

“Personal Network” and retirement: Is retirement bad for friendship and good for family relations?

Anne LaFerrère (INSEE, CREST, and Université Paris-Dauphine)

Prepared for the SHARE users Conference,
Liège, 28-29 November 2013

Motivation

- There is no such thing as an isolated man or woman; we are each of us made of a cluster of appurtenances. (Henry James, *The Portrait of a Lady*, 1881).
- Importance of social/family ties for well-being. Policies inspired by the revival of local communities, or even... spouses' love!
- Is friendship a purely personal affair, or is it influenced by the environment, where a person lives and work, **by retirement?**

Outline

1. Previous literature
2. Theoretical thoughts
3. Data
4. Multivariate analysis of PN size
5. Robustness checks
6. Endogenous retirement?
7. What about life satisfaction?
8. Conclusion

1. Previous literature

- Concept of **Social capital** goes back to Durkheim.
- Strong link between **satisfaction with social life/work conditions and satisfaction with life** (Van Praag & Ferrer-i-Carbonell, 08; Godefroy & Lollivier, 12; Siegrist et al. 07; Frey & Stutzer, 02...)
- And with **health** outcome (Wang et al. , 02; Rasulo et al. , 05; Melchior et al. , 03.)
- Some point to both positive and negative potential effect of social integration on health or psychological **well-being** (Seeman, 00; Rook, 84).
-

1. Previous literature

- On work conditions and desire to retire early (Blanchet & Debrand, 07; Siegrist & Wahrendorf, 09...).
- Relationship to **friends** deemed more important for well-being than those with **family** (Adams & Blieszner, 89; Matt & Dean, 93.).
- Sociologists insist on **gender roles** at retirement time with men less comfortable with retirement than women (Sharabi & Harpaz, 11, Bames & Parry, 03).

1. Previous literature

- Links between **retirement**, health, cognitive capacities and well-being, controversial because of possible **reverse causality**.
- ✓ Adam et al. (07), Bonsang et al. (12), Rohwedder & Willis (10), Mazzona & Peracchi (12) find a significant **negative effect of retirement on cognitive functioning**, both in the US and in Europe. Coe & Zamaro (11) find a positive (temporary) effect of retirement on self-perceived health.
- ✓ Fonseca et al. (13) find no effect of retirement on well-being or life satisfaction, a positive effect on quality of life (CASP) and reduced depressive symptoms.
- ✓ Börsch-Supan & Schuth (13) link **early retirement**, mental health and **social network size**.

This paper

- Uses wave 4 question of SHARE on the **size** of the « Social network ».

The question

- « Now I am going to ask some questions about your relationships with other people. Most people discuss with others the good or bad things that happen to them, problems they are having, or important concerns they may have. Looking back over the last 12 months, who are the people with whom you most often discussed important things? These people may include your family members, friends, neighbors, or other acquaintances. Please refer to these people by their first names. »
- Not an exchange (who helps/is helped), or a pure interaction (whom do you socialize with) approach

The question

- « Now I am going to ask some questions about your relationships with other people. Most people **discuss** with others the good or bad things that happen to them, problems they are having, or important concerns they may have. Looking back over the last 12 months, who are the people with whom you most often discussed important things? These people may include your family members, friends, neighbors, or other acquaintances. Please refer to these people by their first names. »
- Not an exchange (who helps/is helped), or a pure interaction (whom do you socialize with) approach, but a verbal (discuss)

The question

- « Now I am going to ask some questions about your relationships with other people. Most people **discuss** with others the good or bad things that happen to them, **problems** they are having, or important **concerns** they may have. Looking back over the last 12 months, who are the people with whom you most often discussed important things? These people may include your family members, friends, neighbors, or other acquaintances. Please refer to these people by their first names. »
- Not an exchange (who helps/is helped), or a pure interaction (whom do you socialize with) approach, but a verbal (discuss) and affective (problems and concerns) approach.

This paper

- Uses wave 4 question of SHARE on the size of the « personal network » .
- Explores (through OLS) its links to **retirement status**
- keeping only those aged 55-79, separating men and women; family and non family PN members.
- Uses an IV strategy to get at the effect of « retiring » on PN size.

2.Theoretical thoughts

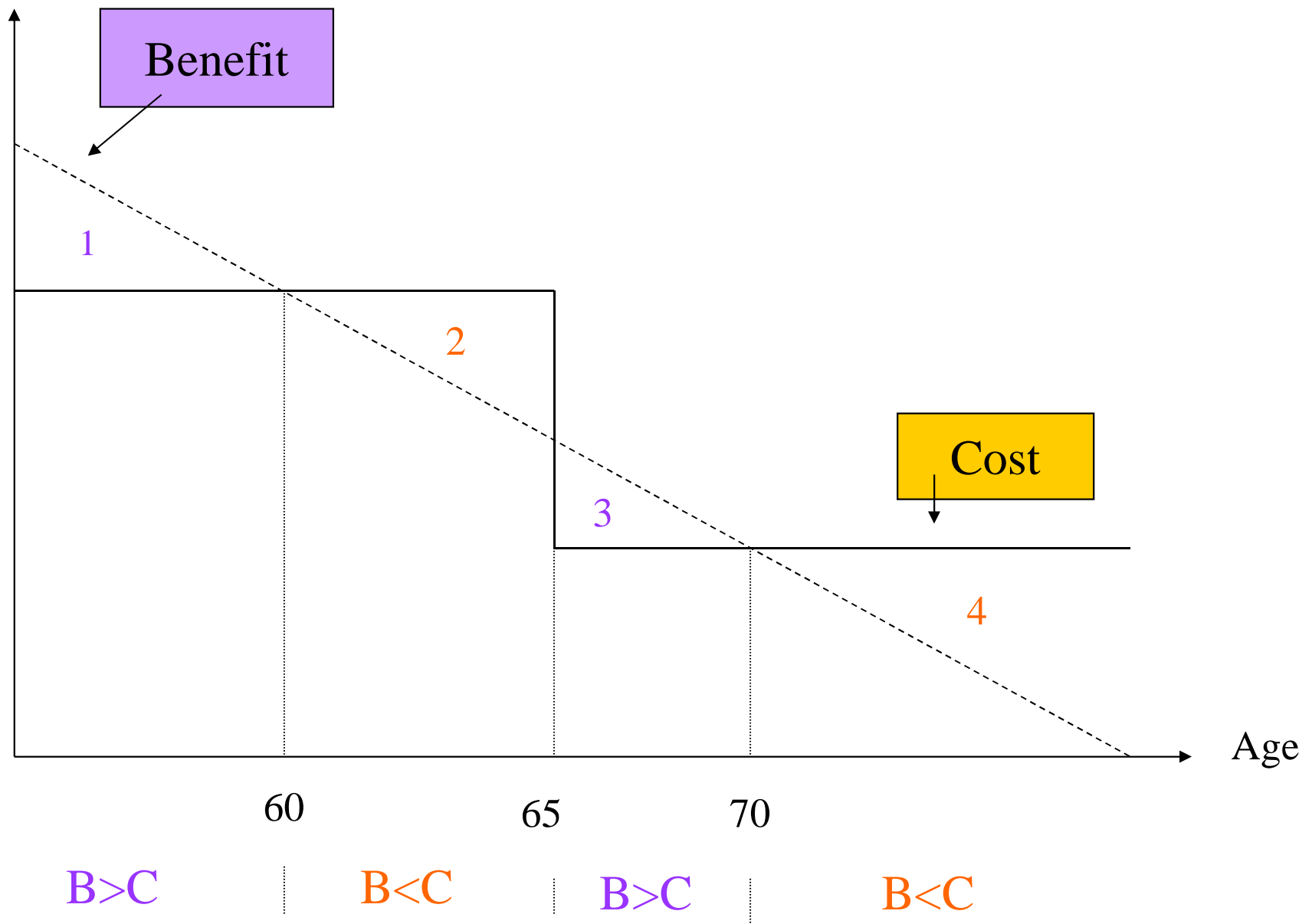
- Not much... except some pages in Posner « Aging and old age » (1995).
- Two offsetting cost/benefit effects of age on investment in relational human capital. :
- A truncated time horizon reduces the incentive to form new relationships (reinforced by friends' death)
- Lower opportunity cost of time produces a rise in the formation of new friendships after retirement (reinforced if help/care needed).

2.Theoretical thoughts

- Other parameters affecting...
- Demand: health
- Supply : location, (professional) activity, family size – potentially endogenous...
- Role of income and wealth?

Utility

Fig. 1. Utility from new friends as a function of age



2.Theoretical thoughts

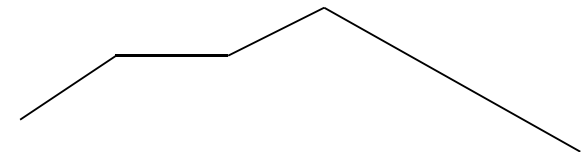
$$\text{Benefit} = B(\text{Age}, \text{Emp}, \text{Health}, K)$$

$$\text{Cost} = C(\text{Age}, \text{Emp}, \text{Health}, \text{Wealth})$$

$$\text{Utility}_{\text{new friend}} = B - C,$$

increases with age, declines when people have not enough time (before retirement), increases just after retirement, up to the point when the time horizon is too short, and death hits the potential supply of new friends.

- Utility from the stock of friends?



3. Data: employment

Regrouped current job situation	male	female	Total
Retired	59.5	56.1	57.7
Employed or self-employed	24.5	18.7	21.3
Unemployed	2.6	2.0	2.3
Permanently sick or disabled	3.5	3.0	3.3
Homemaker	0.3	12.8	7.1
Other (Rentier, Living out of own means...)	0.4	0.8	0.6
Retired and active	6.8	4.3	5.4
Employed and pensioner	2.4	2.2	2.3
Total	100.0	100.0	100.0
sample size	18 077	21 988	40 065
SHARE W4 rel. 1. 55-79 years old	.		

3. Data: number of confidants

	Mean	Mean if size>0	Mean male	Mean female
Total size	2.53	2.61	2.30	2.71
Family members	1.91	1.98	1.80	2.01
Friends	0.46	0.48	0.36	0.55
(Ex-) Colleagues	0.05	0.05	0.05	0.05
Neighbours	0.07	0.07	0.05	0.08
SHARE W4 rel. 1.	55-79 years old.			

4. Multivariate analysis of PN size

$$(1) \text{ Size} = a \text{ Age} + b \text{ Age}^2 + \sum e \text{ Empl} + c Z + \varepsilon$$

Z includes 16 country dummies interacted with Age and Age^2 , dummies for nb children, absence of brothers/sisters, detailed matrimonial state, adl1 , adl2 , nb of grand-children, household size, GALI and EURO-D scales + dummies for never hold a paid job, self-employment.

$$(2) \text{ Size} = a \text{ Age} + b \text{ Age}^2 + \sum e \text{ Empl} + c Z + d Y + \varepsilon$$

Y is a vector of education, income, wealth variables

Table 3	Males OLS (all countries)									
VARIABLES	pure friend		colleague		friend or colleague		neighbour		Family member	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
(self-) employed	ref	ref	ref	ref	ref	ref	ref	ref	ref	ref
retired	-0.0080 (0.0216)	0.0423* (0.0220)	-0.0843*** (0.0076)	-0.0756*** (0.0078)	-0.0923*** (0.0230)	-0.0333 (0.0234)	0.0284*** (0.0078)	0.0257*** (0.0080)	-0.0069 (0.0341)	0.0611* (0.0348)
Retired and employed	0.0914*** (0.0287)	0.0885*** (0.0290)	-0.0458*** (0.0101)	-0.0483*** (0.0103)	0.0456 (0.0306)	0.0402 (0.0309)	0.0329*** (0.0103)	0.0314*** (0.0105)	0.0947** (0.0454)	0.107** (0.0458)
Employed and pensioner	0.0527 (0.0427)	0.0262 (0.0429)	0.0456*** (0.0150)	0.0424*** (0.0152)	0.0983** (0.0455)	0.0685 (0.0456)	-0.0062 (0.0153)	-0.0052 (0.0156)	-0.0083 (0.0674)	-0.0517 (0.0677)
unemployed	-0.0789** (0.0384)	7.78e-05 (0.0391)	-0.0748*** (0.0135)	-0.0645*** (0.0138)	-0.154*** (0.0410)	-0.0644 (0.0416)	0.0268* (0.0138)	0.0281** (0.0142)	-0.136** (0.0606)	0.0092 (0.0617)
Homemaker	0.158 (0.112)	0.232** (0.113)	-0.113*** (0.0394)	-0.100** (0.0399)	0.0455 (0.120)	0.131 (0.120)	-0.0108 (0.0403)	-0.0137 (0.0410)	-0.113 (0.177)	0.0131 (0.178)
Sick or disabled	-0.0066 (0.0358)	0.0630* (0.0363)	-0.104*** (0.0126)	-0.0932*** (0.0128)	-0.110*** (0.0382)	-0.0302 (0.0386)	0.0103 (0.0129)	0.00449 (0.0132)	-0.0650 (0.0566)	0.0385 (0.0573)
Other	0.134 (0.0939)	0.182* (0.0941)	-0.0941*** (0.0330)	-0.0876*** (0.0333)	0.0396 (0.100)	0.0940 (0.100)	0.0037 (0.0337)	0.0039 (0.0342)	0.225 (0.148)	0.288* (0.149)
Never held paid job	0.0089 (0.100)	0.0511 (0.0997)	-0.00354 (0.0352)	0.00162 (0.0353)	0.0054 (0.107)	0.0527 (0.106)	0.0520 (0.0360)	0.0572 (0.0362)	-0.326** (0.158)	-0.263* (0.157)
(former) Self-employed	0.0390** (0.0169)	0.0391** (0.0173)	-0.0382*** (0.0059)	-0.0385*** (0.0061)	0.0008 (0.0180)	0.0007 (0.0184)	0.0093 (0.0061)	0.0066 (0.0063)	-0.0023 (0.0266)	-0.0178 (0.0273)
Constant	-1.410** (0.681)	-1.220* (0.684)	0.0478 (0.239)	0.0769 (0.242)	-1.363* (0.725)	-1.143 (0.728)	-0.130 (0.245)	-0.153 (0.248)	3.074*** (1.074)	3.493*** (1.080)
Observations	18,073	17,736	18,073	17,736	18,073	17,736	18,073	17,736	18,073	17,736
R-squared	0.060	0.080	0.038	0.045	0.068	0.091	0.020	0.024	0.085	0.099
control										
demo, health...	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
education, income, wealth	no	yes	no	yes	no	yes	no	yes	no	yes

VARIABLES	pure friend		colleague		friend or colleague		neighbour		Family member	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
	ref	ref	ref	ref	ref	ref	ref	ref	ref	ref
(self-) employed										
retired	-0.0888***	-0.0195	-0.0679***	-0.0621***	0.157***	-0.0816***	0.0182**	0.0136	-0.0138	0.0384
	(0.0227)	(0.0227)	(0.0066)	(0.0068)	(0.0236)	(0.0236)	(0.0084)	(0.0085)	(0.0342)	(0.0345)
Retired and employed	0.108***	0.0951***	-0.0433***	-0.0445***	0.0644*	0.0505	0.0246*	0.0257**	0.0807	0.0678
	(0.0342)	(0.0340)	(0.0100)	(0.0101)	(0.0356)	(0.0353)	(0.0126)	(0.0127)	(0.0516)	(0.0516)
Employed and pensioner	-0.0513	-0.0997**	0.0655***	0.0615***	0.0142	-0.0383	0.00928	0.0129	0.117*	0.0852
	(0.0451)	(0.0448)	(0.0132)	(0.0133)	(0.0469)	(0.0465)	(0.0166)	(0.0168)	(0.0680)	(0.0681)
unemployed	-0.177***	-0.0765*	-0.0624***	-0.0539***	-0.240***	-0.130***	0.00636	-0.000885	-0.111*	0.0160
	(0.0444)	(0.0444)	(0.0130)	(0.0132)	(0.0462)	(0.0461)	(0.0164)	(0.0167)	(0.0670)	(0.0675)
Homemaker	-0.129***	-0.0156	-0.0784***	-0.0687***	-0.207***	-0.0842***	0.0418***	0.0342***	-0.0353	0.0420
	(0.0266)	(0.0269)	(0.0078)	(0.0080)	(0.0277)	(0.0279)	(0.0098)	(0.0101)	(0.0401)	(0.0409)
Sick or disabled	-0.186***	-0.0868**	-0.108***	-0.0994***	-0.294***	-0.186***	0.0338**	0.0219	-0.0627	0.0360
	(0.0379)	(0.0380)	(0.0111)	(0.0113)	(0.0394)	(0.0395)	(0.0140)	(0.0143)	(0.0571)	(0.0578)
Other	-0.115*	-0.0192	-0.0823***	-0.0756***	-0.198***	-0.0948	0.0299	0.0269	-0.0876	0.0015
	(0.0687)	(0.0689)	(0.0201)	(0.0206)	(0.0715)	(0.0716)	(0.0253)	(0.0259)	(0.104)	(0.105)
Never held paid job	-0.159***	-0.108***	-0.000245	0.00398	-0.159***	-0.104***	-0.0501***	-0.0547***	-0.153***	-0.0961*
	(0.0350)	(0.0349)	(0.0102)	(0.0104)	(0.0364)	(0.0362)	(0.0129)	(0.0131)	(0.0528)	(0.0530)
(former) Self-employed	0.0159	0.0327	-0.0207***	-0.0183***	-0.00479	0.0143	0.00800	0.00330	0.0101	0.00473
	(0.0206)	(0.0209)	(0.0060)	(0.0062)	(0.0215)	(0.0217)	(0.0076)	(0.0078)	(0.0311)	(0.0317)
Constant	-2.640***	-2.705***	0.00972	-0.0130	-2.630***	-2.718***	-0.379	-0.395	3.213***	3.380***
	(0.670)	(0.667)	(0.196)	(0.199)	(0.697)	(0.693)	(0.247)	(0.250)	(1.010)	(1.014)
Observations	21,987	21,691	21,987	21,691	21,987	21,691	21,987	21,691	21,987	21,691
R-squared	0.121	0.152	0.042	0.045	0.129	0.163	0.019	0.022	0.106	0.121
control										
demo, health...	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
education, income, wealth, location	no	yes	no	yes	no	yes	no	yes	no	yes

table 3bis

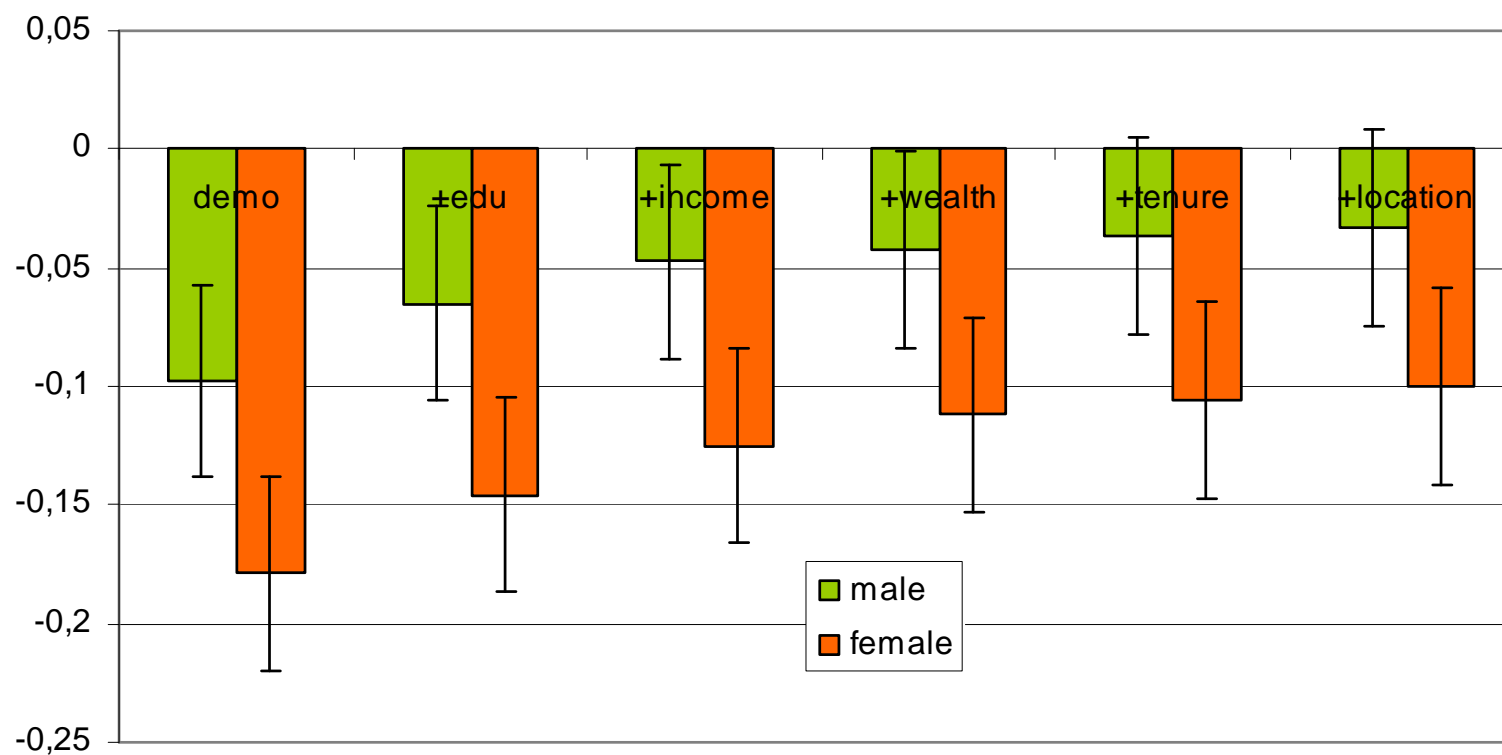
Males OLS (excluding SI, EE)

VARIABLES	pure friend		colleague		friend or colleague		neighbour		Family member	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
	ref	ref	ref	ref	ref	ref	ref	ref	ref	ref
(self-) employed										
retired	0.0057 (0.0242)	0.0566** (0.0247)	-0.0865*** (0.00819)	-0.0785*** (0.00842)	-0.0808*** (0.0256)	-0.0220 (0.0261)	0.0290*** (0.00832)	0.0263*** (0.00858)	0.0206 (0.0375)	0.0848** (0.0383)
Retired and employed	0.101*** (0.0310)	0.0977*** (0.0313)	-0.0518*** (0.0105)	-0.0549*** (0.0107)	0.0494 (0.0328)	0.0428 (0.0332)	0.0338*** (0.0107)	0.0321*** (0.0109)	0.102** (0.0480)	0.115** (0.0485)
Employed pensioner	0.0880 (0.0592)	0.0597 (0.0598)	0.0441** (0.0201)	0.0442** (0.0204)	0.132** (0.0628)	0.104 (0.0633)	-0.0181 (0.0204)	-0.0186 (0.0208)	-0.0266 (0.0917)	-0.0786 (0.0927)
unemployed	-0.105** (0.0461)	-0.0244 (0.0469)	-0.0872*** (0.0156)	-0.0775*** (0.0160)	-0.192*** (0.0489)	-0.102** (0.0497)	0.0314** (0.0159)	0.0326** (0.0163)	-0.139* (0.0714)	0.0021 (0.0728)
Homemaker	0.136 (0.139)	0.196 (0.140)	-0.113** (0.0471)	-0.104** (0.0479)	0.0231 (0.147)	0.0916 (0.149)	-0.0164 (0.0478)	-0.0152 (0.0488)	-0.308 (0.215)	-0.204 (0.218)
Sick or disabled	0.0089 (0.0415)	0.0732* (0.0422)	-0.107*** (0.0141)	-0.0979*** (0.0144)	-0.0979** (0.0440)	-0.0247 (0.0446)	0.0115 (0.0143)	0.0054 (0.0147)	-0.0272 (0.0643)	0.0674 (0.0654)
Other	0.162 (0.104)	0.202* (0.104)	-0.0960*** (0.0352)	-0.0906** (0.0356)	0.0663 (0.110)	0.112 (0.110)	-0.0181 (0.0357)	-0.0172 (0.0363)	0.247 (0.161)	0.289* (0.162)
Never held paid job	-0.0483 (0.115)	-0.00849 (0.115)	-0.00537 (0.0391)	-0.000412 (0.0392)	-0.0537 (0.122)	-0.00890 (0.122)	0.0646 (0.0397)	0.0716* (0.0400)	-0.351** (0.179)	-0.296* (0.178)
(former) Self-employed	0.0410** (0.0184)	0.0375** (0.0190)	-0.0377*** (0.0062)	-0.0381*** (0.0065)	0.0033 (0.0196)	-0.0006 (0.0201)	0.00834 (0.0063)	0.00692 (0.0066)	0.00433 (0.0286)	-0.0118 (0.0295)
Constant	-1.712** (0.764)	-1.473* (0.770)	-0.0317 (0.259)	-0.00821 (0.263)	-1.743** (0.810)	-1.481* (0.816)	0.00015 (0.263)	-0.0405 (0.268)	3.411*** (1.184)	3.997*** (1.194)
Observations	15,443	15,106	15,443	15,106	15,443	15,106	15,443	15,106	15,443	15,106
R-squared	0.057	0.077	0.040	0.046	0.066	0.088	0.021	0.024	0.079	0.093
control										
demo, health...	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
education, income, wealth, location	no	yes	no	yes	no	yes	no	yes	no	yes

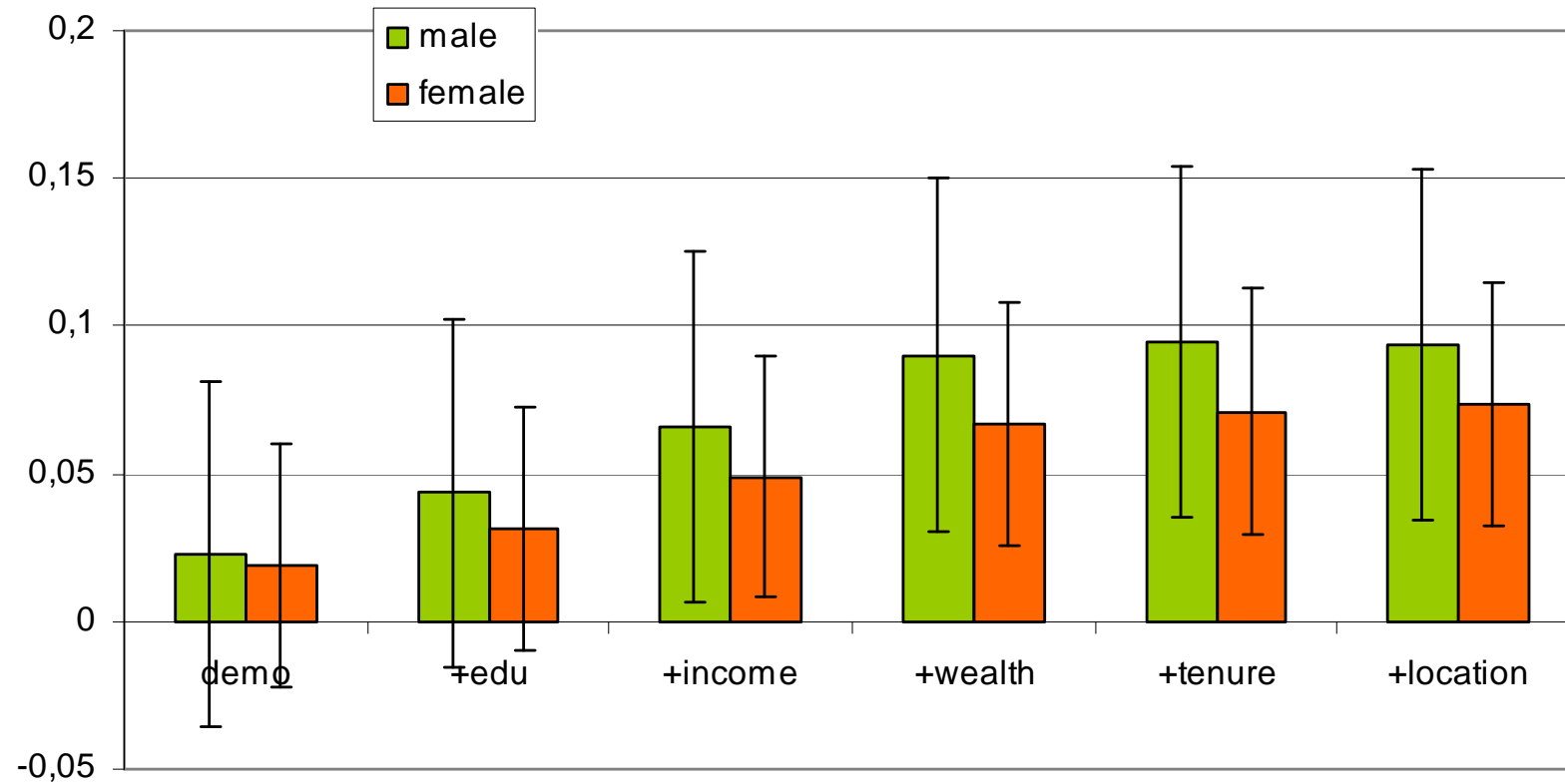
table 4bis **Females OLS (excluding SI, EE)**

VARIABLES	pure friend		colleague		friend or colleague		neighbour		Family member	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
	ref	ref	ref	ref	ref	ref	ref	ref	ref	ref
(self-) employed										
retired	-0.0926*** (0.0250)	-0.0254 (0.0250)	-0.0783*** (0.00676)	-0.0738*** (0.0069)	-0.171*** (0.0258)	-0.0993*** (0.0259)	0.0176** (0.00879)	0.0133 (0.00895)	0.0239 (0.0369)	0.0733** (0.0373)
Retired and employed	0.108*** (0.0365)	0.0909** (0.0362)	-0.0477*** (0.00986)	-0.0495*** (0.01000)	0.0601 (0.0377)	0.0414 (0.0374)	0.0264** (0.0128)	0.0273** (0.0130)	0.111** (0.0539)	0.1000* (0.0541)
Employed pensioner	0.0372 (0.0707)	-0.0357 (0.0705)	0.0531*** (0.0191)	0.0494** (0.0195)	0.0903 (0.0731)	0.0137 (0.0729)	-0.0200 (0.0249)	-0.0180 (0.0252)	0.0312 (0.104)	-0.00323 (0.105)
unemployed	-0.231*** (0.0511)	-0.124** (0.0512)	-0.0851*** (0.0138)	-0.0764*** (0.0141)	-0.316*** (0.0529)	-0.200*** (0.0529)	0.00966 (0.0180)	0.00261 (0.0183)	-0.0519 (0.0756)	0.0706 (0.0764)
Homemaker	-0.126*** (0.0285)	-0.0132 (0.0289)	-0.0868*** (0.0077)	-0.0783*** (0.0080)	-0.213*** (0.0295)	-0.0915*** (0.0299)	0.0393*** (0.0100)	0.0327*** (0.0103)	-0.00999 (0.0422)	0.0619 (0.0431)
Sick or disabled	-0.193*** (0.0434)	-0.101** (0.0437)	-0.112*** (0.0117)	-0.104*** (0.0121)	-0.306*** (0.0449)	-0.206*** (0.0451)	0.0329** (0.0153)	0.0205 (0.0156)	-0.0412 (0.0642)	0.0447 (0.0652)
Other	-0.121 (0.0736)	-0.0295 (0.0740)	-0.0936*** (0.0199)	-0.0884*** (0.0204)	-0.214*** (0.0761)	-0.118 (0.0764)	0.0187 (0.0259)	0.0161 (0.0265)	-0.0667 (0.109)	0.0161 (0.110)
Never held paid job	-0.163*** (0.0374)	-0.116*** (0.0373)	-0.00155 (0.0101)	0.0019 (0.0103)	-0.165*** (0.0387)	-0.114*** (0.0385)	-0.0489*** (0.0132)	-0.0534*** (0.0133)	-0.138** (0.0553)	-0.0906 (0.0557)
(former) Self-employed	0.0091 (0.0222)	0.0273 (0.0225)	-0.0218*** (0.0060)	-0.0205*** (0.0062)	-0.0127 (0.0229)	0.0068 (0.0233)	0.0070 (0.0078)	0.00313 (0.0080)	0.0216 (0.0328)	0.0177 (0.0336)
Constant	-2.740*** (0.746)	-2.798*** (0.745)	0.0552 (0.202)	0.0351 (0.206)	-2.685*** (0.772)	-2.763*** (0.770)	-0.466* (0.263)	-0.498* (0.266)	3.851*** (1.103)	4.099*** (1.112)
Observations	18,340	18,044	18,340	18,044	18,340	18,044	18,340	18,044	18,340	18,044
R-squared	0.124	0.156	0.044	0.048	0.134	0.168	0.019	0.023	0.102	0.115
control										
demo, health...	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
education, income, wealth, location	no	yes	no	yes	no	yes	no	yes	no	yes

Effect of being retired on nb of friends



Effect of being retired on nb of family PN members



4. Multivariate analysis of PN size



- **Retirees**
 - ✓ have **less** friends than (self-) employed. Effect is smaller (no more significant for males) once we control for education, income and wealth.
 - ✓ have **more** family members in their PN than (self-) employed. The effect is significant only once we control for education, income and wealth.
- **Interpretation:**
 - ✓ « Matthew » effect: people with more resources have (... or mentioned?) more non-family confidants
 - ✓ Being employed is « detrimental » for family relations, but it is compensated by the resources fueling family relations. Being retired becomes good for family relations once we control for resources: the trade-off between time and money is favourable to time!

5. Robustness checks

- **OLS by country**
 - ✓ Women retired have **less** friends than employed in SE, CH, AT, ES, IT, CZ, SI
 - ✓ Males retired have **less** friends than employed in Ch, NL, HU.
 - ✓ Retirees have **more** family members in their PN than (self-) employed in DK and FR; in NL, BE and CH (males only); in CZ and HU (females only). Females have less in EE, IT.
- **OLS by income quartile**
 - ✓ **Men « lose » friends only in Q1.**
 - ✓ Women « lose » friends at all income levels (lose less, and less signif in Q4).
 - ✓ Family relations: Men « gain » only in Q4.
 - ✓ Family relations: Women, never significant.
- Dummy for **early retirement**: no effect for males on nb friends, positive for females

6. Is retirement endogenous?

IV analyses of PN size (16 countries)

- **Retirement may be endogenous**
 - ✓ If those who have **less** (more) friends retire earlier (later)
 - ✓ If those who are **less** (more) family oriented retire later (earlier)

6. Is retirement endogenous?

IV analyses of PN size (16 countries)

- **Retirement may be endogenous**
 - ✓ If those who have **less** (more) friends retire earlier (later)
 - ✓ If those who are **less** (more) family oriented retire later (earlier)
- **Legal age for retirement or preretirement**
 - ✓ Influences the probability to be retired without influencing PN size.
 - ✓ Varies by sex, country, cohort
- **Used by many** (since Battistin et al. 08)
 - ✓ Crude, but very signif. in 1st stage regression, and exogeneity is rejected (most of the time)
 - ✓ We use dummies for being over the statutory retirement age (by sex, country, cohort), and being above age of preretirement at the date of the survey (no cohort data). *Source: OECD, with improvement for IT (Angelini et al. 09).*
 - ✓ Allows comparing what happens at retirement on average for those who are hit by age of retirement.

Table 8. Effect of being retired on the number of friends

Men		All				non self-employed		with partner	
	OLS	OLS	IV	IV	OLS	IV	OLS	IV	
retired	-0,0976*** (0,0242)	-0,0335 (0,0252)							
partner retired									
resource ctrl	no	yes							
Exo test Durbin									
nb obs.	15443	15106							

Women		All				non self-employed		with partner	
	OLS	OLS	IV	IV	OLS	IV	OLS	IV	
retired	-0,179*** (0,0249)	-0,100*** (0,025)							
partner retired									
Exo test Durbin									
resource ctrl	no	yes							
	18340	18044							

Table 8. Effect of being retired on the number of friends

Men		All				non self-employed		with partner	
	OLS	OLS	IV	IV		OLS	IV	OLS	IV
retired	-0,0976*** (0,0242)	-0,0335 (0,0252)	0,0573 (0,1274)	0,1473 (0,1420)					
partner retired									
resource ctrl	no	yes	no	yes					
Exo test Durbin			0,2679	0,195					
nb obs.	15443	15106	15443	15106					

Women		All				non self-employed		with partner	
	OLS	OLS	IV	IV		OLS	IV	OLS	IV
retired	-0,179*** (0,0249)	-0,100*** (0,025)	-0,3082* (0,1187)	-0,202* (0,124)	-0,179*** (0,0249)				
partner retired									
Exo test Durbin			0,2356	0,4033					
resource ctrl	no	yes	no	yes					
	18340	18044	18340	18044					

Table 8. Effect of being retired on the number of friends

Men		All				non self-employed		with partner	
	OLS	OLS	IV	IV		OLS	IV	OLS	IV
retired	-0,0976*** (0,0242)	-0,0335 (0,0252)	0,0573 (0,1274)	0,1473 (0,1420)		-0,0485* (0,0278)	0,2383* (0,1550)		
partner retired									
resource ctrl	no	yes	no	yes		yes	yes		
Exo test Durbin			0,2679	0,195			0,059		
nb obs.	15443	15106	15443	15106		12617	12617		

Women		All				non self-employed		with partner	
	OLS	OLS	IV	IV		OLS	IV	OLS	IV
retired	-0,179*** (0,0249)	-0,100*** (0,025)	-0,3082* (0,1187)	-0,202* (0,124)		-0,1283*** (0,0269)	-0,2541* (0,1303)		
partner retired									
Exo test Durbin			0,2356	0,4033			0,3234		
resource ctrl	no	yes	no	yes		yes	yes		
	18340	18044	18340	18044		16121	16121		

When both retired
men gain
(14% signif)

Table 8. Effect of being retired on the number of friends

Men	All				non self-employed		with partner	
	OLS	OLS	IV	IV	OLS	IV	OLS	IV
retired	-0,0976*** (0,0242)	-0,0335 (0,0252)	0,0573 (0,1274)	0,1473 (0,1420)	-0,0485* (0,0278)	0,2383* (0,1550)	-0.0159 (0,0264)	0.0912 (0,1561)
partner retired							0.0191 (0,0183)	0.1415 (0,1411)
resource ctrl	no	yes	no	yes	yes	yes	yes	yes
Exo test Durbin			0,2679	0,195		0,059		0,31198
nb obs.	15443	15106	15443	15106	12617	12617	12709	12709

Women	All				non self-employed		with partner	
	OLS	OLS	IV	IV	OLS	IV	OLS	IV
retired	-0,179*** (0,0249)	-0,100*** (0,025)	-0,3082* (0,1187)	-0,202* (0,124)	-0,1283*** (0,0269)	-0,2541* (0,1303)	-0.0762*** (0,0282)	-0,1277 (0,1384)
partner retired							-0.0528*** (0,0177)	-0,1283* (0,0728)
Exo test Durbin			0,2356	0,4033		0,3234		0,4714
resource ctrl	no	yes	no	yes	yes	yes	yes	yes
	18340	18044	18340	18044	16121	16121	12317	12317

Table 9. Effect of being retired on the number of family members in the PN

Men		All				non self-employed		with partner	
	OLS	OLS	IV	IV	OLS	IV	OLS	IV	
retired	0.0236	0.0935**	0.0679	0.0495	0.0849**	0.0385	0.0722*	0.103	
	(0.0360)	(0.0369)	(0.198)	(0.207)	(0.0412)	(0.229)	(0.0407)	(0.241)	
partner retired							0.0304	-0.247	
							(0.0282)	(0.217)	
Exo test Durbin			0.8201	0.8294		0.8366		0.3909	
resource ctrl	no	yes	no	yes	yes	yes	yes	yes	
nb obs.	15443	15106	15443	15106	12617	12617	12709	12709	

women		All				non self-employed		with partner	
	OLS	OLS	IV	IV	OLS	IV	OLS	IV	
retired	0.0211	0.0736**	0.00700	0.0532	0.0787**	0.0210	0.0911**	-0.00757	
	(0.0357)	(0.0361)	(0.176)	(0.179)	(0.0388)	(0.188)	(0.0441)	(0.216)	
partner retired							0.0748***	0.0327	
							(0.0277)	(0.114)	
Exo test Durbin			0.9350	0.9077		0.7533		0.7749)	
resource ctrl	no	yes	no	yes	yes	yes	yes	yes	
nb obs.	15443	15106	15443	15106	12617	12617	12709	12709	

Table 9. Effect of being retired on the number of family members in the PN

Men		All				non self-employed		with partner	
	OLS	OLS	IV	IV		OLS	IV	OLS	IV
retired	0.0236	0.0935**	0.0679	0.0495		0.0849**	0.0385	0.0722*	0.103
	(0.0360)	(0.0369)	(0.198)	(0.207)		(0.0412)	(0.229)	(0.0407)	(0.241)
partner retired								0.0304	-0.247
								(0.0282)	(0.217)
Exo test Durbin			0.8201	0.8294			0.8366		0.3909
resource ctrl	no	yes	no	yes		yes	yes	yes	yes
nb obs.	15443	15106	15443	15106		12617	12617	12709	12709

women		All				non self-employed		with partner	
	OLS	OLS	IV	IV		OLS	IV	OLS	IV
retired	0.0211	0.0736**	0.00700	0.0532		0.0787**	0.0210	0.0911**	-0.00757
	(0.0357)	(0.0361)	(0.176)	(0.179)		(0.0388)	(0.188)	(0.0441)	(0.216)
partner retired								0.0748***	0.0327
								(0.0277)	(0.114)
Exo test Durbin			0.9350	0.9077			0.7533		0.7749)
resource ctrl	no	yes	no	yes		yes	yes	yes	yes
nb obs.	15443	15106	15443	15106		12617	12617	12709	12709

Results: Friends

- Matthew effect The rich have more friends, or friends bring riches (+ « valuation neglect » ?)
- Differentiated effect of retirement: women lose their friends; some men gain friends...

7. What about life satisfaction?

- What if I look at life satisfaction... (on a scale from 0 to 10)?

how			
satisfied	female		
with life	0	1	Total
-----+-----+-----			
refusal	0.05	0.04	0.05
don't know	0.40	0.35	0.37
0	0.51	0.59	0.55
1	0.28	0.36	0.32
2	0.45	0.52	0.49
3	1.27	1.47	1.38
4	300	443	743
4	1.62	1.97	1.81
5	9.11	11.41	10.37
6	7.28	8.17	7.77
7	16.34	16.28	16.31
8	31.24	29.44	30.25
9	15.95	14.05	14.91
10	15.49	15.35	15.41
missing	0.01	0.00	0.00
-----+-----+-----			
Total	18,071	21,980	40,051

Table 12. Effect of the size of the SN on life satisfaction

VARIABLES	OLS	OLS (2)	ret IV	ret IV
	male	female	male	female
Family member	0.0414*** (0.0093)	0.0831*** (0.0085)	0.0405*** (0.0093)	0.0832*** (0.0085)
Pure friend	0.0423*** (0.0144)	0.0365*** (0.0127)	0.0411*** (0.0144)	0.0363*** (0.0126)
Colleague	-0.0828** (0.0419)	0.0264 (0.0456)	-0.0670 (0.0462)	0.0207 (0.0494)
Neighbour	0.0170 (0.0411)	0.0279 (0.0352)	0.0114 (0.0416)	0.0287 (0.0352)
Retired	-0.0891** (0.0419)	0.0194 (0.0410)	0.0963 (0.235)	-0.0397 (0.204)
Retired & active	0.0197 (0.0536)	0.0704 (0.0602)	0.148 (0.169)	0.0279 (0.156)
unemployed	-0.462*** (0.0823)	-0.180** (0.0861)	-0.385*** (0.126)	-0.209 (0.130)
Homemaker	-0.165 (0.249)	0.0986** (0.0483)	-0.0450 (0.290)	0.0580 (0.146)
Constant	6.740*** (1.329)	7.591*** (1.242)	9.261*** (3.414)	6.867** (2.752)
Observations	15,052	17,982	15,052	17,982
R-squared	0.301	0.329	0.300	0.329

8. Conclusions

- **Retirement** can cut women from friends, not men who increase their friendship ties. **Why this sex dissymmetry?**

8. Conclusions

- **Retirement** can cut women from friends, not men who increase their friendship ties. **Why this sex dissymmetry?**
1. Men have less friends than women, or, more likely, *talk* less to their friends, especially of their problems, hence are less likely to lose them.

8. Conclusions

- **Retirement** can cut women from friends, not men who increase their friendship ties. **Why this sex dissymmetry?**
 1. Men have less friends than women, or, more likely, *talk* less to their friends, especially of their problems, hence are less likely to lose them.
 2. Women's occupations, in offices rather than in the industry, make them more likely to talk to and make friends with colleagues, hence retirement is more a change of life for them.

8. Conclusions

- **Retirement** can cut women from friends, not men who increase their friendship ties. **Why this sex dissymmetry?**
 1. Men have less friends than women, or, more likely, *talk* less to their friends, especially of their problems, hence are less likely to lose them.
 2. Women's occupations, in offices rather than in the industry, make them more likely to talk to and make friends with colleagues, hence retirement is more a change of life for them.
 3. A retired man does not turn to homework, but still goes out to meet his friends in the pub or cafe, walks the dog, plays outdoor games; a retired woman is more likely to increase her homework involvement, all the more that she has an added retired husband in her home, one more mouth to feed for lunch.

8. Conclusions

- **Retirement** can cut women from friends, not men who increase their friendship ties. **Why this sex dissymmetry?**
 1. Men have less friends than women, or, more likely, *talk* less to their friends, especially of their problems, hence are less likely to lose them.
 2. Women's occupations (offices vs industry), make them more likely to talk to and make friends with colleagues, hence retirement is more a change of life for them.
 3. A retired man does not turn to homework, but still goes out to meet his friends in the cafe, walks the dog, plays outdoor games; a retired woman is more likely to increase her homework involvement, all the more that she has an added retired husband in her home, one more mouth to feed for lunch.
 4. A wife may even encourage her husband to go out and meet his friends, to have some free time at home...