships are defined by social interactions such as relatives, friendship, acquaintances, collaboration, and information or other interaction flow, or a combination of such interactions.

It is argued that, over 50 year old men, who are not employed have poor social networks than those who are in work or younger or female. Thus, they may be deficient both in human capital (qualifications etc.) and social (links to other people) capital.

The importance of the current investigation is the addition of a micro social perspective, *social network analysis,* in the search of the causes of high economic inactivity amongst the 50+ year olds in Scotland, rather than attributing the problem solely or mainly as an outcome of structural change in the economy.

Background

Over the next 25 years, the UK's workforce is projected to significantly age. The average age is expected to rise, from 38.6 years in 1998 to 41.9 years by 2021, accompanied by a significantly more aged workforce. For Scotland, this changing age structure will be even sharper than most other parts of the UK. Population projections by the General Registrar for Scotland, incorporating the 2001 Census data, predict a continuous fall of population from 5.12 million in 1998 to 5.06 million by 2021, followed by a quick fall to 4.83 million in 2026. Simultaneously, the number of children aged under16 is projected to fall to 85 per cent of its 1998 level, and those aged 24-34 to decline by 20-25 per cent within the next 20 years. Clearly the larger older dependent population will increase fears over the adequacy of pensions, the supply of social services and the size and structure of the labour force. This has led to calls to increase the age of pension entitlement (beyond the increase in female pension age to 65 by the year 2020) and to encourage people to remain in employment until older ages, as well as to reform pensions.

However, as Disney *et al* (1997) observed, half of men and one third of women of aged over-50 leave work before state pension age in the UK. Brown (2000) and Hollywood *et al* (2003) suggested that the Scottish economy was adversely affected by the low level participation of people aged 50+ years to state pension age and that unemployment among this age group was higher in Scotland than

elsewhere in the UK. Older workers are particularly disadvantaged, even in relatively buoyant labour markets, due to individual aspects such as poor qualifications, job search strategies and perceived age discrimination (McQuaid and Lindsay 2002, 2005).

In Scotland as a whole 31% of people between 50 years old and retirement age are described as not being active in the labour market (i.e. not in work or seeking work) and in Glasgow City and North Lanarkshire this percentage rises 45% (Labour Force Survey, March 2003-February 2004). Thus there is a need to study the situation of those in this growing, but vulnerable, age group.

Causes of High Economic Inactivity Rates among Older Workers: Brief Literature Review

One of the main reasons attributed to the high levels of economic inactivity amongst those over 50 years old is structural change in the economy (see Kodz *et al* 1999 and Lindsay and McQuaid 2004, among others). There has been a move from manufacturing to service employment. This has particularly affected older industrial areas such as the West of Scotland. People who are 50+ years old may have had spent much of their life in manufacturing and have difficulty acquiring skills for service type work. The other causes of long term unemployment among older workers found in literature are: the effects of the new economy and skill gaps; outsourcing and/or globalisation; the welfare benefit system – and state and institutions; employer prejudice; the social

environment; negative attitudes towards work among unemployed; health problems and caring responsibilities etc. Many of these causes can be related to skill deficiencies, other employability factors and changes in demand in the economy.

With sectoral and skills changes in the economy affecting labour demand, one of the arguments in this research is that, where older job seekers have to move to new sectors of the economy, or need new skills to meet changing labour demand, then they may have to become more reliant on social networks to find out about, and get introductions to, jobs.

Methodology

The research reported here was conducted between September 2004 and November 2005. The main research approach used is Social Network Analysis, i.e. a research method "used to analyse the pattern of interpersonal communication in a social system by defining who talks to whom…can be used to understand the flow of personal influence by enabling researchers to define who influences whom in a social system" (Valente 1995: 2). Social network analysis focuses on uncovering the patterning of the interactions of an individual with their friends, acquaintances and social relations. In some cases these social networks may be interlinked with professional relationships (e.g. with support or advisory services).

As a research approach, social network analysis seeks to capture

the context of social relations within which actors participate and make behavioural decisions. The unit of analysis in the social network approach is not the individual, but an entity consisting of a collection of individuals and the linkages among them.

This approach has been used in studies of the diffusion of innovation, demographic change, drug dependency, entrepreneurial research as well as labour market analysis etc.

Social Networks and Job Search: Evidence from Literature

Hannan (1999) reported a detailed econometric study of micro-data from the British Household Panel study, examining the impact of both traditional economic explanations of exit from unemployment, and the social network hypothesis. The latter was found to be very important. In the labour market, people use social networks of friends, peers, parents, and teachers to obtain career advice and information on jobs (Holzer 1987). Granovetter (1973, 1995) found that over 50% of jobs were obtained through social contacts and Rees (1966) found numbers of over 60% in a similar study.

For Granovetter (1995), Topa (2001), Calvo-Armengol and Zenou (2001) unemployed individuals often find jobs via employed friends or acquaintances. Boorman (1975), Montgomery (1994), Calvo-Armengol and Jackson (2003) and Topa (2001) found positive associations between social networks and the transmission of

job information and eventually obtaining a job.

Sweitzer and Smith (1974) observed that the unemployment levels among others often influences unemployed individual's beliefs about the prospect of finding a job and thereby their search intensity. Hedström *et al* (2003) further focused on the role of social interactions in that exits from unemployment were affected by the availability of employed contacts within local neighbourhoods.

Working on the role of social networks on women's participation in the labour force, Stoloff *et al* (1999) found that the greater the quality and diversity of the social resources that are available through a woman's social network, the more likely she is to be working for pay.

The socioeconomic resources of the people in the network are additional important components of social network composition. Job seekers who are able to utilise the information and to influence relatively high status and affluent individuals are likely to find better jobs than those who do not have such connections. Lin *et al* (1981), for example, found that the higher the occupational status of the job contact, the higher the occupational status of the job the searcher obtains. Because highly educated people tend to have high status occupations, people who have such people in their network should also benefit from them in the labour market. In addition, the higher socioeconomic status of the contact (called 'alters'), measured in terms of educational attainment,

should increase the range (and possibly quality) of information received, because a higher status is associated with more diverse networks (see, Stoloff *et al* 1999 and Campbell *et al* 1986). This could in turn connect the job seeking person (called the 'ego') to a more diverse, and beneficial, set of second order contacts.

The availability of network resources is essential to understand how people use their networks to find jobs (Campbell *et al* 1986).

It is suggested that:

i) individuals who are currently not employed have a higher probability of remaining so, because of a failure of the social network to inform them about job opportunities; and hence

ii) high rates of unemployment can emerge among people whose social networks are weak or are only weakly connected to the labour market.

Thus the analysis of social networks can explore the social environment in which individuals are embedded and can reveal how that social environment may shape their job related attitudes and also act as a bridge to employment.

More precisely, social networks can play a role as a persuasive factor for job related attitudes and at the same time as a vehicle to obtain job information and eventually a job. In the present research both of these aspects are addressed.

The Sample and Data Collection

Two dimensional data are required to investigate the association of someone's social networks in explaining their employability. These are, first, the individual's social and economic background data and their views on employment; and second, the relational data of their friends and acquaintances. These will allow statistical models to be constructed that analyse the importance of social networks.

In order to judge the importance of social networks, particularly to the jobseekers between 50+ year olds and state pension age who are not employed, comparisons need to be made, first with those in that age group who are in employment and second, with those <50 year olds who are in or out of employment. So, a quota based sampling scheme was adopted to acquire four sub-samples of about 25 males and 25 females in each age group. The sub-samples are:

- Not employed 50+ year olds but below state pension age
- Employed 50+ year olds but below state pension age
- Not employed <50 year olds
- Employed <50 year olds

A small percentage of those not employed were not seeking a job (according to the ILO definition, they could be termed inactive, but for simplicity they are considered as not employed in this report).

A number of employers and agencies catering for job seekers allowed access to their clients:

1. For employed people (both over 50s and under 50s), interviews were held with staff at the Royal Bank of Scotland, NHS, Diageo, B&Q, Napier University, and a selection of people who were contacted individually. Attempts were made to include interviews with people from a range of occupational groups roughly reflecting the local working population.
2. For people not employed (both over 50s and under 50s), data were collected from A4E Work Scotland, Employment Access-South Edinburgh, West Edinburgh Action, Working Links, Worktrack and personal contacts from the researchers' social networks for people voluntarily retired (but who may be seeking work).
3. Data were collected from the Edinburgh Housing Association, Yachting Club of Edinburgh, Golf Clubs of Edinburgh to target both the employed and unemployed mainly over 50s with a few under 50s people.

194 people were interviewed and these reported on 530 relations. The composition of the sample is detailed in Table 1.

Table 1: Employment Status as per Age Category

	Employment Status		Total
	In employment	Not in employment	Total
<50 years	54	41	95
50+ years	45	54	99
Total	99	95	194

Among the sample, 51 per cent were not employed and 49 per cent were employed. Among the <50 year population, 55 per cent were not employed and 43 per cent were employed. For the population of 50+ years, 46 per cent were not employed and 55 per cent were employed. For those in employment, the sample was fairly representative of the employment profile in Edinburgh.

The data were collected by interviewing the individuals using a structured questionnaire. The questionnaire comprised of five sections: Background Information, Education and Professional Skills, Employment History, Searching for a Job, and Social Network questions. The social network questions were used to find out about the employment status and employment history of friends and acquaintances and their influence on the individual's employability and job seeking. Those interviewed were asked to report on up to five friends. Asking for reports on three to five people is fairly common in social network questionnaires (see Wasserman and Faust 1980). Views and degrees of influence were assessed using a Likert scale (using a 1-5 scale) and the questionnaire was coded and entered into the statistical package SPSS for analysis.

Findings

More people lived alone among the under fifty year old group (48 per cent) compared to the 50+ year old group (41 per cent). There is a significant difference between the <50 and 50+ year groups in terms of living with a spouse/partner but

without children. In the <50 year old group only 17 per cent lived with their spouse/partners compared to 40 per cent in 50+ year old group. Unsurprisingly there is also a significant difference evident in lone parents - 14 per cent in the <50 group compared to only 3 per cent in 50+ year group. However, there is almost no difference between the groups in relation to living with a spouse/partner and children. For the <50 old category the mean number of children was 0.41 with a standard deviation of 0.722 and for the 50+ group, the mean number of children was 1.24 with a standard deviation of 1.23.

they possess. Among the <50 year old group, 45 per cent were owner occupiers whereas this rate was much higher in the 50+ group, at 66 per cent.

Academic qualifications were higher among the <50 year olds group than the 50+ year olds, see Figure 1.

As expected there were more people in the 50+ age group who did not have any qualifications and there were also fewer degree holders in this age category. However, as displayed in Figure 2 when work based qualifications are considered the 50+ age group had more qualifications.

Figure 1: Academic Qualification per Age Category
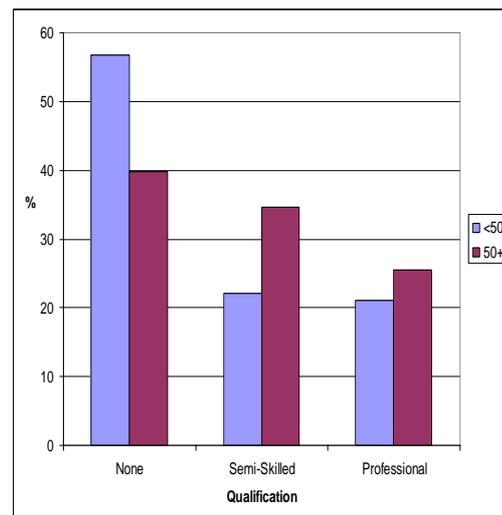
Figure 2: Comparison of Work Based Qualifications per Age Category

The majority of the sample (56 per cent) reported owning their own homes. Among others, 23 per cent rented their house from the local council, 11 per cent rented from housing associations, 8 per cent from the private sector and the rest, 2 per cent, from other sectors. There is a significant difference between the age categories in terms of type of accommodation

The distribution of activity between the age categories is illustrated in Figure 3 and it is clear that amongst the 50+ year olds there were a variety of reasons for not being in employment.

The distribution of job types for those employed was similar between the age groups. However, the distribution of previous employment for those who are not

employed differed between the age groups. 25 per cent of those who were not employed in the 50+ category had previously been employed in manufacturing or construction, while only 13 per cent had been previously employed in this sector amongst those <50.
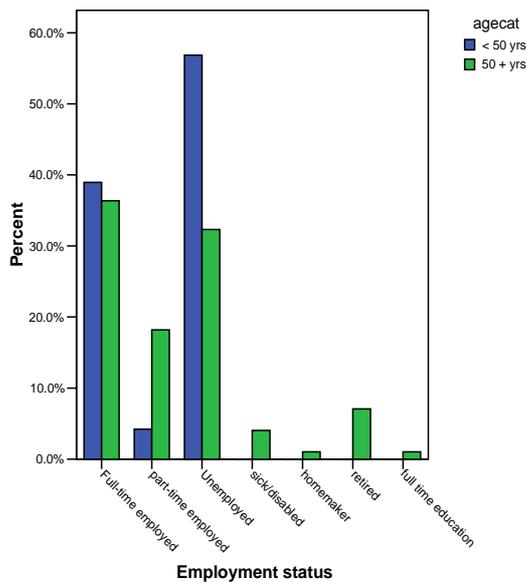
Figure 3: Distribution of Activity for the two Age Groups.

Surprisingly, the average or mean duration of being not employed is longer for the <50 year old group at 18.7 months compared to 17.0 months for the 50+ year old group. Regarding Benefits received both age categories most frequently cited Job Seekers Allowance.

When asked about their previous work history the majority of the 50+ group were in stable employment. A smaller majority of the <50 year olds had a stable employment history and more had spells of not-in-employment or breaks for study.

When asked about the acceptability of a job with less status than their current or previous job, the majority of both age categories suggested it would not be acceptable. However,

for those not employed, a job of less status than their previous one would be more often acceptable, particularly for those in the 50+ year old group. The acceptability of service sector jobs was found to be similar between to two age categories.

Considering approaches to job searching, older people appear to search more locally and rely more on Job Centres and friends and family than their younger counterparts. The younger group make more use of the internet and perceive direct approaches to employers as relative more important than older people.

The degree of importance, as scored out of ten, of personal and external barriers preventing employment are now examined for those out of work, grouped by age category. The relative importance of the various personal barriers for each age group is displayed in Figure 4. For both age groups a lack of IT skills are stated as the most important barrier.
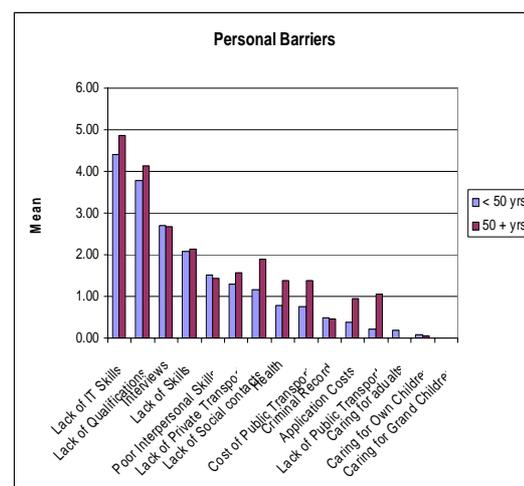
Figure 4: Personal Barriers to Obtaining Work

Personal barriers preventing people getting employment are

generally similar for each age group (barriers were ranked on a 1-5 scale). A 'lack of IT skills' (scoring 4.9 for 50+s and 4.4 for <50s) and 'qualifications' (4.3 and 3.8 respectively) are the most important personal barriers (Figure 4), followed by poor 'interview skills' and 'general skills'. A 'lack of social contacts' was more important for 50+ people (1.9 and only 1.2 for the <50 year olds). So, given their limited networks, they were unaware of the importance of this barrier.

There were differences between age groups in the external barriers to getting employment (Figure 5). The most important barrier by far among the 50+ is 'age' (4.4), while <50 year olds scored age as only 2.7. 'Being long term unemployed' (2.7 for each age group) was next in importance, followed by 'a lack of job opportunities' (especially for older people at 3.0 compared to 1.9 for younger people). Both age groups scored 'a lack of contacts who are at work' at around 1.8.

Social Network Findings

On average each respondent mentioned about 2.7 network members. For the younger respondents, the mean number of contacts was 2.8 and for the 50+ year old respondents it was 2.7. There is a significant difference in the number of network members as per Employment Status. Those not employed have 1.9 ties on average, compared to 3.63 for employed people.

The duration of acquaintance with the mentioned network members is quite high, mainly more than 10 years. People mainly have contact with their network members weekly but meeting weekly is higher among <50 year old people than 50+ year people. Younger people also contact their network members more often on a daily basis than the older age group. The most common method of communication is face-to-face. Meeting network members face-to-face is higher among those 50+ year not employed people than younger people, who use e-mail as a medium of communication more than the older people. Older people live nearer to their network members, 5-30 minutes distance by bus/car, whereas younger people live within a distance of 30 minutes to one hour by bus/car. Home is still the main meeting place. Younger people visit their network members' homes more than older people while older people use social or community organisations as their meeting place more than the younger group. People who are not employed appeared to meet their network members more in the home, whereas employed people

Figure 5: External Barriers to Obtaining Work by Age

meet their friends in clubs/ pubs/ coffee shops more.

People quite often turn to their network members for advice on mundane problems, and younger people turn more to their peers than do older people. Also employed people turn more to their peers for mundane problem advice than those not employed. The <50 year olds feel more influenced by their network members in their personal decision making than the 50+ year people and employed people also feel more influenced by their network members in their personal decision making those not employed.

The <50 year old age group and employed people speak more frequently about work opportunities with their network members than 50+ year group of not employed people. Network members mentioned by the <50 year employed people are mainly engaged in managerial and/or professional positions, whereas network members mentioned by 50+ year olds are mainly not employed.

Network members mentioned by actors who are not employed are mainly involved in manual jobs or out of work. <50 year old people have more network members of their same status, whereas the older age group mentioned relatively more often that their network members were mainly of higher status than them.

Employed people had more network members with higher status people, whereas people not employed had more network

members with either same status or a lower status than them.

Help received from the network members in searching for a job is not very frequent. Although the younger age group get more job information and help with applications from their network members than the 50+ year olds, those not employed reported receiving more help from their network members.

From the discussion above it is evident that there are clear differences between the networks of younger and older people, but the sharper differences are evident in networks of employed and not employed people.
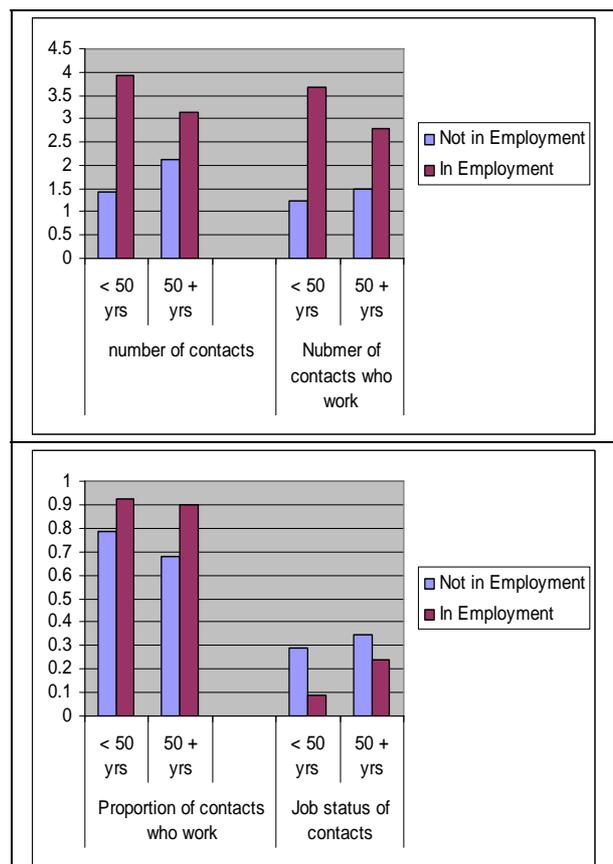
Figure 6: Mean Number of Contacts and Proportion of Contacts who are in Employment by Age

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Bar charts for the mean number of contacts, the mean number of contacts who are employed, the proportion of contacts who are employed and the mean relative job status of the contacts are displayed for each activity and age group in the Figure 6. From this it is clear that social network variables have a significant association with the likelihood of someone being in employment.

To test for significance, a two-way analysis of variance was used and it was found that for the job status of contacts there were no significant effects for either age or activity level. For the number of contacts a significant effect was observed between employment categories but not between age categories. However, the interaction between age and employment level was found to be significant. In other words those in employment did have significantly more social network contacts, but we need to consider more fully the effects of age. This effect is illustrated in Figure 7.
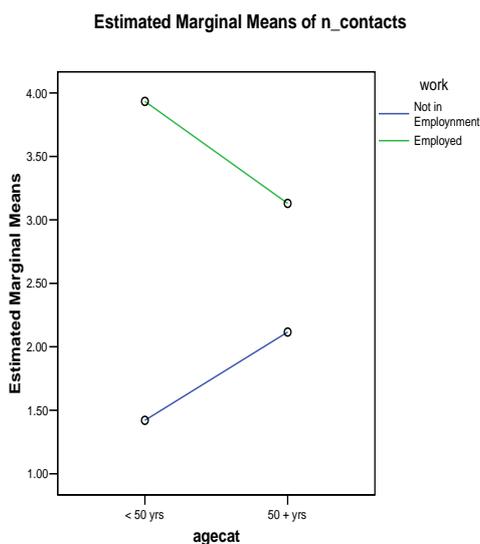
Figure 7: The Number of Contacts by Age and Employment Status Level

The number of contacts who are in work differed significantly by age and whether people were in employment or not, and also the interaction between them was significant. For the proportion of contacts who were in work, only whether or not people were in employment was found to be significant. Thus if a respondent is employed then they have more contacts who are also in work. For employed people, the number of contacts falls with age (the <50 year olds have significantly more contacts) while for the not employed, the number of contacts rises with age (the 50+ years old have significantly more contacts).

The strength of ties with members of someone's social network was estimated by summing the factor scores for each named member in someone's social network. The variables combined for the five members in someone's social network were:

i)   frequency of meeting;
ii)   frequency of mundane problem advice;
iii)   influence on personal decision making; and
iv)   frequency of discussions about work opportunities

The effect of the variable "strength" is illustrated in Figure 8.

From Figure 8 it is clear that the stronger the ties are with contacts then the more likely a respondent will be in employment. Ties are less strong for the older group. Thus one can observe that, regardless of age level, having social contacts appear as important to increase the

likelihood of being employed. The effect is more pronounced for the younger age group.
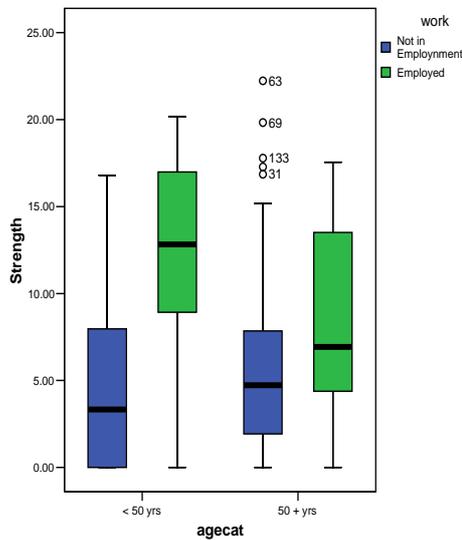
Figure 8: Strength of Ties with Contacts by Age and Employment Status

Statistical models were formed to determine the relative importance of different variables in influencing the likelihood of being employed. For the younger age group the greater the number of children, qualifications and number of contacts all made employment more likely. For those 50+ years old if the respondent was married, their spouse worked, they owned their own home and had a greater proportion of contacts who worked, then it is more likely that they are employed.

From this it appears that for people who are 50+ years, not employed and looking for a job, even if they have contacts and have fairly strong relationships with their social network members (ties), this factor cannot explain their employment because they (the ties) are not in a position to be helpful in getting the respondents into work. The bar chart presented in Figure 9 shows

this difference. Among the 50+ year people, who are not employed, their social network members are mainly not employed and if any of them are employed, they are often in manual jobs. On the contrary, the employed people have network members who are mainly in managerial/ professional positions.
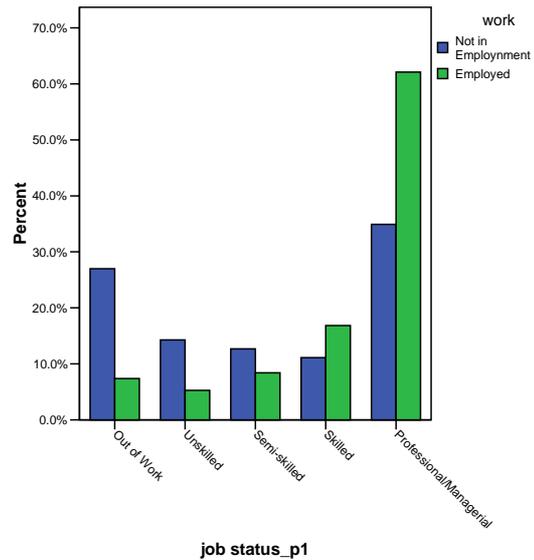
Figure 9: Difference in Social Network Members' Job Status of 50+ Year People by Employment Status

This is further illustrated by Figure 10 which presents the ego-centric network contacts from a variety of respondents.

From this the importance of social capital is evident – the more contacts one has who are in work, and the higher their status, the more likely is it that the respondent is also in work.

In Figure 10, several ego-centric networks by age category and employment status have been presented. In the diagram, colour blue represents the managerial/ professional positions, red represents unemployed, green represents homemakers, dark

green represents semi-skilled and maroon represents skilled manual jobs.

Unfortunately, people who are not-in-employment, irrespective of age category, have a lower number of ties compared to employed people. If people are in the older age category, and not employed but seeking a job then they have very few contacts and often they mentioned that they had hardly any friends. After decoding the

job and their network members were not employed or worked in semi-skilled or skilled manual jobs. 50+ year old employed people mainly represented manual jobs rather than professional/ managerial jobs.

Thus from very micro analysis it was found that the older, not employed population have very few network members, and the network members that they do have are mainly not in employment or else

Red
Not employed (50+)

Blue
professional/ managerial (<50 years)

Green
homemakers (50+)

Dark green
semi-skilled manual (mainly 50+)

Maroon
skilled manual (mainly 50+)
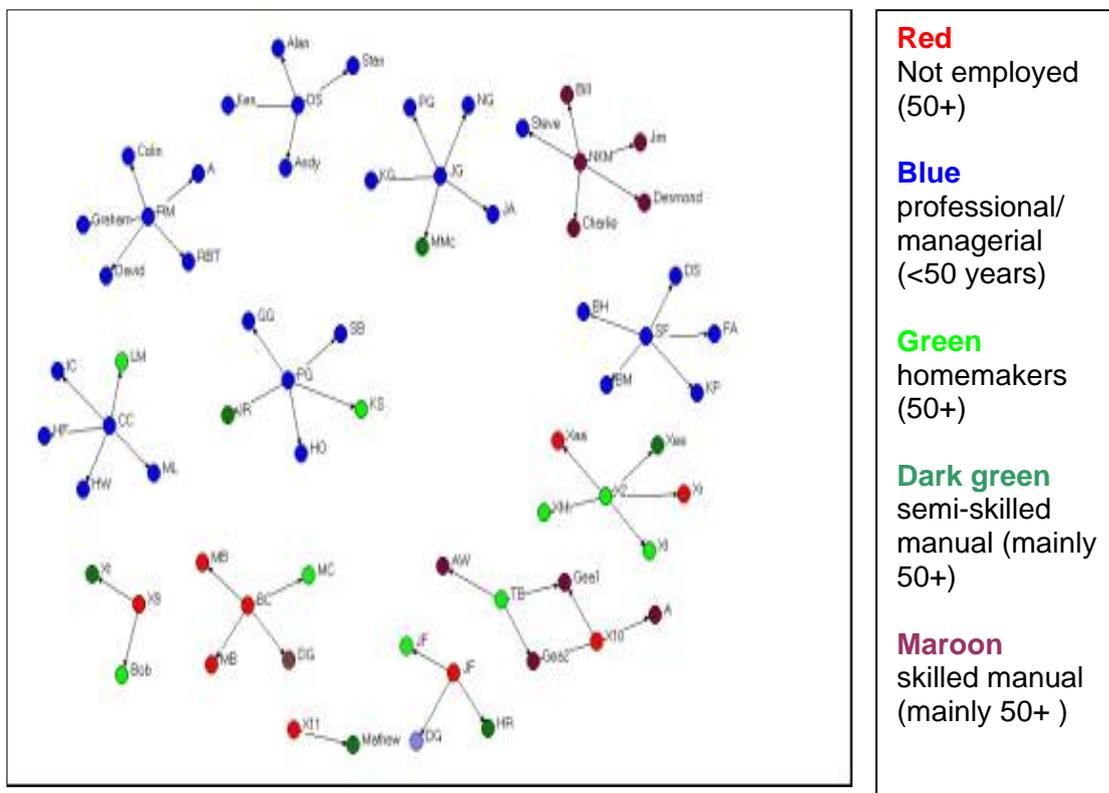
Figure10: Sample Ego-centric Networks by Age and Employment Status

individual characteristics it was found that blue (professional/ managerial) egos' network members also displayed blue and these blue egos were mainly <50 employed actors.

Red egos represented not employed actors who were mainly 50+ year people and looking for a

are engaged in manual jobs from which positions they cannot provide much job help to the person (ego).

Conclusions

In the sample it was found that the 50+ year olds work more part-time jobs, more unskilled manual jobs

and fewer weekday only jobs than the <50 year olds.

The demographic and socio-economic characteristics of the sample showed that the older group has more home owners, more children, more spouses who work, more affiliation with organisations and more access to private transport than the <50 year age group and this has an effect on the attachment to employment.

In this research the human capital has been analysed in terms of academic qualifications, together with professional/ vocational qualifications and previous job history. It was found that:

- the rate of any kind of academic qualification was 1.87 times more among <50 year old people than the 50+ year old people;
- the level of academic qualification was also much higher among <50 year old people than 50+ year old people, for example, 22.1 per cent in <50 year old group have secondary/higher degree, which was only 8.1 per cent in 50+ year old people;
- 50+ year old people had more vocational types of qualifications than the <50 year old group.

Regarding their previous working life the older age category reported having more stable jobs than the younger age group.

Thus, in terms of human capital there is a difference between the age categories. <50 year old people had a higher level of academic qualification than 50+

year people whereas 50+ people had more professional and/or vocational qualifications and had more stable jobs compared to the younger cohort.

The main objective of this research was to examine the influence of social networks in explaining older peoples' employment. The influence of social networks was analysed in two steps. First, like other variables, social network variables were examined as per age category and then compared with employment status.

- Number of ties per age category was almost same;
- Employed people had much higher number of ties (3.63) than not employed people (1.9);
- Among 50+ year olds, the mean number of ties was much higher among employed people (3.1) than not employed people (2.2);
- Employed people contacted their ties daily basis more than not employed people;
- Network members of 50+ year old employed people worked mainly in managerial and/or professional positions, whereas network members of 50+ year olds not employed people were mainly out of work or employed mainly in manual jobs.

Statistical models were used to identify factors linked to people's employment. The social network variables were found to be significant in them all. In the models for the whole data set, number of contacts and proportion of the contacts in employment were found significant. In the models for <50 year old people, the same variables were significant. In both models for 50+ year old people and

models for 50+ years of who are not employed and looking for a job, only the proportion of contacts who are in employment was found to be significant.

The key findings are:
- Social networks are important in understanding people's employment status;
- Employed people have more contacts;
- Employed people have both higher human capital and stronger social capital;
- Older people who are not employed and looking for jobs have fewer ties and very low social capital in terms of their social network.

Recommendations for Further Study

1. There is a need for surveys in other geographical areas to try and obtain greater socio-economic diversity of the sample.
2. Triangulate findings by using alternative sample strategies, such as snowball samples, to measure the reciprocity of the relationships, which is a basic property of social network analysis.
3. Reassess the importance of social networks amongst the sample at other time points, perhaps in one year and three years in the future.
4. Supplement findings with ethnographic research based on observation of some sub-groups of the sample.
5. By using focus groups, attempt to achieve face validity by reporting results back to parts of the sample to ensure that the

researcher correctly interpreted their responses.

Policy Issues

1. As the social networks of those not employed are so limited, especially among the older (50+ year old) unemployed, consideration should be given to job search and support agencies proactively supporting the filling of some of the relevant roles of social networks and supporting the development of individuals' social networks. Of use may be developments based upon aspects of:

    the former Job Clubs (where job seekers received a range of use, practical and peer support, such as help with identifying appropriate job opportunities, interviews skills and writing resumes, in a group with other job seekers who could form part of their social network peer group, although these were also unemployed job seekers rather than people in work);

    greater work placements (where employers can test out people, but the person can also improve their skills and confidence etc. and form new social networks with those in work);

    increased volunteering linked to improving the employability among those not in work and increasing their social networks with those in work and others (e.g. volunteer organisations often catering for over 50s, although in the context of this report, greater focus needs to be placed upon linking this to

employability for those wishing to return to paid work).

2. Employability policies should seek to deal with the range of issues faced by the older unemployed including health (e.g. depression), which may be affected by poor social networks, as well as usual job search factors etc. For example by developing joint agency working whereby NHS and Job Centre Plus staff work together for clients as in the Pathways to Work projects.

3. It was found that the importance of human capital amongst the 50+ year olds was not as strong as their social capital, i.e. access to networks. Consequently agencies should focus on enhancing the social capital of the 50+ year olds as well as improving their qualifications etc.

4. There is a clear socio-economic gradient in terms of strength of social networks, in that those who are poorer in society have weaker and less connected networks (particularly those \aged 50+ and not in work). Agencies should actively tackle this aspect of social exclusion. Success in this will result in greater economic activity amongst excluded groups.

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Acknowledgements

For Further Information Contact:

Dr Kaberi Gayen
Employment Research Institute
Napier University
Craiglockhart, EdinburghEH14 1DJ
Scotland UK
Email: ka.gayen@napier.ac.uk
http://www.napier.ac.uk/depts/eri/research/equal.htm