The Experiences of Older Workers Compared to Younger Workers: Connection to the Workplace

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In this paper a micro study of the employability of those born into a large cohort compared to those of a smaller cohort is undertaken. The purpose of this study was to determine the level of importance that an individual's social network has on their employability. In particular the study focused on the experiences of those aged 50 years to state retirement age (60 for women and 65 for men). This was prompted by a concern that those aged over 50 years were in some areas of Scotland experiencing economic inactivity rates in excess of 35%. Many in this group, the younger portion were the baby boomers, who being part of a larger cohort found aspirational achievement more competitive and this increased economic inactivity rate as they move towards retirement may well be a consequence of the effects reported by Easterlin (1980) and commented on by Steinberg (1982).

The idea that being born in to a large generation leads to a relatively more difficult time to achieve aspirations formed during childhood experiences and will lead to delayed and reduced childbearing has its critics. Notable amongst these are Mchenry (1984) and Ermisch (1990).

However, some current researchers such as, McNown and Rajbhandary (2003) study of female labour force participation in the US and Jeon and Shields (2005) investigation panel data from OCED countries, find support for the hypothesis

and Macunovitch (1999) argues that the hypothesis is applicable worldwide. Macunovitch (1998) conducted a comprehensive assessment of literature pertaining to Easterlin hypothesis and found unequivocal support for the relative income concept but less support for reasons for differences in aspirations. Easterlin (2001) points out that relative inequality between generations is not solely an income effect, but an effect on well-being. Important in the concept of well being, according to Diener and Seligman (2004), is the support and influence of friends and family – social capital. Blanchflower and Oswald (2004) monitored recent trends in well being in the USA and the UK and found effects consistent with those advocated by Easterlin that being part of a large cohort population means that satisfaction is harder to attain.

In this paper the relation of social networks to employment of those beyond age 50 but below retirement age are compared with those of younger people. First, some background is given and a profile of the labour market studied is presented. Following this, a summary of the characteristics of the sample is presented before the results are detailed and analysed.

Background

Scotland was one of the first countries to industrialise and experience population growth but now it is one of the first countries to achieve a mature post-industrial society a manifestation of which is an ageing population and soon (by 2009), predicted to be a declining population. Since, the baby boom of the 50's and 60's in Scotland fertility has declined and since the mid 1970's there has been a sustained period of sub replacement fertility (currently the TFR is 1.54). This is possibly a reflection of an Easterlin effect, and has came as somewhat of a surprise, many thought population growth in Scotland would slow as a result of excess out migration over in-migration, which had been the historical experience of Scotland. Now out and in migration has reached a balance at low levels. The outcome is a large cohort of those aged over 50, reflective of the 1950's "baby boomers" and a relatively much smaller following cohort. This is graphically illustrated in the population pyramids displayed in Figure 1.



Figure 1: Population pyramids of the Scottish population 1971-2026

One result of this change in age structure is that those over 50 years are experiencing more dislocation from the labour market than their younger counter parts. Indeed, according to Disney *et al* (1997) half of all males and one third of all females retire before the state pension age and economic inactivity rates of those over 50 are averaging more than 35% in most parts of the country. While it is recognised that a significant amount of this is voluntary the largest part is enforced and those in the bottom quartile of the hourly wage distribution are at greatest risk (Campbell, 1999).

There are many possible reasons for the high economic inactivity rates, notably structural changes in the economy away from manufacturing to service type work for which people over the aged of 50 are perhaps not deemed to have the appropriate skill set – see Kodz *et al* (1999). There is evidence that older workers

are discriminated in favour of younger workers and denied training opportunities and consequent promotions as pointed out by Talyor and Walker (1994) and McGregor (2001). Other reasons revolve around older people's relative immobility resulting from caring responsibilities, (see Weir (2000)), friendship networks and the lack of access to transport, Loretto and White (2003). This older group is also the leading edge of the wave of "baby boomers" and their economic outlook appears for many to be less advantageous than the prospects of the smaller cohort, which they have produced. This may well be an example of an Easterlin type relative generational hypothesis in action or it may be the result of new work paradigms emerging, manifesting in the likes of job share, "24/7" flexibility and new skill requirements. To investigate this further, social network analysis, (Wassermann and Faust (1994)), has been employed to study the experiences of four workforce eligible groups. The study used samples of people who were residents of Edinburgh in Scotland. The people were selected at random and allocated to one of four groups. These groups were

- a. Over 50 year old and below retirement age and in work
- b. Over 50 year old, below retirement age and unemployed
- c. Under 50 year old, and in work.
- d. Under 50 and out of work.

Data was collected by interview using a questionnaire comprising of five domains: demographic background, skill level, employment history, job search details and social network details. The social network questions required the respondent to report the economic background and employment history of up to five friends. The choice of up to five friends is fairly common in sociometric analysis, see for example Friedkin (1984) and Wassermann and Faust (1994). This allowed both the effects of social capital and social influence on the individual to be examined.

This data set allows the following hypotheses to be explored:

- 1. Low skills, low social capital and history of unemployment explain older workers economic inactivity.
- For younger people social capital is less important in explaining economic inactivity

This allowed analysis to detect Easterlin effects by controlling for group membership and connectedness. Regression methods were used to analysis the data and model the likelihood of being in work and to explain differences between younger and older workers. Siociograms were constructed to show the importance of being connected to the world of work in order to stay in work.

Economic Summary of the Labour Market

The City of Edinburgh is fairly atypical of Scotland in that its population is growing and it is one of the more affluent areas of Scotland and suffers least levels of deprivation. The number of workforce eligibles is 267,900, 66.4% of the population of the City of Edinburgh of these 79.4% are economically active. Male and female unemployment rates as a percentage of those of working age are 6.4 and 4.9 per cent respectively comparing favourably to those of Scotland of 6.9 and 4.7 per cent. The number of people in the market, which are described as economically inactive are 60,000 of these 12.5%, do not wish a job. Hourly wage rates for Edinburgh are £13.3 for males and £11.6 for females. The corresponding rates for Scotland are £11.8 and £9.9.

The workforce of Edinburgh is well qualified compared to the rest of Scotland with only 8.5% having no qualifications while 16.6% have no qualifications in the rest of Scotland and 41.3% on those in Edinburgh have qualifications at NVQ4 and above, the level in Scotland is only 28.4%. Qualification levels for the work force of Edinburgh vary by age as is displayed in Figure 2 below.



Figure 2: Qualifications by age for the population of the City of Edinburgh

Groups 1 & 2 are school qualifications whereas groups 3 and 4 are post school qualifications, which the 16 to 24 year old group are still in the process of attaining.

Sample Characteristics

In Table 1 the profile of the sample of 186 interviewed people is displayed.

				wk_		
gender				In work	Out of Work	Total
female	agecat	<50 yrs	Count	25	17	42
			% within agecat	59.5%	40.5%	100.0%
		50 yrs +	Count	25	10	35
			% within agecat	71.4%	28.6%	100.0%
	Total		Count	50	27	77
			% within agecat	64.9%	35.1%	100.0%
male	agecat	<50 yrs	Count	16	17	33
			% within agecat	48.5%	51.5%	100.0%
		50 yrs +	Count	30	31	61
			% within agecat	49.2%	50.8%	100.0%
	Total		Count	46	48	94
			% within agecat	48.9%	51.1%	100.0%

 Table 1: The Composition of Sample as per Work Status

The salary levels of those employed change significantly with age (χ^2 is significant at the 2% level), as can be observed from Figure 3.



Bar Chart

Figure 3: Annual Salary Levels by Age.

Surprisingly the younger group receive higher salaries; this is partly explained by the older group working significantly less hours per week than the younger group, the older group work on average 33.36 hours per week, while those under 50 do on average 40.07 hours per week which is significant at the 1% level. For those out of work the mean duration of unemployment is 2.78 and 3.55 years respectively for the younger and older groups. The difference is however, not significant.

The distribution of occupation types and occupational sector collected in the sample of those who were in work are compared to distribution of the City in Table 2. The distribution of occupational types in the sample is broadly similar to that of the City of Edinburgh. However, skilled and manual work is under-represented and employment in distribution, hotels and Restaurants is badly under-represented. Managerial and manufacturing jobs are over-represented in the sample. In the sample of those who work 73% are in full time employment and 22% is in part time employment, this compares with the respective levels of 68.7% and 31.4% for the City as a whole.

Occupation Type	Sample %	City of	Occupational	Sample	City of
		Edinburgh %	Sector	%	Edinburgh %
Managerial	22.1	15.9	Manufacturing	8.4	4.7
Professional	22.1	20.0	Construction	2.1	3.0
Assoc. Profess. & 14.7 13.4 Distr		Distr, Hotels &	4.2	22.0	
Technical			Restaurants		
Clerical &	25.3	22.0	Finance & Business	32.6	33.3
Secretarial					
Personal &	3.2	5.2	Public Admin,	35.8	27.1
Protective			Educat & Health		
Retail Sales	6.3	7.2	Other	14.8	19.1
Skilled	2.1	8.8			
Unskilled	4.2	11.2			

Table 2: Distribution of the Sample by Occupation Type and Sector

Results

In Table 3 the mean score of academic qualification by age and employment status is given. This scale runs from 1 = no qualifications to 8 for doctorate.

Table 3: Mean Qualification Score

	Mean Qualification Score				
Work Status	< 50 yrs	50 yrs +			
In Work	6	5			
Out of Work	3	3			

Thus those in work have much higher qualification level than those out of work. Perceptions of personal and external barriers to employment are displayed in Figures 4a and 4b.



Figure 4a: Personal Barriers to Employment

The older group cites lack of skills, especially IT skills as major personal barriers, much more so than the younger group. Health also appears as significant in the older group's reasons. Both groups state qualifications as important barriers.

Barriers facing the respondents from the employer side, labelled as external reasons are now examined.



Figure 4b: External Barriers to Employment

Clearly the older group perceive that their age is a significant barrier, it is also of interest that the lack of contacts that are at work carry a lot more weight for the older group than their younger counterparts.

Shown in Table 4 are the mean numbers of contacts by employment category and by age. Thus those who are in work cite more contacts than those out of work, but of interest is that for the over fifty year old out of work group they maintain higher levels of contacts than their younger counterparts. However, for the out of work over fifty year olds the contacts they have who are in work are significantly less than their total contacts.

Table 4: Mean Number of Contacts by age and Work Status

	Age					
Work Status	<50	yrs	50+yrs			
	All contacts	In Work	All contacts	In Work		
		Contacts		Contacts		
In Work	4.29	3.95	4.67	3.02		
Out of Work	1.41	1.35	3.11	1.50		

For each person factor analysis was used to produce a measure of strength of

association from the questions, this gives a measure of social cohesion.

- How long have you known?
- How often are you in contact?
- How distant are they?
- How often do you seek mundane advice?
- To what degree do they influence you decisions?

The amount of variation explained by each of the factors for each contact was 42.1%, 64.7%, 76.3%, 81.5% and 82.0%. The comparative influence of strength of association of the strength of influence of the first named person for each age group with employment is illustrated in Figure 5.



Figure 5: Variation in the Influence of the First Named Person and Employment by Age.

Across the age group the influence of the first named has a positive association with employment. However, for those over fifty there appears to be less association with employment.

Regression Analysis

The dependent variable, work status, was dichotomised into 0 for out of work and 1 for in work. Various independent variables were used in binary logistic regression to predict this outcome and these variables are tabulated in Table 5.

Variable	Description		
Gender	0 = female, 1 = male		
Ac_Qual Score	Academic qualifications,1 = none to 8 = doctorate		
Prof_Qual	Professional Qualifications, 0 = none, 1 = semi-skilled, 3 =		
	professional		
History	Work history: 1 = mainly stable employment and 0 otherwise		
Contacts	Number of contacts listed in a persons social network		
Cont_wk	Number of contacts listed in a persons social network who are		
	in work		
P_Cont.	Proportion of named contacts who are in work		
Strength	This was formed by summing the factor scores for each named		
	person. The summation was conducted by first transforming		
	the factor score to a strictly positive scale by adding 10 to the		
	score and then missing values, corresponding to non-cited		
	responses were replaced with zeros.		
Job_st	The summed comparative job status of those mentioned. Each		
	named persons comparative job status was listed as -1 for		
	less status, 0 for similar and 1 for greater status. Missing		
	values were coded as zero.		

 Table 5: Independent Variables Used in the Logistic Regression

The regressions were performed on three groups drawn from the sample, namely those under the age of 50, those over the age of 50 and those over the age of 50 years who were actively seeking work, (if out of work). Wald's forward selection

method was used – see Sharma, (1996) and the models formed are summarised in Table 6.

	Model I < 50 yrs		Mode	Model II 50 yrs +		Model III 50 yrs+			
	(N = 75)			(N = 99)		searching for a job (N			
								= 74)	
Variables	Coeff.	St.	Exp(B)	Coeff.	St.	Exp(B)	Coeff.	St.	Exp(B)
		Error			Error			Error	
Gender	-	-	-	1.658	0.642	5.247	2.985	1.105	19.779
Ac_Qualif	-1.017	0.296	0.362	-	-	-	-	-	-
Score									
Prof_Qual	-1.577	0.769	0.207	-	-	-	-	-	-
History	-	-	-	-	-	-	-	-	-
Contacts	-1.391	0.398	0.249	-	-	-	-	-	-
Cont_wk	-	-	-	-	-	-	-	-	-
P_Cont	-	-	-	-1.988	0.692	0.137	-2.926	0.981	0.054
Strenght	-	-	-	-0.086	0.025	0.918	-0.088	0.033	0.916
Job_st	-	-	-	-	-	-	-	-	-
Constant	9.264	2.350	10553.	3.421	1.366	30.590	2.374	1.710	10.736
			8						
Pseudo R									
Square									
Cox & Snell	64.8%			28.2%			33.3%		
Nagelkerke	86.7%			37.8%			47.3%		
% correctly									
predicted									
In Work	95%			83%			94%		
Out of Work	94%			71%			55%		
Total	94%			78%			82%		

 Table 6: Logistic Regressions Predicting the Likelihood of Being in Work.

The models predict very well the likelihood of being in work at ages below 50 years old and show the importance of qualifications to avoiding out of work status. Also important are the number of contacts in a persons social network,

few contacts are associated with out of work situations. (Clearly being in work help build ones social network).

For those over fifty years gender is a significant predictor of being out of work and males are more likely to be in this situation, especially amongst those who if out of work are actively seeking work. The strength of their social networks and proportion of contacts that are in work are associated with being in work. Thus the amount of one's contacts who work is important to be in work and the strength of ones links to these people is also important.

The created variable "strength" is a measure of social cohesion, i.e. how close the individual is to their network members. This needs to be explored further and the marginal means of this variable by age category and work status are presented in Table 7.

		Age Category			
		< 50 yrs	50+ yrs		
Work Status	In Work	44.90 (2.08)	45.66 (1.26)		
	Out of Work	14.27 (2.35)	30.68 (2.84)		

Table 7: Mean "Strength" of Network by Age and Work Status

(Figures in brackets in the table are standard errors of the means)

This supports the observations made from Table 4 that older people are more connected than their younger counterparts. For the out of work groups the cohesion is significantly less than the in work groups. The out of work younger age group are much less, and significantly so, less cohesive than the older out of work group. To illustrate the importance of contacts and the status of ones social network on employment a sociogram has been produced of ego centred networks using the sociometric software Netdraw (Borgatti *et al* (2002)) for a sample of those who are over 50. This is displayed in Figure 6. (Details regarding sociograms can be found in Wassermann and Faust (1994)).





Figure 6: Sociogram of Ego Centred Networks of the Over 50 Year Olds

It is clearly illustrated in Figure 6 is the importance of social capital in adhering to the workplace.

Discussion and Conclusion

The finding of this research indicate that as one ages then to stay in work place ones social "connectedness" is important in that the more contacts one has who are in work and the stronger the ties with these people are then the more likely one is to be associated with being work active. The old adage "it is not what you know but who you know" seems to ring true. Social capital of those in ones social group are also important as it would seem that being connected to those with higher social capital is associated with greater likelihood of being in work, however, this requires further exploration. Also requiring further exploration is the nature of the formation of the social networks and the question arises to what extent are the networks a consequence of ones work situation rather than the reverse. Nevertheless the importance of being in a close social network, which is connected to work, has been demonstrated. This supports the earlier work of Granovetter (1973 and 1995) and Rees (1966), who found that over 50% of jobs were obtained through social contacts. Montgomery 1994, Topa 2001, Calvo-Armengol and Zenou 2001 and Marmaros and Sacerdote 2002, all found that the positive association of social networks in transmission of job information and eventually in obtaining a job.

To return to the hypothesis, which were postulated at the beginning of the paper, it appears that older worker unemployment is related to lower levels of social capital, but neither to history of unemployment nor to lower academic or professional qualifications. However, for this group the lack of IT skills was perceived as a major barrier to employment. Hence hypothesis one can only be partly supported. With regards to the second hypothesis this is confirmed that for younger people social capital is less important to explaining out of work situations than the combined effect of qualifications.

The social networks of the older workers and out of work group were found to be "tighter" than those of the younger groups. This dimension of connectedness which differs between the generations might be an intermediate variable which plays on the socio-economic situation of these people and effects their job chances may, however, be a manifestation of Easterlin effects. It appears, that the important aspect of well being noted by Easterlin (2001) and Diener and Seligman (2004) of social contact and social capital are extremely important in the job market. This is more so for the older group, born in to larger cohorts, who have fewer qualifications and probably require "word of mouth" referring to obtain work. Whereas, the younger group, born in a less numerous generation, can rely more on their intrinsic merit and on academic and professional qualifications. Thus from study of local labour markets there does appear evidence of Easterlin effects.

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