Direction des Statistiques Démographiques et Sociales

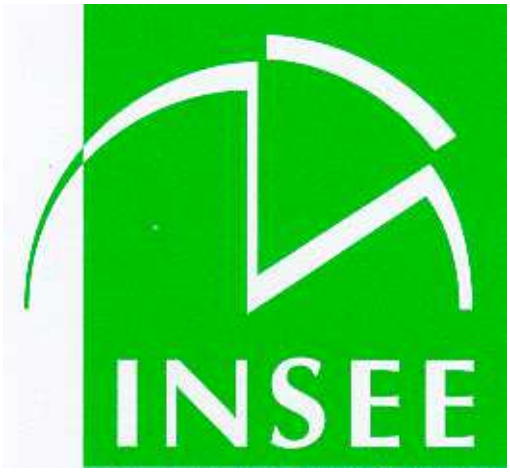
N° F1410

PERSONAL NETWORK AND RETIREMENT

Is retirement bad for friendship and good for family relationships ?

ANNE LAFERRERE

Document de travail



Institut National de la Statistique et des Etudes Economiques

INSTITUT NATIONAL DE LA STATISTIQUE ET DES ÉTUDES ÉCONOMIQUES
Série des Documents de Travail
de la
DIRECTION DES STATISTIQUES DÉMOGRAPHIQUES ET SOCIALES

N°F1410

PERSONAL NETWORK AND RETIREMENT

Is retirement bad for friendship and good for family relationships ?

AUTEUR : ANNE LAFERRERE

(DÉPARTEMENT RESSOURCES ET CONDITIONS DE VIE DES MÉNAGES)

Document de travail

Janvier 2015

"Personal network" and retirement:
Is retirement bad for friendship and good for family relationships?

Anne Laferrère[1]

Janvier 2015

I thank participants to the Conference on the Performance of the Welfare State in honour of Sergio Perelman in Liège (7-8/6/2012), to the CDC scientific Seminar in Bordeaux (15/11/2012), to the DSDS seminar at INSEE (30/11/2012), to the Journée d'Etudes SHARE at University Paris-Dauphine (11/10/2013) and the SHARE Users Conference in Liège (28-29/11/2013) for their remarks. Comments on various versions by Jérôme Accardo, Eric Bonsang, Chantal Cases, Pascal Godefroy and Fabrice Lenglart are gratefully acknowledged. Errors are mine.

[1] INSEE and CREST.

“ Réseau personnel” et retraite:
La retraite est-elle nuisible à l’amitié et bonne pour les relations familiales?

Résumé

Qu’est-ce qui influence la taille du réseau des relations personnelles familiales et amicales? On s’intéresse ici à l’effet de la retraite. La retraite fournit du temps libre pour développer des relations personnelles, mais prive d’une offre potentielle de collègues et amis. Lors de la 4ème vague de l’enquête SHARE sur la retraite et le vieillissement en Europe une nouvelle question a été posée sur le nombre de confidents. L’enquête permet de tenir compte de nombreux déterminants potentiels des relations personnelles. A première vue, être à la retraite diminue les liens d’amitiés et augmente les liens familiaux. Les ressources économiques influencent le nombre de confidents. L’effet négatif de la retraite est réduit de moitié quand on contrôle par le revenu permanent. Les différences entre pays et cohortes dans les âges légaux de retraite fournissent un moyen de s’approcher d’un effet pur de la retraite. De fait la décision de retraite peut être endogène. Il résulte de cette stratégie d’estimation par variables instrumentales que l’effet négatif de la retraite sur le nombre d’amis disparaît pour les hommes, mais pas pour les femmes retraitées qui ont moins d’amis que les femmes actives, *cet. par*. La taille du réseau personnel a un effet positif faible sur la satisfaction dans la vie. Les liens familiaux semblent plus importants que les amis pour les femmes et les deux types de liens d’égale importance pour les hommes.

Mots-clefs: Retraite; Réseau personnel ; Réseau Social; Santé; Variables Instrumentales

“Personal network” and retirement:
Is retirement bad for friendship and good for family relationships?

Abstract

What shapes the size of a personal network of family and friends? We concentrates here on the effect of retirement from the work force. Retirement provides time to develop personal relationships; but it deprives from a potential supply of colleague friends. We draw evidence from a new question on the number of confidants in the 4th wave of the Survey of Health, Ageing and Retirement in Europe. The survey allows to take into account many potential determinants of personal relations. A first result is that being retired decreases friendship ties, while it increases family ties. Economic resources influence the number of confidants. We estimate that the negative effect of being retired on the number of friends is reduced by one half when we control for permanent income. The differences among countries and cohorts in retirement age regulation provide an instrument to get closer to a retirement effect. We find that the retirement decision can be endogenous. The result from the IV strategy is that the negative effect of retirement on the number of friends is erased for men, not for retired women who do have less friends than employed women, *cet. par*. . Finally the size of the personal network is found to have a positive but small impact on life satisfaction. Family ties are more important than friends for women and both types of ties seem equally important for men.

Keywords: Retirement; Personal Network; Social Network; Instrumental Variables

JEL codes: J26, D19, D69, C26

SOMMAIRE

1. Introduction **7**
2. Literature review **7**
3. Theoretical thoughts **8**
4. Data **9**
5. Multivariate analysis of personal network size: OLS **11**
6. Endogeneity of retirement and IV strategy **14**
7. Et le bonheur dans tous ça ? **19**
8. Conclusion: Is retirement bad for women friendship? **19**
References **21**
Appendix **24**
Appendix 1. Sample description 24
Appendix 2. Age effect and retirement 25

1. Introduction

"No man is an island" wrote John Donne in 1624, meditating on how we feel diminished by anyone's death. Even economists, the champions of atomistic agents maximizing their utility, have developed formal models taking into account altruism, household bargaining, reciprocity or peer effects. Be it to deplore their disappearance or to revive them, social linkage and bonding are often at the center of the political debate. Community-centered policies are put forward as a condition for efficient democracy in the USA and the UK (the 'Big Society' of David Cameron). Between the macro national or local citizenship levels, and the micro individual or household levels, there is a place for social relations. Such social ties are likely to be important in old age when help from others becomes a necessity.

In this paper we do not primarily question the importance of social ties. Rather, we focus on the determinants of the size of the network. Moreover we concentrate on *personal* ties. Is friendship a purely individual affair, or is the number of confidants influenced by more exogenous factors, such as the environment where a person lives and works? Angelini and Laferrère (2013) concentrated on the housing environment. They found a modest but positive effect of living in big cities on the number of personal relations. Here we expand their approach and we are interested in the work environment of a person, or the lack of it, through unemployment, disability and, especially, retirement. The literature on work conditions is large and growing. That on the effect of retirement on well being is more recent, but also growing. We hope this paper contributes to the second strand of literature. If the personal network is important for well-being and if employment has an effect, a policy relevant question is how to help persons with few or no personal ties to keep or increase them, particularly after retirement.

Section 2 reviews the related literature. Section 3 presents some theoretical thoughts. The data are presented in section 4. Section 5 offers a multivariate analysis of Personal Network (PN) size, separating family and non family members of the PN. In Section 6 we rely on the variability in retirement age in Europe and use an IV strategy to take into account the potential endogeneity of the retirement decision. Section 7 looks for the effect of the PN size on life satisfaction. Section 8 concludes.

2. Literature review

Social interactions have been widely studied in the context of neighbourhood and peer effect on school age children and teen-agers (after Becker, 1974, see e.g. Case and Katz, 1991). Some are interested in their effect on health. Auld (2011) finds only a moderate effect of large-scale social interactions on body weight. Social ties have been shown to be important to find a job (Mouw, 2003; Calvó-Armengol and Jackson, 2004); married people are in better health than non married people or those living alone (Verbrugge, 1979; Lillard and Panis, 1996); women who have a mother nearby to help them with child care are more likely to have a career (Ogawa and Ermisch, 1996; Compton and Pollak, 2013). Ties are likely to be important in old age when help from others becomes a necessity. Endogeneity issues are to be dealt with when assessing the effect of social ties on health. Sirven and Debrand (2012) show that the effect runs more from the person's health to her "social capital" - a concept going back to Durkheim - than vice-versa. Social capital is deemed useful in finding a job (Coleman, 1988; Portes, 1998). The literature on work conditions and well being is also growing (Frey and Stutzer, 2002).

Some have linked work conditions and the desire to retire early (Blanchet and Debrand, 2007; Siegrist and Wahrendorf, 2009, 2009(2); Siegrist et al., 2007). Others have stressed the importance of social participation after retirement (Sirven and Debrand, 2008; Sirven and Godefroid, 2009; Croezen et al., 2013; Laferrère 2015). Some studies conclude that relations to friends are more important for well being then those with family (Adams and Blieszner, 1989; Matt and Dean, 1993). Shiovitz-Ezra (2013) finds that having a spouse as a confidant is the most influential factor against loneliness.

The links between retirement and health, cognitive capacities or well being are controversial. Adam et al. (2007) and Bonsang et al. (2012) find a significant negative effect of retirement on cognitive functioning, both in the USA and in Europe. So do Rohwedder and Willis (2010) and Mazzonna and Peracchi (2012). But Coe et al. (2012) point to reverse causation in the US. Coe and Zamarro (2011) find a positive temporary effect of retirement on self-perceived health.[2] Sociologists insist on gender

[2] See also Blake and Garrouste (2013).

roles, with men traditionally less comfortable with retirement than women (Sharabi and Harpaz, 2011; Barnes and Parry, 2004). Epidemiologists point to potential contradictory effect of social integration on health or psychological well-being. Social integration can be both positive (providing support) and negative (generating stress) (Seeman, 2000; Rook, 1984). Loneliness in old age is also a concern (Perlman, 2004). More recently, on the same SHARE data that we use here, Börsch-Supan and Schuth (2013) find links between early retirement, mental health, cognition and personal networks.

3. Theoretical thoughts

We did not find much in the economic literature on testable PN size theory. It might be so because personal relations, a subset of social network, seem a rather personal affair, more linked to a person's character than to circumstances or economic constraints. In his book on aging (1995, chap. 3, p. 61-65) Richard Posner analyzes how age influences investment in relational human capital and points to two contrary effects. On the one hand, a truncated time horizon reduces the incentive to form new relationships as one ages. On the other hand, a lower opportunity cost of time would produce a rise in the formation of new friendships after retirement. For Posner, the declining time horizon and high time cost before retirement should produce a decline in the formation of new friendship just before retirement age. Then the sudden reduction in time cost would make new ties rise just after retirement up to the age at which the shorter time horizon again makes them decline till death. Posner also mentions that the negative time horizon effect is reinforced by the friends' death if friendship takes place with contemporaries, the supply of which is declining with age. He does not mention that retirement *per se* could reduce the supply of potential relational human capital.[3]

We formalize those intuitions about the cost and benefit of friendship formation. The benefit from *new* friends is negatively influenced by age *A,* if ageing gives less time to reap benefit from new ties. Related to age, bad health *H* might on the contrary increase the need for new friend's support. Employment *E* will have an effect if professional friendship is useful in networking, but this effect is likely to be small at the end of a career. Finally personal traits *K* are likely to play a role, as some are less sociable than others. Hence we assume benefit *B* for friendship:

$$B = B\,(A, E, H, K)$$
$$-,\ +,\ +,\ ..?$$

Facing the benefit from new friends is their potential cost. According to Posner, the main cost is time. Time cost is likely to be smaller for the unemployed, retired or inactive who have more leisure. However cost *C* will also be linked to supply. Supply is itself linked to age *A* (rising as one gets to know more people, then declining when death begins to strike among peers), employment *E* (offering professional contacts), family *M* (matrimonial state, number of children, parents, siblings, cousins, all potential confidants), and the local environment *L* (whether one lives in a house, a flat, a village, a city). Part of the effects might be endogenous if people self-select according to their need of friends. Health *H* will also play a role if people find it difficult to interact with people who are ill or disabled. The cost of establishing/sustaining friendship might also be a function of income (even if friends cannot be bought on the market) and wealth *W*. Income allows entertaining, having a spare room, and, importantly, staying in one's home as one's age, which is likely linked to keeping one's friends (Angelini and Laferrère, 2011, Laferrère *et alii*., 2013); owning a second home in the country allow inviting friends, etc..

$$C = C\,(A, E, M, L, H, W)$$

The utility of new friends as a function of age is the difference between cost C (Fig. 1, solid lines) and benefit B (Fig. 1, dot lines). Finally the result is an empirical issue. Posner's model predicts an increase in the number of new friends with age ($B>C$) till the age (60 on Fig. 1) when people work too much to have time for new friendship (the opportunity cost of time is too high) and the number of new friends decline. It increases then suddenly after retirement (age 65 on Fig. 1), up to the point (age 70) when the time horizon becomes too short, and death hits the potential stock of new friends. Translated into a stock of friends (not a flow) the stock should increase with age, pause some time before retirement, rise again after retirement to begin decreasing after 70-75 when death begins to strike. We test this model in Appendix 2.

[3] Posner points that empirical testing of the higher loneliness of old age should take care of the selection of those who survived to old age: better educated, more affluent, they may feel less lonely than their number of friends would predict.

4. Data

We use questions from the social network module of the 2010 fourth wave of the Survey of Health, Ageing and Retirement in Europe (SHARE)[4], to which we add demographics, employment, health and proxies for permanent income (wealth and education). We use the term "personal" rather than "social" network because the questions did not encompass the whole social relationships of a person, but were by construction limited to up to 7 confidants; hence it could be called "friendship ties". More precisely the question was the following:
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, neighbours, or other acquaintances. Please refer to these people by their first names.

Among all the possibilities offered by such "name generator" questions - as they are known in the sociology literature - what is favored here is not an exchange approach (who helps or who is helped)[5] or a pure interaction approach (whom do you socialize with), but a verbal relational approach (*discuss important things*) and, to a lesser extent, an affective approach (*problems and concerns*).[6] Then the respondents were asked to qualify their relation to the person. We group the relationships into four mains groups: family[7], friends, (ex-) colleagues and co-workers, neighbours.

We use the sample of individuals interviewed in 2010-2011.[8] We restrict the sample to non nursing home residents, aged below 80, because looking at the effect of professional activity above that age seems irrelevant. Hence we are not concerned by old age solitude. We also drop those below 55 because some countries did not refresh their samples which are no longer representative below that age. We separate men and women. Only 0.3% of men classified themselves as homemakers when 12.8% of females did so (table 1). Men and women might also differ in their relation to paid work, family and children. Leaving aside observations for which crucial variables are missing, we use a sample of 40,060 observations, 21,987 women and 18,073 men.

We define the current job situation drawing from three elements: self-declared "retired" situation, actual paid activity at the survey time and reception of a pension. The self-declared "retired" situation derives from question EP005:

In general, which of the following best describes your current employment situation?

1. Retired

2. Employed or self-employed (including working for family business)

3. Unemployed

4. Permanently sick or disabled

5. Homemaker

97. Other (Rentier, Living off own property, Student, Doing voluntary work)

---

[4] We use release 1 data from SHARE wave 4. The SHARE data collection has been primarily funded by the European Commission through the 5th framework programme (project QLK6-CT-2001- 00360 in the thematic programme Quality of Life), through the 6th framework programme (projects SHARE-I3, RII-CT- 2006-062193, COMPARE, CIT5-CT-2005-028857, and SHARELIFE, CIT4-CT-2006-028812) and through the 7th framework programme (SHARE-PREP, 211909 and SHARE-LEAP, 227822). Additional funding from the U.S. National Institute on Aging (U01 AG09740-13S2, P01 AG005842, P01 AG08291, P30 AG12815, Y1-AG-4553-01 and OGHA 04-064, IAG BSR06-11, R21 AG025169) as well as from various national sources is gratefully acknowledged (see www.share-project.org for a full list of funding institutions).

[5] Even if the SHARE questionnaire is also interested in such exchanges and allows linking them to the personal network (Roll and Litwin, 2013).

[6] For a discussion on name generators see e.g. Marin and Hampton (2007).

[7] Spouse/partner, mother, father, mother-in-law, father-in-law, stepmother, stepfather, brother, sister, child, step-child/ partner's child, son-in-law, daughter-in-law, grandchild, grandparent, aunt, uncle, niece, nephew, other relative.

[8] We exclude those for whom housing information was missing or number of grandchildren is unknown.

We exclude from the retired category those who said they only got a survivor's pension[9], and we reclassify them as homemakers. From another question we spot retired, unemployed, homemakers, disabled who nevertheless had a job.[10] We keep the separate category when it is more than 1% of the sample otherwise we reclassify the unemployed, disabled, homemaker, etc. who have a paid work as employed.[11] Finally 58% of our sample are retired and not working, 21% are employed or self-employed, 7% are homemakers, 5% classified themselves as retired and have a job, 3% are disabled, 2% have a job and get a pension, 2% are unemployed (table 1, unweighted). When we use the calibrated weights to correct for various country sample designs, non random response and attrition rates, the population is shifted towards men and towards younger ages, hence towards the employed (+6 percentage points).[12] Employed men represent a third of the population of 55-79 versus only a quarter in the sample (+7,3 percentage points). Our interpretation is that (1) those out of the labour force or who were older were easier to find at home and interview than the working or younger age population, (2) women were more likely than men to answer when a couple was interviewed.

The average size of the personal network of the 55-79 years old was rather low: 2.5 persons. Few (3.2%) did not mention anybody, a little more than a quarter (26.0%) mentioned just one person, 26.4% mentioned 2 confidants, only 2.6% mentioned the maximum of seven. Most confidants are family members. On average the respondents in our sample mentioned 1.91 family members (among them, 0.63 spouses) and only 0.61 non-family confidant. Among the non-family confidants we concentrate on friends, colleagues or ex-colleagues, and neighbours (table 2). Some have insisted on the difference between family and non family interactions in terms of wellbeing so we analyze them separately in what follows (Matt and Dean 2012). Since we left the very old out of the sample, we exclude from the "friends" category professional helpers, therapists, priests, or care providers who were named as confidants.
The decision to retire may not be exogenous. At a given age, the number of confidants might influence the decision to retire, or some unobserved traits influence both. If this is the case the measure of a pure retirement effect would be biased. Using panel data would partly alleviate the problem. With only a cross section we rely on the differences between countries, sex and cohorts in the legal age of eligibility for early or normal retirement pension, likely to be unrelated to PN size, to instrument retirement, as others have done (Angelini *et al*., 2009; Mazzonna and Peracchi, 2012; Bonsang *et al.,* 2010; Coe and Zamarro, 2011; Börsch-Supan and Schuth, 2013; Fonseca *et al*. 2013).

A controversial issue is whether to use weights. According to Davezies and d'Haultefoeuille (2009) weighted estimators are more robust than non-weighted estimators, even if they are less precise when unweighted estimators are valid. In SHARE, the sample frames and sample sizes vary across countries[13] so we decided to present both unweighted and weighted results (using the calibrated individual cross section sampling weights *ciw_w4*) as robustness checks.[14] We only point to cases when the results differ.

---

[9] They only selected item 7 or 8 when they answered question *EP071*
Please look at card 23.Have you received income from any of these sources in the year [{previous year}]? Code all that apply
1. Public old age pension
2. Public old age supplementary pension or public old age second pension
3. Public early retirement or pre-retirement pension
4. Main public disability insurance pension, or sickness benefits
5. Secondary public disability insurance pension, or sickness benefits
6. Public unemployment benefit or insurance
7. Main public survivor pension from your spouse or partner
8. Secondary public survivor pension from your spouse or partner
9. Public war pension
10. Public long-term care insurance
96. None of these

[10] From question *EP002: Did you do any paid work [since our last interview/during the last four weeks] either as an employee or self-employed, even if this was only for a few hours?*

[11] When we kept them separate their behaviour was close to that of employed persons.

[12] It is also shifted towards small towns and suburbs. Calibration adjusts the design weights to reflect the distribution of country population by sex, age and regions. As a natural result using weights give more importance to more populated countries. For instance Germany is 3.2% of the sample and 25.8% of the 55-69 population (Table A1).

[13] The mean number of observations in each country is 2,500. It goes from 1,286 in Germany, 1,366 in Portugal to 4,215 in the Czech republic and 4,495 in Estonia.

[14] The range of the weights varies a lot by country. On the use of weights see also Solon *et al*. 2013.

5. Multivariate analysis of personal network size: OLS

We start with regressions of the size of the personal network on employment status. We estimate OLS models of type (1) :

$$Size = a\ Age*ctr + b\ Age^2*ctr + \Sigma e\ Empl + c\ Z + \varepsilon \qquad (1)$$

Empl is a vector of the 8 possible job situations of table 1. Being employed is the control group. Since the PN has been built over a lifetime, we add a dummy to control for those who never held any paid job.[15] We look at the effect of being retired, home maker, unemployed or in other forms on inactivity on *Size,* the number of confidants, separately for males and females. *Size* is, in turn, the number of friends, of colleagues, of neighbours and of family confidants. All models include *ctr* a full set of 16 country dummies[16] interacted with age and age squared, and a vector *Z* of other control variables. *Z* includes dummies for the number of children (1, 2, 3, 4 or more), and for absence of brothers, of sisters, the number of grand-children, household size, detailed matrimonial status or state (Married living with spouse, Registered partnership, Married separated, Never married, Divorced, Widowed, Unregistered partnership) and physical and mental health proxies: limitations in daily activities, adl1 (having one or more limitations) and adl2 (having one or more limitations with instrumental activities), GALI dummy (the Global activity limitation index) and the full depression scale EURO-D (from 0 to 12). In the first models vector *Z* does not include economic resources nor human capital. Table A1 in Appendix 1 describes the sample.

First we comment the model for men (table 3, col. 1-3-5-7-9).[17] Being retired rather than employed had no effect on the number of friends (col. 1) but decreased the number of colleagues or ex-colleagues (col. 3) in a man's network. Then we pool friends and colleagues because the number of colleagues is very small compared to the number of friends (table 2), neglecting the fact that calling a "colleague" a "friend" might have a meaning *per se*. The number of friends or colleagues was significantly lower for retirees (col. 5). Being retired increased the number of neighbours (col.7) and had no significant effect on the number of family members (col. 9) in the PN. Being unemployed was detrimental not only to the number of friends and colleagues confidants but also to the number of family confidants. Those who declared they were retired and nevertheless employed did not have less friends than those who declared they were "employed". Since we control for age, it is not only because they were closer to pension age. It is either because employment goes with making friends, or because such persons self-selected into employment. The self-selection into activity might be part of the negative effect of being retired. At a given age, one may stay active all the more than one gets a non monetary reward from working, such as friendship ties (more on this below). Men who never held a job declared less *family* confidants. Together with the negative effect of unemployment on the number of family confidants it is a sign that there is more to professional activity than meeting potential friends.

The results are slightly different for women (table 4, col. 1-3-5-7-9). Being retired increased, as for men the number of neighbours in the PN, but decreased not only the number of a woman's colleagues in the PN, but also her number of friends, hence the number of friends or colleagues. Being a homemaker decreased the number of friends, increased the number of neighbours in the PN. Neighbourhood relationships are fuelled by the so-called "inactive" women. But women who never held a job had less of all types of confidants, including family.

Whether the effect of employment comes from meeting people while working, as would seem likely for colleagues who by definition cannot have been met outside a job situation, or through other channels is unclear. Angelini and Laferrère (2013) have pointed to what is called the "Matthew effect", from the Gospel "whoever has, will be given more" (Matt 13, 12). They showed that people with higher economic resources and a higher level of education mentioned a larger network of confidants. As mentioned above, relationships are built over time so we want to control for proxies for permanent income. Retirement usually goes with a reduced *current* income, but since this is an intrinsic part of the effect we want to measure, we do not control here for current income. Moreover, on a cross-

[15] This variable does not pick all of them because it was asked only to those who answered 4,5,97 to EP005 or "no" to EP002 (see footnote 9), hence it excluded the "false retired".

[16] Austria, Germany, Sweden, the Netherlands, Spain, Italy, France, Denmark, Switzerland, Belgium, the Czech republic, Hungary, Portugal, Slovenia and Estonia.

[17] We do not dwell on the effect of demographics. Those who have more children, who have siblings, a spouse or partner mention more family confidants and less friends. Angelini and Laferrère (2013) pointed to the substitution between family and friends in the number of confidants.

section comparing retirees and employed persons of the same income would induce a bias in measuring the retirement effect. If a retiree has the same income level as an employed person, he or she is likely to have had a higher income when employed, hence a higher number of friends, and this is not the effect we want to capture.[18] We add the following measures of permanent income: dummies for household net worth quartiles defined at the country level; a simple score for the number of assets (adding 1 for each type of owned assets - except homes - and subtracting 1 for having no bank account or no car[19]; a score for debts (adding one for each type of debt, except mortgage or overdue bills), a dummy for having a mortgage; dummies for home tenure status (the reference category is "living rent free"); for owning a second home; the number of years of education and dummies for quartiles of number of years of education defined at the gender and country levels, to assess both absolute and relative education level. In addition the models control for the local supply of confidants with dummies for environmental conditions: location, from big city to rural area, and type of home, house or flat and size of building (the reference is farm house). We also add the length of tenure in the current home, with the idea that establishing deep ties may take time or that moving may cut from friends.[20] We find that human and economic capital had a highly significant effect. Friends and number of family members in PN were more numerous for those who were relatively more educated, had more assets, more debt, owned a second home. The higher the net worth quartile the higher the number of friends or colleagues, or family members in the PN. The rich have more friends, or friends bring riches. The importance of education is also a hint that PN size might be, at least partly, a social construction. The way people answer to a question on the number of their confidants, even if care has been taken to use simple words, such as "discuss with others the good or bad things that happen", "problems", "concerns", might be not only linked to the fact that they do "discuss things", but that they are conscious of doing so, and conscious of the value of such discussion. Hence the effect of education, even when we control for wealth. Such *valuation neglect*, to borrow Sen's term applied in the context of subjective well-being, might apply here and make the number of PN members more linked to socio-economic status than "in reality" (Sen, 1985). In other words, not only do richer and more educated people have more personal ties, but they are more likely to say so. On a subsample of 6,387 respondents who had been asked about how they fared in language and maths at age 10 relatively to the rest of their school class (in SHARElife study 2008) we introduced such self-assessed verbal and maths fluency dummies. Only verbal fluency had an effect on the number of friends. The less fluent had a smaller number of friends in their PN more than 50 years later *cet.par.*. It did not change the retirement effect. We leave the deeper study of the links between schooling, personal traits and network for future research.

Once we control for permanent income, the effect of being retired is modified (col. 2-4-6-8-10 of tables 3-3w and 4-4w). It seems that being retired was detrimental to friendship partly because retirees had lower permanent income. The magnitude of the negative effect of being retired on the number of friends or colleagues in the PN is smaller once we control for resources: it becomes non significant for men, and it is halved for women (col. 6 compared to col. 5). Moreover, for a given level of resources being retired *increased* the number of family members in the network of males. The effect is only 15% significant; it is non significant once we use weights (table 3w, col. 10). Being retired has no significant effect on the number of family members in a woman's PN. Being unemployed was the most detrimental to relationships partly because it went with less resources.

To be more precise about the employment and resources effects on PN size we present the estimated OLS coefficients of retirement status on the number of friends or colleagues (from now on lumped together as "friends") in PN (tables 5, 5w for males and 6, 6w females) and on the size of family network (tables 5bis, 5bisw for males and 6bis, 6bisw for females), introducing controls step by step to assess their effect. We lumped those who are employed and pensioner to the reference group of employed.[21] Figures 2 to 5 present the estimated coefficients of "being retired" rather then employed or self-employed.

[18] Our results were qualitatively unchanged when it a former version we controlled for current income.

[19] Asset= - no bank + bond + stock + fund + saving+ life insurance+ firm - no car+ own real estate. Debt= debt on cars and other vehicles + on credit/store cards + to relatives/friends + loans (from bank, building society or other financial institution).

[20] Location and housing choices may be endogenous if people self-select into places where they can meet other people according to unobserved tastes.

[21] It does not qualitatively change the results on the effect of being retired. Besides the category is important only in Estonia where many get a persecution pension. We also checked that adding neighbours to the category of friends + colleagues did not modify the results.

Males' friends (Fig. 2, top)

Being retired reduced a man's number of friends and colleagues by -0.111 (unweighted estimation, table 5, col. 1) or -0.131 (weighted estimation, table 5w, col. 1) compared to being employed, i.e. if we divide this mean effect by the mean number of friends to get an order of magnitude of the effect, by 0.131/0.431 = 30% (Fig. 2., top panel, left bar). Part of the effect comes from the different economic resources of current retirees (human capital and wealth); a small part comes from environmental factors. Retirement *per se* counts for 0.044 to 0.069, that is some 10 to 16% of PN of friends size (table 5, col. 5, only 16% significant in the weighted estimation). All in all 47% (weighted specification) to 60% (unweighted specification) of the "retirement" effect comes from permanent income and environment differences.

Females' friends (Fig. 2, bottom)

Similarly, retirement decreased the size of women's friends and colleagues network by 0.16 (unweighted specification, table 6, col. 1) to 0.18 (weighted, table 6w, col. 1), that is by 26% to 30% compared to being employed (Fig. 2, bottom, left bar). Part of the effect comes from the economic resources of the retirees[22] ; the same small part as men comes from environmental factors. All in all a third to 46% of the "retirement" effect comes from resources and environment. Retirement per se counts for 0.086 to 0.121 (14% to 20% of PN friendship size) depending on whether we weight or not (Fig. 2, bottom, right bar).

Males' family network (Fig. 3, top)

The size of family PN was larger for retired than for employed males (+0.059 if unweighted, table 5bis col. 5; +0,071, weighted, table 5bisw, col. 5) only when we control for economic resources (compare left and right bars, on fig. 3, top). The tentative interpretation is the following. Being professionally active was detrimental to a man's family relationships, but it does not show since it also went with more resources that fuel the relationships. Being retired was good for family relationships, leaving more time for them, but it did not show since it also goes with a lower permanent income. For a given level of permanent income, being retired raised the mean number of family members in men's PN by a relatively modest 3-4%. The effect is similar but non significant when we weight the sample.

Females' family network (Fig. 3, bottom)

Contrary to men, the size of a woman's family network does not depend on her being retired or not (tables 6bis and 6bisw).

To summarize: Retired males had 10 to 16% less friends than employed males. They "gained" 3-4% family members in their PN. Retired women had 14 to 20% less friends, a difference that was more significant than for men.[23] Retired women did not mention more family members in their network than employed women.

Early retirement

Some have found that, more than retirement, early retirement was detrimental to PN size (Börsch-Supan and Schuth, 2013). Angelini et al (2009) show that early retirement can have long term adverse consequences on economic resources. We introduce *EarlyRet* an early retirement dummy (defined as having retired before the normal pensionable age) in our models.

$$Size = a\ Age*ctr + b\ Age^2*ctr + \Sigma e\ Empl + f\ EarlyRet + c\ Z + \varepsilon \qquad (3)$$

The results are in the last right bars of Fig. 2-3, and in col. 6 of table 5 to 6bisw. Early retirement had no specific effect for males compared to just being retired. The negative effect of retirement on the number of friends was reduced for women who retired before the statutory age. This could be as a sign of the endogeneity of retirement for some women, if those who had more friends retired earlier. We come back to this in the next section. The early retirement dummy had non significant effect on family relations.

[22] Wealth is measured at the household level.

[23] The R^2 of the OLS regressions are larger for females (0.129 to 0.160 for friends, 0.106 to 0.119 for family confidants) than for males (0.068 to 0.090 for friends, 0.085 to 0.096 for family confidants).

Estimation country by country

As a robustness check we run the models country by country (not shown). We drop some explanatory variables because the sample size gets very small in some countries. We only keep employed and retired individuals, to avoid possible pitfalls in the idiosyncratic country perception of the current job situation (there is for instance hardly any homemakers in Denmark, Sweden ant the Czech republic). Our main covariates have similar effects in all countries. For instance those never married or with no partner, or who are relatively more educated have more friends. Men's number of friends was smaller for retirees in 12 countries out of 16, and significantly so in the Netherlands, Switzerland, Hungary and Estonia. In no country the effect was significantly positive. For females, it was smaller for retirees in 12 countries out of 16, significantly smaller in Sweden, Spain, Slovenia and the Czech Republic (and also in Germany and Italy when we use weights). Small sample sizes explain the large standard errors. The number of family members in PN is significantly smaller for female retirees in Estonia and for male retirees in Austria. Otherwise it is significantly higher in Denmark, France, Switzerland, the Czech republic, Hungary and Portugal for men; in Denmark, France, Switzerland, the Czech republic, Hungary for women; retirement has a positive non significant sign in most other countries for males, and is divided evenly between non significant positive and negative signs for women. All in all the country regressions do not contradict our former results.

6. Endogeneity of retirement and IV strategy

We have shown so far that for both women and men, being retired decreased the number of *friends,* more so for females than for males and that being retired was favourable to family links for men, not so for women. Being retired entailed an increase in family intimacy for men, hence was presumably beneficial, while it entailed a net drop in the number of close friends for women, hence might be detrimental, and more detrimental for women than for men because they did not compensate by family *cet. par*.. We also found an important impact of resources, implying that employment is beneficial for PN size partly to the extent that for those cohorts it goes with higher education and wealth than retirement. In Appendix 2, we present alternative models concentrating on the effect of age, in line with Posner's theory, with similar conclusions on the differences between men and women, and between family and non family relations.

On a cross section it is hard to conclude to a pure retirement effect as it could be mixed up with cohort effects. Some future retirees may have higher permanent income than that of the current retirees compared to the non retirees. Moreover, as mentioned above, retirement may not be totally exogenous to the size of the personal network. Unobserved characteristics may influence both retirement and PN size. Or the PN size, by reverse causation, may influence directly the retirement decision. Those with less intimate relations to colleagues might decide to leave earlier; we would overestimate the negative effect of retirement on the number of friends. But so might do those with relations so tight they know or think they will survive the separation; we would underestimate the negative effect of retirement on the number of friends. Persons who are family oriented and have more family relations might decide to leave earlier; we would overestimate the positive effect of retirement for them. Persons who are not family oriented and have less family relations might decide to leave later (underestimation of the positive effect).

Note that somebody who retires *in order to* spend more time with his family is aware of the retirement effect, and uses it. In that sense the issue differs from that of the effect of retirement on health or cognition. I retire because my cognition is declining, probably unaware that retirement might have a compounding negative effect. For most people, retirement brings free time, and they plan to spend part of this time with family and friends. In wave 1 of SHARE, 18.5% of those who did not retire "because they became eligible" gave spouse/time with family, friend/ enjoy life as a reason for retirement. What about the issue of economic resources, retirement and number of friends? People might be unaware of the adverse effect of retirement on their resources especially in the long run (see Angelini et al., 2009) or even more unaware of its indirect effect of their PN.

With longitudinal data on PN we could address some of those problems, but not all. What we do here on a cross section is what others did since Battistin et al. (2008). We use normal pension eligibility ("pensionable") age to build an instrument for "being retired at the time of the survey". The idea is that this age which makes retirement compulsory in most countries, varied by sex, cohort and country, hence allows for identification, but has no reason to be linked to PN size. Various measures of this instrument can be used. Some use normal pensionable age by country and sex *at the time of the*

survey (Rohwedder and Willis, 2010; Coe and Zamarro, 2011), some use normal pensionable age by country, sex and cohort, i.e. is the normal age that each individual faced when making the decision (Angelini et al., 2009). Most use data gathered by OECD; some revise them according to more accurate country information. In the same fashion an early retirement age can be defined. In some cases such data seems rough. For instance in France, the notion of a retirement age is not well defined as retirement eligibility was based on a minimal numbers of years of contributions, differed for civil servants, or depended on the number of children. We played around with various definitions and the IV results did not vary with the choice of the instrument. We present the results with the most sophisticated instrument: OECD (2011) data for retirement ages by sex, country and cohort, modified for Italy as in Angelini et al. (2009). Our instruments are a dummy variable for "being over the statutory retirement age" and a dummy for being above early retirement age, at the time of retirement. It is important to have in mind what the instrument does. Fonseca et al. (2013) who studied well-being, explain it as follows. "The procedure compares the well-being of individuals before they are eligible for retirement pensions and after they are eligible for each country, after controlling for continuous age, birth cohort, and country effects. That is (it estimates) the discontinuous jump in wellbeing when individuals become eligible for retirement pensions for each country and then aggregate that effect". Here we would substitute "jump in PN size" for "jump in wellbeing". So we estimate a "local average treatment effect" where the "treatment" is retiring. First stage regressions have high R^2 (0.6 or 0.7) and the instruments are not correlated with the residuals.

Number of friends : All population/ non self employed/ active population:

We first keep as before the whole population, that is we include those who never worked, who are homemakers, long term disabled or belong to other categories (sample sizes: 18,073 men and 21,987 females). One could argue that we should not include any controls except for age and, possibly, education, as they are potentially endogenous (for instance unobservables affect both the number of friends and family composition; or education level affect the way the PN question is answered).[24] We present three specifications, one with all controls, one with only demographic, health and education controls, one with only the education controls. All specifications include age and age square interacted with country dummies.

For men, the endogeneity of retirement is rather weak (table 7, col. 6-8). The negative OLS coefficient for "retired" (table 7, col. 1-3) becomes positive and non significant in the IV specification for males' number of friends. Even if they are very significant in 1st stage regressions, our instruments are rather crude. They might be less relevant for self-employed individuals who have different retirement rules or pension rights in some countries.[25] Our instruments may be better adapted to the salaried population. SHARE provides some information on the nature of the current or former job. In col. (4) and (9) of table 5 we exclude the self-employed, both in OLS (col.4) and IV specification (col. 9). Self-employed represented 12% of the sample, and sample sizes are now 15,328 males (and 19,905 females). The effects are slightly modified for men. As expected they "lose" slightly more friends in the OLS specification. Retirement becomes more clearly endogenous, and the IV effect of retirement on the number of a man's friends becomes more positive and still non significant (tables 5, col. 9).

If we further exclude, as in Mazonna and Perrachi (2009) the non active population (the 1,022 men who never held a job, were long term disabled, homemakers, rentiers), with the idea that studying "being retired" made sense on the whole population, but studying "retirement" does not make sense for those who were far from the labour force, the male sample is reduced to 14,647 observations. The IV specification makes more sense, endogeneity is not rejected and the result is robust. The effect of retirement is +0.19 (st. err. 0.15), 20% significant (table 5, col. 10). Retiring can increase a man's number of friends. Part of the apparent decline came from unobserved heterogeneity. Men who were more likely to be retired *cet. par*. were also those whose unobserved characteristics were such that they had less friends, and retirement *per se* rather increases a male's number of friends. Table 7w presents the weighted specification. The results are qualitatively similar but the positive IV effect of retirement is not significant.

[24] We did not comment the somewhat puzzling positive effect of Euro-D depression scale on the number of friends. It might also be endogenous. Note also that the question mentioned discussing three negative things (bad things, problems, concerns) one neutral (important things) and only one positive (good things)!

[25] Self-employment may entail a particular relation to one's job, and probably less interaction with colleagues than salaried work.

For women, the negative effect of retirement on the number of friends in the OLS specification remains negative and significant in the IV model. It becomes even larger. Retirement is endogenous (tab 8, col. 6-10). Contrary to men, women who were more likely to be retired also had *more* friends. If we reduce the number of controls, the result is unchanged. If, as for men, we drop the self-employed, the endogeneity of retirement is clearer, and our conclusion are strengthened (col. 9). If we further drop women who never held a job, were homemakers and the like, the sample is reduced to 16,466, and the conclusions are unchanged (table 8, col. 10). Indeed women lose their friends when they cross the retirement age threshold.

Hence, unobserved heterogeneity play in opposite directions for men and women. The former are more likely to retire when they have *less* friends, and they do not lose friends on retirement, and could even gain some; the latter are more likely to retire when they have *more* friends and they do lose friends on retirement.

Number of family members in the PN: whole population/ non self employed/ active population:

We also run the IV regressions on the total number of family members in the PN. The results are in col. 6-10 of tables 9 (males) and 10 (females), (tables 9w and 10w for the weighted samples). Males significantly gained family confidants in the OLS specification when we control for wealth (table 9, col. 1). The effect is not significant when we use weights (table 9w, col. 1). We reject endogeneity in all non weighted specifications (table 9, col. 6-10), and retirement has no effect on the number of family members in PN. The effect is positive and more significant (and endogeneity is not rejected) when we use weights, especially when we control for resources (table 9w, col. 6-10). The discrepancy between weighted and unweighted results for males is puzzling. We suspect that it is because of unobserved characteristics of missing male spouses when a couple was interviewed.[26] All in all we have some reasons to believe that men gain family relationships when they retire; and that those who are more likely to be retired *cet. par*. are also those who had less family members in their PN, and that retirement increased a man's family relations.

By contrast there was no sign of endogeneity for women and nothing happened to them when they retired concerning family relations, whatever the sub-sample or the controls (tables, 10, 10w).

Total number of confidants (family + friends + (ex-)colleagues)

What happens on the overall PN size (number of confidants = friends + family members) for retirees versus (un)employed? Males don't lose confidants in the IV specification (table 11, col. 2). They even significantly gain when we weight the sample (table 11, col. 6). Women lose overall (table 11, col. 4). They lose friends and don't gain family confidants. Table 12 summarizes our results.

Table 12. Summary of the results for non self-employed active (employed or unemployed) or retired.

(extracted from tables 7-11, col. 5 and 10; 7w-10w)

	friends		**family**		**Friends and family**	
Men	**OLS**	**IV**	**OLS**	**IV**	**OLS**	**IV**
Non weighted	-0.08***	+0.19§	-0.001	-0.06	-0.08**	+0.14
weighted	-0.11§§	+0.17	-0.05	+0.67§§	-0.16§§	+0.84*
Women						
Non weighted	-0.15***	-0.33**	+0.03	-0.00	-0.12***	-0.34§§
weighted	-0.17***	-0.36§	+0.04	-0.10	-0.13	-0.46

**** p<0.01, ** p<0.05, * p<0.10, §§ p<0.15, § p<0.20. Controls are country dummies interacted with age and age square, number of years of education and relative level of education by country.*

[26] If we separate those with a partner and those with no partner, the difference between weighted and non weighted estimations is lower for the latter than for the former.

Interaction within couples

To understand better what may happen on retirement we also tested possible interactions between spouses. A partner's colleague may be a friend, and the partner's retirement may affect the spouse's network. Time use on retirement may also differ whether one's spouse is retired or not (Stancanelli and Van Soest, 2012). We use a sub-sample of couples and introduce *PartRet* the partner's retirement status and *Agepartner* the partner's age (interacted with *ctr* country dummies) in the regression.

$$Size = a\ Age*ctr + b\ Age^2*ctr + a_p\ Agepartner*ctr + \Sigma e\ Empl + p\ Ret + q\ PartRet + r\ Ret*PartRet + c\ Z + \varepsilon \quad (4)$$

We also use a sub-sample of non couple individuals and estimate:

$$Size = a\ Age*ctr + b\ Age^2*ctr + \Sigma e\ Empl + c\ Z + \varepsilon \quad (5)$$

The results, on the sub-samples of non self-employed (the partner may be self-employed), are in tables 13-19.

Number of friends

In the IV specification (we instrument both ego and partner's retirement) the number of friends is <u>not</u> reduced for male retirees who live in couple; it is even increased when their partner is retired (16% significant, table 13, col. 3-4; non significant in a weighted specification- not shown). Male with a partner seemed more likely to retire when they had less work related friends.[27] For women who had a partner, we find again that they have less friends when they are retired, and that the reduction is more significant when their partner is also retired (OLS), and that they have less friends when their partner is retired. In the IV specification they lost more friends on retirement when their partner was retired (table 13, col. 5-8). [28]

Retired single men (those who do not have a partner) have less friends than their employed counterparts (table 14, col. 1-4), the effect is still negative but non significant in the IV specification. Retired women with no partner also have less friends than non retired women both in OLS and IV specification (table 14, col. 5-8). Even if the sample become small, it seems that single men and single women behaved in a somewhat similar fashion, when retirement had a different effect on married men and women. Both were influenced by their partner's retirement but in a rather positive way for males, and negative way for females;

Family members

The positive "retirement" effect on the number of family PN members for a man disappears when he lived in couple (table 15). The complementary test on "non couples' shows an increase in the number of family members in PN for single male retirees, but not significant, probably because of the small sample size (table 16, col. 4). For women both with and without partner, not much seems to happen on retirement as far as number of family members in PN is concerned (non significant in tables 15 and 16, col. 5-8).

We are facing a double gender dissymmetry. Men in couple did not lose friends on retirement, they even gained some when their partner was retired (+0.22§). Women lost friends when their partner retired (but the partner's retirement is endogenous, as it is no more significant in the IV specification) and they lost more friends on retirement when their partner also retired (-0.37***). Single men lost friends, as did single women when they retired. Single men increased the number of family members in their PN (22% significant), not so single women. All in all retirement reduced the size of the personal network of women, not that of men (tables 17-18). Table 19 summarizes the results. Some tentative explanations come to mind.

[27] We do not control for whether the partner is homemaker, unemployed or employed when non retired.
[28] Using weights does not change the results for women.

Table 19. Summary of the results for active or retired non self-employed couples and non couples (extracted or computed from tables 13-18)

	ego	partner	friends		family		Friends + family	
Men			**OLS**	**IV**	**OLS**	**IV**	**OLS**	**IV**
In couple	Non retired	retired	0.01	-0.05	-0.02	-0.97**	-0.02	-1.01**
	retired	Non retired	-0.06**	+0.10	-0.01	-0.01	-0.07§§	+0.10
		retired	-0.06**	+0.22§	-0.02	-0.11	-0.08§§	+0.12
single		-	-0.22***	-0.30	+0.10	+0.88	-0.12	+0.58
Women								
In couple	Non retired	retired	-0.08**	-0.03	-0.05	-0.26	-0.14**	-0.28
	retired	Non retired	-0.06*	-0.14	-0.00	-0.19	-0.07	-0.33
		retired	-0.15***	-0.37***	0.01	-0.04	-0.14**	-0.40*
single		-	-0.23***	-0.43§	-0.08	-0.12	-0.30***	-0.55§

**** p<0.01, ** p<0.05, * p<0.10, §§ p<0.15, § p<0.20.*

First the gender dissymmetry on the effect of retirement on family relationships. Men, less involved in them can increase them when they retire. Not women who have more of them whether retired or not, and whatever their matrimonial state.

Then the dissymmetry in the effect of retirement on non family relations, reinforced by the dissymmetric endogeneity of retirement: married men who have less friends seem to retire earlier, while the reverse seems true for married women.

(1) on average men have less friends in their PN than women, or, more likely, *talk* less to their friends, especially of their problems,[29] hence may be less likely to lose PN friends.

(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 (hence of friends' supply) for them.

(3) Some of a woman's friends might come through her husband's friends; or having a retired husband at home reduces the time a woman can devote to her friends (see (4)).

(4) A retired man does not turn to homework, or more precisely, even if he turns to homework, he still does less of it than his wife. He still goes out to meet his friends in the pub or cafe, walk the dog, play outdoor games; a retired woman is likely to increase her homework involvement all the more that she has a retired husband in her home (hence the added negative effect), one more mouth to feed for lunch.

(5) A wife may even encourage her husband to go out end meet his friends, to have some free time, in her home (hence the positive interaction effect of a retired wife annulling the negative effect of retirement for married men in OLS)….

Nevertheless when men and women live without a partner they behave more in the same way: both have less friends when they are retired. Interpretations remain tentative at this stage, but we do see a fine pattern pointing to the importance of heterogeneity stemming from matrimonial state.

What have we learnt so far?

For men, the decrease in the number of non-family members in PN after retirement is probably due to self-selection of the less socially oriented men into retirement, for a given age, on average. Men do not lose friends on retirement. Men with a partner even gain some friends when they both retire. For women, the decrease in the number of non-family members in PN after retirement is real, and not due to self-selection. It could be linked to women's jobs which provide more "socialization" than men. Her partner's retirement also influences a woman's number of friends negatively.

[29] This is the main comment I got from men in the audience when I first presented those results: "We play football with our friends and do not talk much of our problems with them".

7. Et le bonheur dans tous ça ?

Intuitively, having somebody to confide in is “good”, and many have stressed the importance of social ties (see our section 1). Since SHARE also asks a question about life satisfaction we can check more directly the benefit of the number of confidants. After all if it had no effect on wellbeing our results would be of little interest. We use the question on life satisfaction (*On a scale from 0 to 10 where 0 means completely dissatisfied and 10 means completely satisfied, how satisfied are you with your life?)* to measure well-being and regress the life satisfaction level (LS) on all previous control variables, to which we add the number of friends, of (ex-) colleagues, of neighbours and of family members in the PN.[30] What we do here is purely descriptive. LS is very much related to the country where you live; matrimonial state is very influent. Family composition, ADL limitations, depression, wealth, all play a role. The effect of PN size is small but significant (table 20, col. 1-2). LS is not related to the number of neighbours mentioned in the PN. Curiously the number of colleagues in the PN has a negative impact for men (it has no impact for women).[31] Life satisfaction is positively related to the number of friends, and with the number of family members in the PN. If we instrument retirement the negative effect of colleagues becomes non significant. Retirement is endogenous for men. It could be that men who were less satisfied with their life and, as we found before, with their relationship with colleagues were more likely to retire. Or some unobservables affect both retirement and LS. Instrumentation does not change the effect of the other PN sizes (table 20, col. 3-4). Retirement is not endogenous for women.

The effect of the number of family members mentioned as confidants and that of the number of friends are equal for men; both increased LS by 0.04-0.06 (mean LS is 7.67 for them). For women family was twice more important than friends (0.093 versus 0.044, the mean LS being 7.52 for women). This leads to temper our affirmation on the benefit of being employed for women. For them the number of family confidants, independent from employment (and also controlling for family composition), was important. Contrary to some other studies, we do not find that having confidants outside the family was more important than having family members confidants for men, and we find that family members confidants were more important than friends confidants for women.

8. Conclusion: Is retirement bad for women friendship?

This paper investigated the determinants of the size of the personal network of confidants of men and women aged 55 to 80 in sixteen European countries in 2011 based on data from the 4th wave of SHARE. Our main interest was to compare retired and employed individuals and look for a causal

[30] Ordered probit and OLS gives the same results.

how satisfied with life	female 0	female 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
	100.00	100.00	100.00

[31] That friends and colleagues are not the same is made clear by their very different impact on life satisfaction. It is probable that a colleague confidant becomes a friend when he is really a good friend, hence increasing LS!

effect of retirement. The intuition was that being out of the labour force provides free time to develop personal ties, especially with family members. On the other hand, it might cut from colleagues or people met in the workplace, hence decrease the number of non family confidants. From OLS on a single cross section, we concluded that being retired affected negatively the number of close friends: a retired man or woman named 30% less friends. The effect was roughly divided by two when we took into account economic resource in the form of permanent income. More savings and more human capital bring more friends. According to our estimation the negative resource effect was around half of the retirement effect for men, and between a third and half for women. Our first OLS measure of the negative "retirement" effect was then around 10% for males and 15%-20% for females. While retired men partially made up for having less friends by having more family members as confidants than employed men, it was not the case for retired women, who as a consequence lose part of their network compared to active women.

However unobserved heterogeneity and selection into retirement may bias the result. Following previous literature we used the pluri-national aspect of the SHARE data in an IV strategy. Various cohorts were facing different compulsory pension age according to their sex and the country they lived in. This allows to get closer to measuring an average treatment effect of retirement. The result of this IV strategy pointed to probable self-selection, and heterogeneity, both observed and unobserved. To get sharper effect of our IV strategy we focused on the non self-employed. We also split the sample between those with a partner and those without a partner to get more insight into what could happen. We found that there was no effect whatsoever of retirement on the number of a woman's family confidants; while the number of family confidants increased for men, especially single men. Both men and women lost friends on retirement when they lived as single. We found no negative effect of retirement on a married man's number of friends, and even a positive effect in some of our specifications, especially when both partners were retired. For women, a robust result is the important negative effect of retirement on the number of their friends, even if they have a partner, and especially when the partner is also retired. We tentatively explain it by the different occupations of men and women, the latter more likely to make friends with colleagues than the former. We also point to different gender roles after retirement. Men somewhat keep a social life outside the home, while women, in a sense more adapted to retirement by being able to work in their home, lose some of their friends. More work, and more waves of data, are needed to confirm what is yet only an intuition.

Another lesson from our study is the puzzling effect of using the weights in the estimation in some cases, especially for men. It seems to us that with a multi country longitudinal survey like SHARE using weights as a robustness check is useful. More work is clearly needed.

Our findings plead for progressive and not brutal reduced work hours on retirement, encouraging the maintenance of links with former colleagues, and compensating contact with colleagues by other regular binding social activities.[32] The important impact of economic resources, implies that employment was beneficial for friendship partly to the extent that it went with an adequate income, or that a higher level of human capital entailed better jobs both in terms of economic resources and friendship. Finally men and women are not equal in front of personal network with women's satisfaction relying more on their family network than on their friends, while both seem equally important for men.

[32] In a companion paper we find that some types of social activities can fully compensate for the negative effect of being retired.

References

Adams and Blieszner, 1989. Older Adult Friendships. Newbury Park: Sage.

Adam, S , Bonsang E., Germain, S and S. Perelman, 2007, Retraite, activités non professionnelles et vieillissement cognitif, une exploration à partir des données de Share*, Économie et Statistique,* 403-404, 83-96.

Angelini, V., Brugiavini, A., Weber, G., 2009. Ageing and unused capacity in Europe: is there an early retirement trap?. *Economic Policy* 59, 463–508.

Angelini, V. and A. Laferrère, 2011. Residential Mobility of the European Elderly, 2012, *CESifo Economic* Studies 58(3). doi:10.1093/cesifo/ifr017.

Angelini, V. and A. Laferrère, 2013. Friendship, housing and economic resources: what influences social network size after age 50? , 323-335, in Börsch-Supan A et al. (ed.), Active Ageing and Solidarity between Generations in Europe – First Results from SHARE after the Economic Crisis.

Auld C.M. , 2011. Effect of large-scale social interactions on body weight, 2011, *Journal of Health Economics*, 30, 2, 303–316.

Barnes H. and J. Parry, 2004, Renegotiating Identity and Relationships: Men and women's adjustments to retirement, Policy Studies Institute, PSI Report 892, published in Ageing and Society.

Becker, G., 1974, A Theory of Social Interactions, *Journal of Political Economy*, 82, 1063-1093.

Blake Helene and Clementine Garrouste, 2012, Collateral effects of a pension reform in France, WP 12/16, University of York.

Blanchet D., Debrand T., 2007, Souhaiter prendre sa retraite le plus tôt possible : Santé, satisfaction au travail et facteurs monétaires, *Économie et Statistique*, 403-404, 39-62

Bonsang E., Adam, S and S. Perelman, 2012. Does retirement affect cognitive functioning?, *Journal of Health Economics*, 31, 490– 501

Börsch-Supan, Axel and Morten Schuth, 2013. Early retirement, mental health and social networks, in Active ageing and solidarity between generations in Europe, Ed. by Börsch-Supan, Axel, Brandt, Martina, Litwin, Howard, Weber, Guglielmo, DeGruyter, eBook ISBN: 9783110295467, 337-348.

Calvó-Armengol, A. and M.O. Jackson, 2004. "The effects of personal networks on employment and inequality". *American Economic Review* 94, 426-454.

Case A. and L. Katz, 1991, "The Company You Keep: The Effect of Family and Neighborhood on Disadvantaged Youth", NBER WP 3705.

Coe, N. B. and G. Zamarro, 2011. Retirement Effects on Health in Europe. *Journal of Health Economics* 30(1): 77-86. DOI: 10.1016/j.jhealeco.2010.11.002.

Coe, Norma, von Gaudecker, Hans-Martin, Lindeboom, Maarten, Maurer, Jürgen, 2012. "The effect of retirement on cognitive functioning". *Health Economics* 21(8), 913–927.

Coleman, J. 1988, Social Capital in the Creation of Human Capital, *American Journal of Sociology*, 94, S95-S121.

Compton J. and R. Pollak, 2013, Family proximity, childcare, and women's labor force attachment, mimeo.

Croezen, Simone, Avendano, Maurizio, Burdoff, Alex and Frank J. ven Lenthe, 2013. Does social participation decrease depressive symptoms in old age?, in Active ageing and solidarity between generations in Europe, Ed. by Börsch-Supan, A., Brandt, M., Litwin, H., Weber, G., DeGruyter, eBook ISBN: 9783110295467, 391-402.

Davezies, L. et X. d'Haultefoeuille, 2009, Faut-il pondérer ? … Ou l'éternelle question de l'économètre confronté à un problème de sondage, mimeo.

Fonseca, Raquel, Arie Kapteyn, Jinkook Lee, Gema Zamarro and Kevin Feeney, 2013. Financial and subjective well-being of older Europeans, in Active ageing and solidarity between generations in Europe, Ed. by Börsch-Supan, A., Brandt, M., Litwin, H., Weber, G., DeGruyter, eBook ISBN: 9783110295467, 137-146. MEA: Mannheim.

Frey, B.S. and A. Stutzer, 2002. *Happiness and Economics: How the Economy and Institutions Affect Human Well Being*, Princeton University press, 228p.

Laferrère A, Van den Heede A., Van den Bosch K. et J. Geerts, 2013. Entry into institutional care: predictors and alternatives, in Börsch-Supan A et al. (ed.), Active Ageing and Solidarity between Generations in Europe – First Results from SHARE after the Economic Crisis, 253-264.

Laferrère A., 2015. Retired but not withdrawn: Does Retirement Induce Participation in Social Activities ?, Document de travail, F1409, INSEE.

Lillard, L.A. and C.W.A. Panis, 1996. Marital status and mortality: the role of health, *Demography* 33, 313-327.

Marin Alexandra and Keith N Hampton, 2007, Simplifying the Personal Network Name Generator Alternatives to Traditional Multiple and Single Name Generators, *Field Methods* 19(2), 163-193 (Sage Publications, Ltd).

Matt G.E. and A. Dean, 1993, Social Support from Friends and Psychological Distress Among Elderly Persons: Moderator Effects of Age, *Journal of Health and Social Behavior*, 34, 3, 187-200.

Mazzonna F. and F. Peracchi, 2012. Ageing, cognitive abilities and retirement. *European Economic Review*, 56, 4, 691-710.

Mouw, T., 2003. Social contacts and finding a job: do contacts matter?, *American Sociological Review* 68, 868-898.

OECD (2011), Pensionable Age and Life Expectancy, 1950-2050, in *Pensions at a Glance 2011: Retirement-income Systems in OECD and G20 Countries*, OECD Publishing.
http://dx.doi.org/10.1787/pension_glance-2011-5-en

Ogawa, N. and J.F. Ermisch, 1996. Family structure, home time demands, and employment patterns of Japanese married women, *Journal of Labor Economics* 14, 677-702.

Perlman, Daniel, 2004. European and Canadian studies of loneliness among seniors, *Canadian Journal of Aging* 23, 181–188.

Portes, A., 1998, Social Capital: Its Origins and Applications in Modern Sociology, Annual Review of Sociology, 1-14.

Posner R.A., 1995, *Aging and Old Age*, The University of Chicago Press, 375p.

Rohwedder, S., Willis, R.J., 2010. Mental retirement, *Journal of Economic Perspectives* 24 (1), 1–20.
Roll A. and H. Litwin, 2013**.** The exchange of support and financial assistance: differences in exchange patterns and their implications for ageing well, in Börsch-Supan A et al. (ed.), Active Ageing and Solidarity between Generations in Europe – First Results from SHARE after the Economic Crisis, 289-300.

Rook, K. S; (1984). “The negative side of social interaction: Impact on psychological well-being”. *Journal of Personality and Social Psychology*, 46(5), 1097-1108.

Stancanelli E. and A. Van Soest, 2012. Joint leisure before and after retirement: A double regression discontinuity approach , CES Working paper, 2012-85.

Seeman T. E., *2000*. “Health Promoting Effects of Friends and Family on Health Outcomes in Older Adults”. *American Journal of Health Promotion,* 14, 6, 362-370.

Sharabi, M., Harpaz, I., 2011. “Gender and the relative centrality of major life domains: changes over the course of time”. *Community, Work & Family,* 14 (1), 57–62.

Shiovitz-Ezra, 2013. Confidant network and loneliness, in Active ageing and solidarity between generations in Europe, Ed. by Börsch-Supan, A., Brandt, M., Litwin, H., Weber, G., DeGruyter, eBook ISBN: 9783110295467, 349-358.

Siegrist, J. and M. Wahrendorf. 2009a. Participation in socially productive activities and quality of life in early old age: Findings from SHARE. *Journal of European Social Policy* 19(4): 317-326.
Siegrist, J. and M. Wahrendorf. 2009b. Quality of work, health and retirement. *The Lancet* 374: 1872-1873.

Siegrist, J., M. Wahrendorf, O. von dem Knesebeck, H. Jürges and A. Börsch-Supan. 2007. Quality of work, well-being and intended early retirement of older employees; baseline results from the SHARE study. *European Journal of Public Health* 17(1): 62-68.

Sirven, N. and T. Debrand. 2008. Social participation and healthy ageing: an international comparison using SHARE data. *Social Science and Medicine* 67: 2017-2026.

Sirven, N. and T. Debrand. 2012. Social capital and health of older Europeans: causal pathways and health inequalities. *Social Science and Medicine* 75(7): 1288-1295.

Sirven, N. and P. Godefroy. 2009. Le temps de la retraite est-il improductif?. *Retraite et Société* 57: 75-97.
Sirven, N. , 2012. Capital social et santé des européens âgés: de la causalité inversée aux inégalités de santé, mimeo.

Solon, G., Haider, S. and J.M. Wooldridge. 2013. What Are We Weighting For?. *NBER Working Paper* 18859.

Verbrugge, L.M., 1979. Marital status and health, *Journal of Marriage and the Family,* 41, 267-285.

Appendix

Appendix 1. Sample description

Table A1.

	sample	weighted		sample	weighted
SE	0.039	0.027	partner in household	0.754	0.724
DK	0.037	0.014	No child	0.084	0.097
DE	0.032	0.258	1 child	0.177	0.183
NL	0.051	0.047	2 children	0.423	0.403
BE	0.086	0.027	3 children	0.197	0.191
FR	0.093	0.151	>3 children	0.118	0.125
CH	0.063	0.019	Number of grand-children	2.664	2.336
AT	0.088	0.020	Household size	2.136	2.216
ES	0.058	0.099	adl1 (>=1 activities of daily living limit.)	0.095	0.091
IT	0.066	0.146	adl2(>=1 instrumental activities limit.)	0.146	0.123
PL	0.035	0.106	GALI Global activity limitation index	0.478	0.467
CZ	0.105	0.027	EURO-D depression scale (from 0 to 12)	2.5	2.6
HU	0.057	0.027	Own 2d home	0.228	0.188
PT	0.034	0.025	Number of asset types[1]	1.15	1.19
SI	0.045	0.005	Mortgage	0.165	0.155
EE	0.112	0.003	Number of debt types[1]	0.145	0.161
Matrimonial state			home owner	0.798	0.775
Married living with spouse	0.688	0.661	tenant	0.147	0.185
Registered partnership	0.014	0.008	Submarket tenant	0.053	0.058
Married separated	0.020	0.027	Big city	0.143	0.136
Never married	0.047	0.065	Suburbs	0.105	0.135
Divorced	0.069	0.068	Large town	0.162	0.156
Widowed	0.110	0.116	Small town	0.241	0.258
Unregistered partnership	0.052	0.055	Rural area	0.349	0.315
Age	65.70	64.95	House	0.439	0.425
Length of tenure	28.0	28.1	Row house	0.148	0.166
Number year education	10.3	10.7	Flat 3 to 8 floors	0.121	0.166
Self-employed/ former self-employed	0.120	0.135	Flat 9 floors or more	0.193	0.163
Never held paid job	0.023	0.045	High rise	0.033	0.028
Female	0.549	0.526			
No brother	0.420	0.385	Sample size	40 060	39 992
No sister	0.378	0.366			

NB. 68 observations have been given missing values for weights.

1. See footnote 19 for the definitions.

Appendix 2. Age effect and retirement

Going back to Posner's model and age effect is a means to check the results of section 5. For that we test a somewhat different model where age (we drop age squared, age and age squared interactions with country differences, keeping country dummies)) is interacted with employment status:

$$Size = \alpha\, Ret + \beta_1\, Age{*}Employed + \beta_2\, Age{*}Retired + \gamma Z + \varepsilon \qquad (2)$$

Hence we get two age gradients: one for employed, one for retired individuals (we work on the sub-sample excluding the other types of occupations). We test $\beta_1 = \beta_2$. This is a robustness check for our results. Table A2 presents what we get, running 8 successive models.

Table A2 . Age gradient difference for retirees

	Friends males	**Family members males**	**Friends females**	**Family members females**
No resources controls	(1)	(2)	(3)	(4)
Age* empl (β_1)	0.0044 (0.0047)	-0.0084§ (0.0062)	-0.0017 (0.0055)	-0.0124* (0.0072)
Age*ret (β_2)	-0.0044*** (0.0014)	0.0013 (0.0022)	-0.0117** (0.0014)	0.0031 § (0.0022)
Test $\beta_1 = \beta_2$ Prob > F	0.0697**	0.1333§§	0.0776*	0.2297
+ resources controls				
Age* empl (β_1)	0.0030 (0.0047)	-0.0111* (0.0063)	0.0004 (0.0050)	-0.0120* (0.0075)
Age*ret (β_2)	-0.0027* (0.0014)	0.0018 (0.0023)	-0.0077*** (0.0015)	-0.0007 (0.0023)
Test $\beta_1 = \beta_2$ Prob > F	0.238	0.0471**	0.1439§	0.1406 §§
Number observations	15 178	15 178	16 462	16 462

NB. All models include the demographics and health controls of table 3. col. 1-5. Robust standard errors (clustered at the household level) in parenthesis.

The age gradient for the number of males' friends is flat when men are employed and negative only when they are retired. The difference is 7% significant. Once we control for resources the age gradient for retirees is less significantly (24%) different from the flat gradient of employed men (col. 1). Part of the negative effect stemmed from the lower resources of retirees.

The age gradient is larger (more negative) for retired than employed females (col. 3). It is still significant (15%) when we control for resources. Women "lose" their friends as they age after retirement.

The age gradient for the number of males' family members in PN is negative when they work, positive for retired males, more significantly so once we control for resources (col. 2). This "family" part of males' personal ties is in line with Posner's intuition. It confirms what we got with the former models (1). Women lose family members in their PN as they age, retirement does not reverse the process, but slows it (col. 4).

Figure A1 presents the results of the estimation, assuming retirement at age 60 for women, and age 63 for men.

Figure A1.

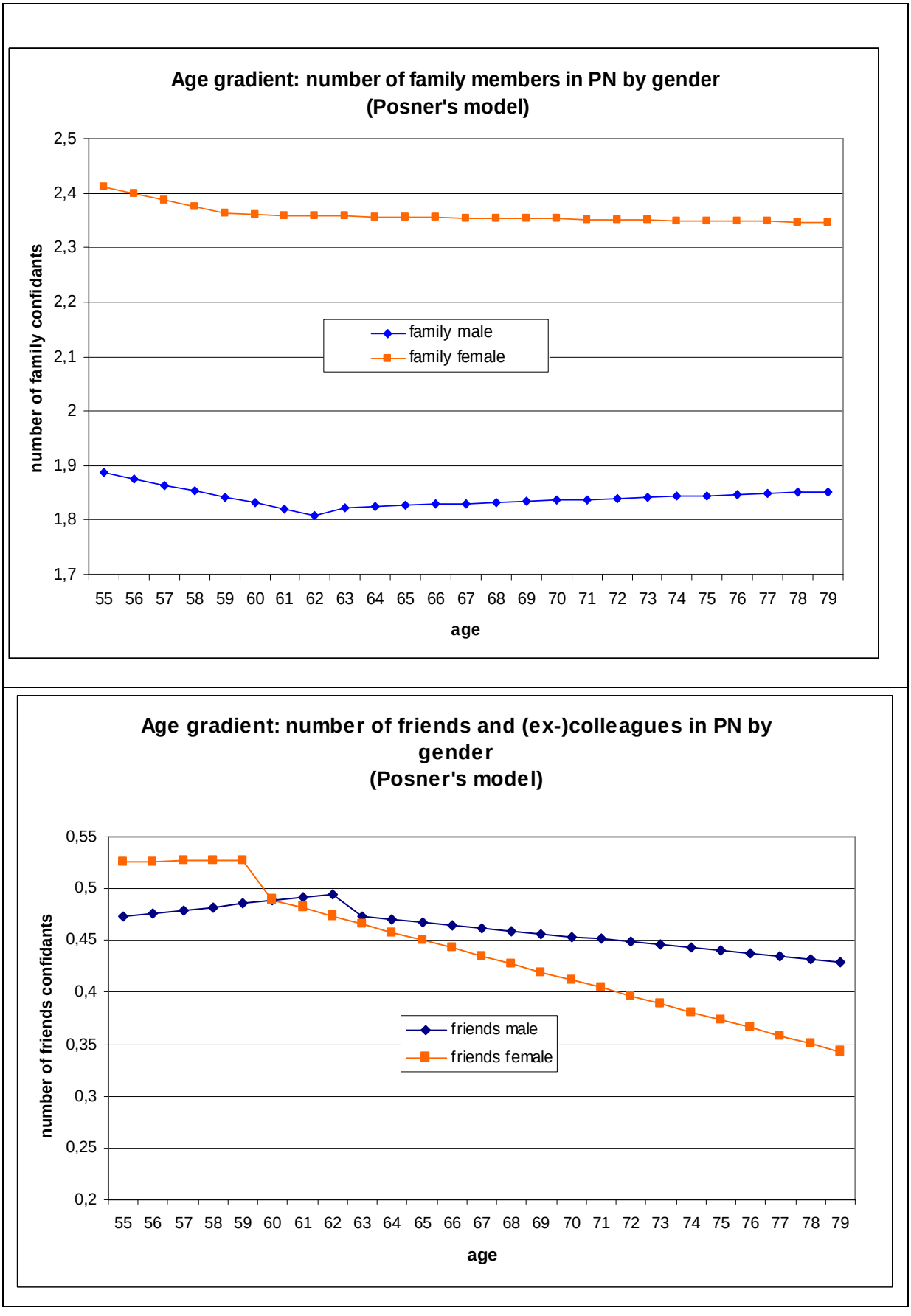

Age gradient: number of family members in PN by gender
(Posner's model)
number of family confidants
2,5
2,4
2,3
2,2
2,1
2
1,9
1,8
1,7
family male
family female
55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79
age
Age gradient: number of friends and (ex-)colleagues in PN by gender
(Posner's model)
number of friends confidants
0,55
0,5
0,45
0,4
0,35
0,3
0,25
0,2
friends male
friends female
55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79
age

Figure A2. Number of friends or (ex-)colleagues

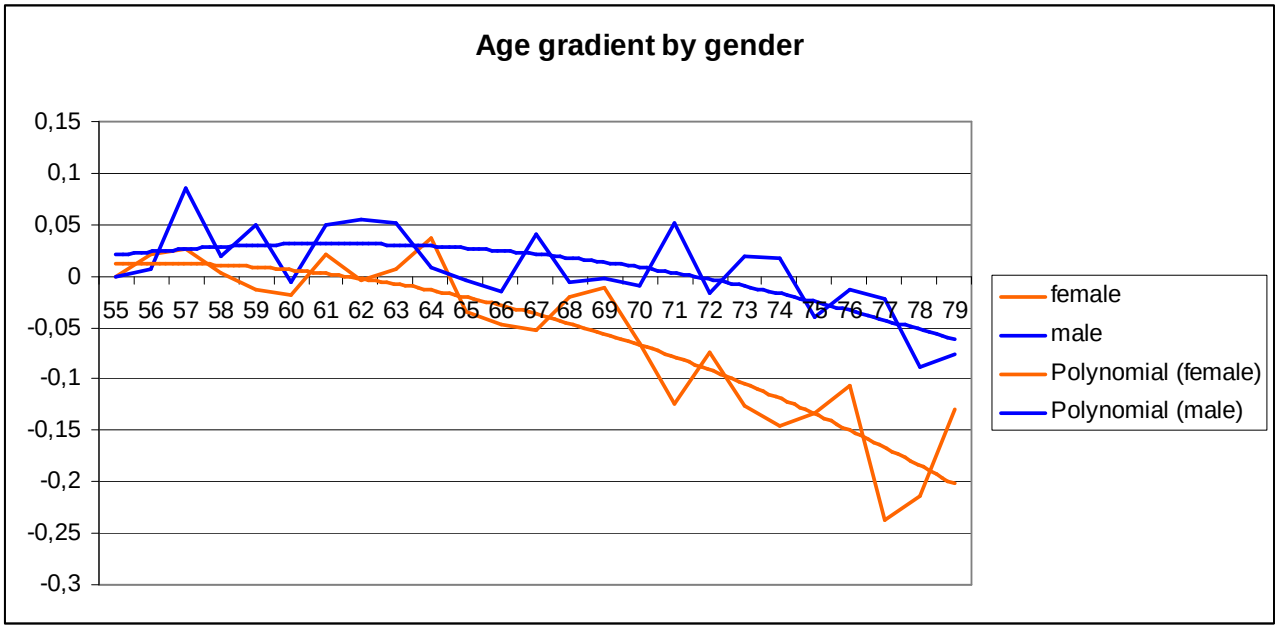


Figure A2 above presents the estimated full set of age dummies coefficients in a simpler model (3)

$$Size = \Sigma\, \alpha_i \; Age_i \; + \gamma Z + \varepsilon \qquad (3)$$

The model is as model (2) above estimated on the sub sample or individuals who are either employed or retired. *Z* includes all the controls of table 3 and resources controls. The difference between men and women is again striking, with the number of women's friends declining after around age 62-64, and the number of men's friends declining less, and later after around age 66-68, in line with the differences in retirement ages.

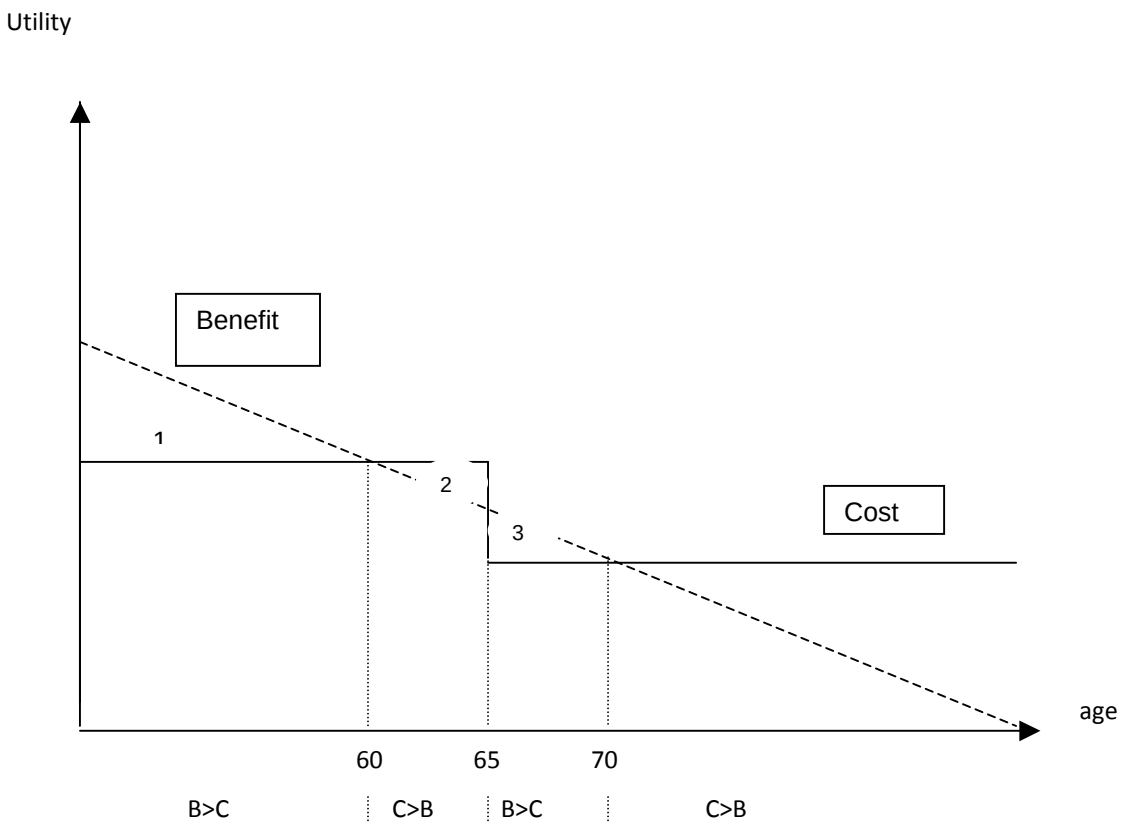
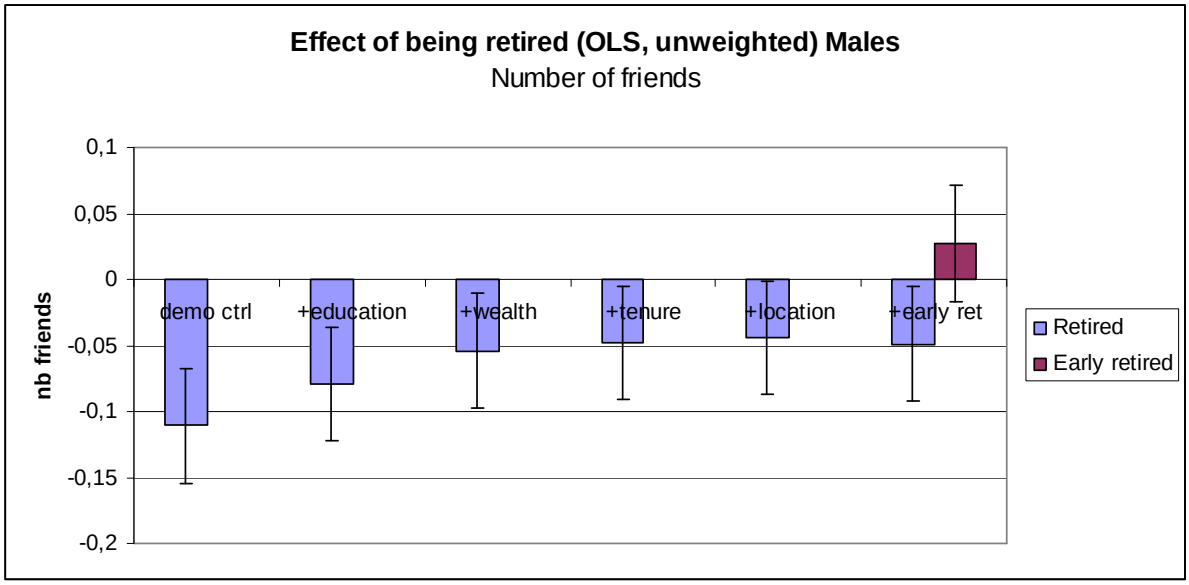
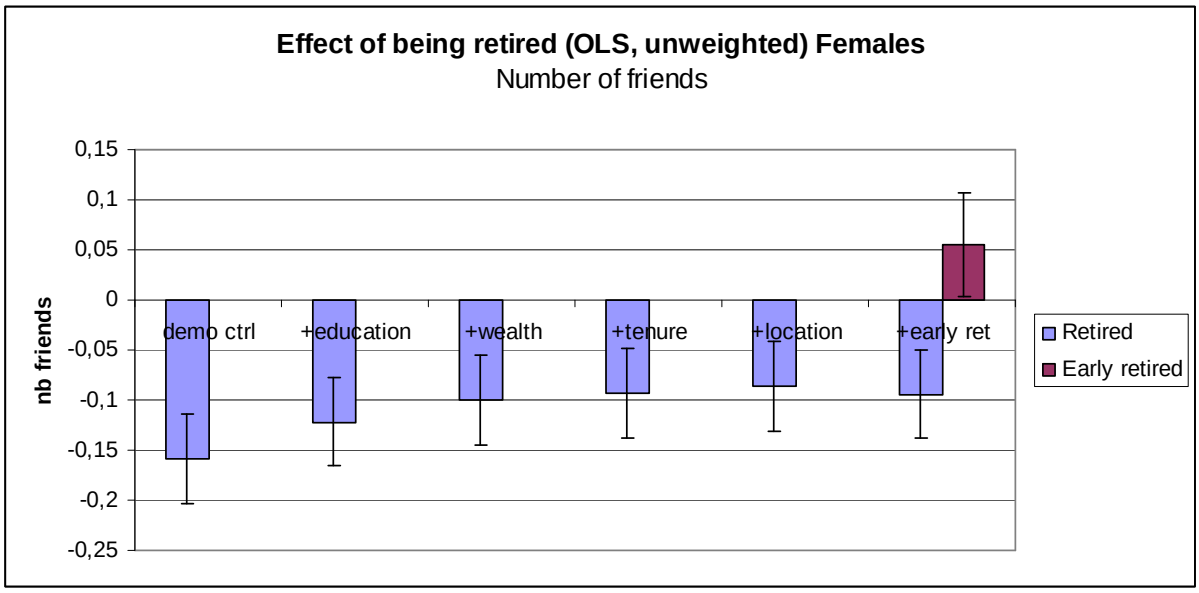


Figure 1. Utility from new friends as a function of age (adapted from Posner, 1995, Fig. 3.2).

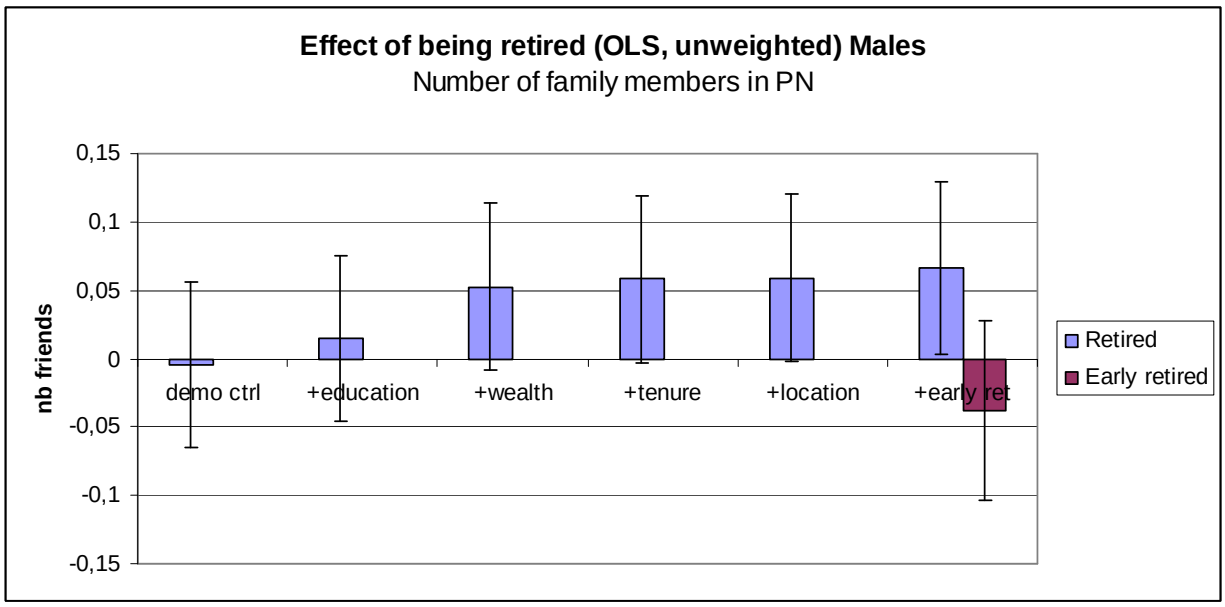
Figure 2. OLS estimated effects of being retired on the number of friends in PN

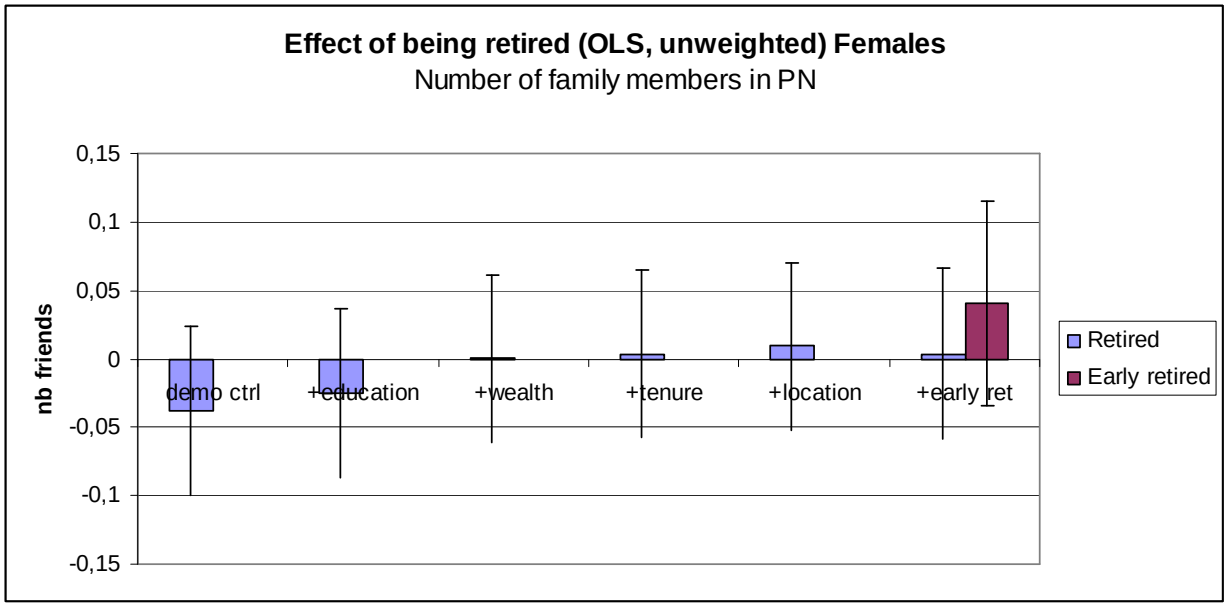




Estimated coefficients of the Retired dummy of the models in table 5 (males) and 6 (females).

Figure 3. OLS estimated effects of being retired on the number of family members in PN





Estimated coefficients of the Retired dummy of the models in table 5bis (males) and 6bis (females).

Table 1. Detailed and regrouped current job situation (55-79 years old)

ep005ter_w4 Detailed job situation	male	female	Total
retired 1	59.50	56.13	57.65
employed 2	23.08	17.51	20.02
unemployed. 3	2.65	1.98	2.28
disabled 4	3.53	3.03	3.26
homemaker 5	0.28	12.78	7.14
ret employed 11	6.77	4.33	5.43
employed pens 21	2.39	2.22	2.30
unempl employ 31	0.77	0.45	0.59
disab employ 41	0.40	0.21	0.30
homemker empl 51	0.02	0.44	0.25
other employ 61	0.22	0.14	0.17
other 97	0.40	0.79	0.62
Total	100.00	100.00	100.00

Regrouped current job situation	male	female	Total	male	female	Total
	unweighted			weighted		
Retired	59.5	56.1	57.7	50.6	47.4	48.9
Employed or self-employed	24.5	18.7	21.3	32.8	22.8	27.6
Unemployed	2.6	2.0	2.3	3.1	1.9	2.4
Permanently sick or disabled	3.5	3.0	3.3	4.3	3.4	3.8
Homemaker	0.3	12.8	7.1	0.4	17.2	9.2
Other (Rentier, Living out of own means...)	0.4	0.8	0.6	0.5	1.5	1.0
Retired and active	6.8	4.3	5.4	7.2	4.7	5.9
Employed and pensioner	2.4	2.2	2.3	1.1	1.0	1.1
Total	100	100	100	100	100	100
	45.1	54.9	100	47.4	52.6	100
sample size	18 073	21 987	40 060			

SHARE W4 rel.1. 55-79 years old.

Table 2. Mean number of confidants and type of confidants

	Mean	Mean if size>0	Mean male	Mean female	Mean	Mean if size>0	Mean male	Mean female
	unweighted				weighted			
Total number	2.53	2.62	2.30	2.71	2.54	2.65	2.33	2.73
Family members	1.91	2.00	1.80	2.01	1.93	2.02	1.82	2.03
Friends	0.46	0.48	0.36	0.55	0.47	0.50	0.39	0.56
(Ex-) Colleagues	0.05	0.05	0.05	0.05	0.04	0.04	0.04	0.04
Neighbours	0.07	0.06	0.05	0.08	0.06	0.06	0.05	0.07

SHARE W4 rel.1. 55-79 years old. Total number includes 0.1 other types of confidants (care providers, helpers.)

Table 3. Males OLS (unweighted specification)

VARIABLES	friend		colleague		friend or colleague		neighbour		family member	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(self-) employed	ref	ref	ref	ref	ref	ref	ref	ref	ref	ref
retired	**-0.0152**	**0.0408***	**-0.0772*****	**-0.0688*****	**-0.0924*****	**-0.0280**	**0.0267*****	**0.0247*****	**-0.00647**	**0.0509§§**
	(0.0215)	**(0.0217)**	**(0.00916)**	**(0.00911)**	**(0.0235)**	**(0.0236)**	**(0.00668)**	**(0.00681)**	**(0.0336)**	**(0.0339)**
Retired and employed	0.0933***	0.0999***	-0.0476***	-0.0466***	0.0457	0.0534	0.0334***	0.0337***	0.0946**	0.0933**
	(0.0323)	(0.0321)	(0.0124)	(0.0124)	(0.0352)	(0.0348)	(0.0112)	(0.0112)	(0.0457)	(0.0456)
Employed and pensioner	0.0577	0.0436	0.0406	0.0395	0.0984*	0.0831	-0.00503	-0.00416	-0.00857	-0.0424
	(0.0448)	(0.0448)	(0.0255)	(0.0253)	(0.0520)	(0.0514)	(0.00971)	(0.00967)	(0.0660)	(0.0657)
unemployed	-0.0845**	-0.0237	-0.0692***	-0.0611***	-0.154***	-0.0849**	0.0254*	0.0238*	-0.135**	-0.0477
	(0.0348)	(0.0349)	(0.0136)	(0.0138)	(0.0372)	(0.0373)	(0.0138)	(0.0138)	(0.0559)	(0.0560)
Homemaker	0.154	0.206	-0.109***	-0.0985***	0.0455	0.107	-0.0118	-0.0151	-0.112	-0.0334
	(0.142)	(0.139)	(0.00813)	(0.00873)	(0.142)	(0.139)	(0.0270)	(0.0269)	(0.136)	(0.136)
Sick or disabled	-0.0107	0.0491	-0.0994***	-0.0902***	-0.110***	-0.0411	0.00929	0.00556	-0.0648	0.00290
	(0.0368)	(0.0367)	(0.00927)	(0.00930)	(0.0378)	(0.0376)	(0.0114)	(0.0115)	(0.0546)	(0.0547)
Other	0.135	0.156	-0.0956***	-0.0916***	0.0396	0.0643	0.00406	0.00331	0.225	0.236§§
	(0.119)	(0.116)	(0.0158)	(0.0159)	(0.123)	(0.121)	(0.0347)	(0.0346)	(0.156)	(0.156)
Never held paid job	0.00216	0.0460	0.00307	0.00970	0.00524	0.0557	0.0504	0.0534	-0.326**	-0.268*
	(0.111)	(0.110)	(0.00727)	(0.00800)	(0.111)	(0.110)	(0.0537)	(0.0540)	(0.147)	(0.148)
Constant	-1.451**	-1.051	0.0875	0.118	-1.363*	-0.933	-0.140	-0.135	3.076***	3.545***
	(0.668)	(0.668)	(0.269)	(0.269)	(0.728)	(0.726)	(0.231)	(0.230)	(1.049)	(1.050)
Observations	18,073	18,073	18,073	18,073	18,073	18,073	18,073	18,073	18,073	18,073
R-squared	0.059	0.079	0.036	0.041	0.068	0.091	0.020	0.024	0.085	0.096
Controls										
demo, health...	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
education, wealth, location	no	yes	no	yes	no	yes	no	yes	no	yes

All models include country dummies interacted with age and age squared. Demographics and resources controls not shown are those of table 5, col. 6.
Robust standard errors clustered at the household level in parentheses. *** p<0.01, ** p<0.05, * p<0.1, §§ p<0.15, § p<0.2

Table 3w. Males OLS (weighted specification)

VARIABLES	friend		colleague		friend or colleague		neighbour		Family member	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(self-) employed	ref	ref	ref	ref	ref	ref	ref	ref	ref	ref
retired	**-0.0326**	**0.0197**	**-0.0635*** **	**-0.0540*** **	**-0.0961***	**-0.0280**	**0.0351***	**0.0346***	**-0.0366**	**0.0463**
	(0.0538)	**(0.0533)**	**(0.0156)**	**(0.0155)**	**(0.0556)**	**(0.0236)**	**(0.0192)**	**(0.0182)**	**(0.0737)**	**(0.0700)**
Retired and employed	0.0606	0.0596	-0.0451**	-0.0418**	0.0155	0.0534	0.0158	0.0180	0.00195	0.0282
	(0.0821)	(0.0778)	(0.0179)	(0.0174)	(0.0833)	(0.0348)	(0.0207)	(0.0213)	(0.0877)	(0.0868)
Employed and pensioner	0.335*	0.321*	0.0586	0.0648	0.393**	0.0831	-0.0319	-0.0340	-0.286*	-0.274**
	(0.198)	(0.193)	(0.0454)	(0.0449)	(0.198)	(0.0514)	(0.0229)	(0.0211)	(0.154)	(0.138)
unemployed	0.0335	0.107	-0.0646***	-0.0529***	-0.0311	-0.0849**	0.0497	0.0499	-0.445***	-0.309***
	(0.109)	(0.0975)	(0.0153)	(0.0163)	(0.110)	(0.0373)	(0.0439)	(0.0428)	(0.130)	(0.116)
Homemaker	-0.211*	-0.0899	-0.0774***	-0.0655***	-0.289**	0.107	-0.0406	-0.0369	-0.434	-0.246
	(0.116)	(0.113)	(0.0156)	(0.0181)	(0.119)	(0.139)	(0.0318)	(0.0332)	(0.322)	(0.332)
Sick or disabled	-0.0135	0.0392	-0.0733***	-0.0683***	-0.0868	-0.0411	0.0127	0.0136	-0.0526	0.0542
	(0.0870)	(0.0851)	(0.0160)	(0.0162)	(0.0866)	(0.0376)	(0.0199)	(0.0206)	(0.128)	(0.118)
Other	-0.0204	0.0142	-0.0816***	-0.0714***	-0.102	0.0643	-0.0628	-0.0640	0.157	0.235
	(0.0981)	(0.0922)	(0.0157)	(0.0174)	(0.0970)	(0.121)	(0.0415)	(0.0405)	(0.204)	(0.206)
Never held paid job	-0.192**	-0.144*	-0.00505	0.0126	-0.197**	0.0557	0.181	0.189	-0.449	-0.372
	(0.0858)	(0.0796)	(0.0116)	(0.0138)	(0.0866)	(0.110)	(0.162)	(0.163)	(0.294)	(0.278)
Constant	-1.619	-1.363	-0.186	-0.0460	-1.805	-0.933	-0.348	-0.264	2.561	3.332
	(1.570)	(1.568)	(0.463)	(0.451)	(1.604)	(0.726)	(0.480)	(0.441)	(2.529)	(2.399)
Observations	18,039	18,039	18,039	18,039	18,039	18,073	18,039	18,039	18,039	18,039
R-squared	0.052	0.084	0.041	0.050	0.063	0.091	0.026	0.033	0.083	0.105
Controls										
demo, health...	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
education, wealth, location	no	yes	no	yes	no	yes	no	yes	no	yes

All models include country dummies interacted with age and age squared. Demographics and resources controls not shown are those of table 5, col. 6.
Robust standard errors clustered at the household level in parentheses. *** p<0.01, ** p<0.05, * p<0.1, §§ p<0.15, § p<0.2

Table 4. Females OLS (unweighted specification)

VARIABLES	friend		colleague		friend or colleague		neighbour		Family member	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(self-) employed	ref	ref	ref	ref	ref	ref	ref	ref	ref	ref
retired	**-0.0900*** **	**-0.0283**	**-0.0664*** **	**-0.0613*** **	**-0.156*** **	**-0.0896*** **	**0.0176** **	**0.0145***	**-0.0145**	**0.0272**
	(0.0233)	**(0.0232)**	**(0.00781)**	**(0.00780)**	**(0.0246)**	**(0.0244)**	**(0.00770)**	**(0.00771)**	**(0.0343)**	**(0.0343)**
Retired and employed	0.109***	0.106***	-0.0445***	-0.0449***	0.0641	0.0614	0.0251**	0.0243**	0.0813	0.0696
	(0.0407)	(0.0401)	(0.0121)	(0.0121)	(0.0420)	(0.0413)	(0.0123)	(0.0123)	(0.0517)	(0.0515)
Employed and pensioner	-0.0501	-0.0792*	0.0640***	0.0611**	0.0138	-0.0182	0.00986	0.0121	0.118*	0.0905
	(0.0458)	(0.0454)	(0.0239)	(0.0237)	(0.0521)	(0.0513)	(0.0141)	(0.0141)	(0.0647)	(0.0647)
unemployed	-0.179***	-0.102**	-0.0607***	-0.0555***	-0.239***	-0.157***	0.00568	0.00301	-0.112	-0.0417
	(0.0422)	(0.0420)	(0.0148)	(0.0149)	(0.0451)	(0.0447)	(0.0143)	(0.0143)	(0.0688)	(0.0686)
Homemaker	-0.131***	-0.0468*	-0.0760***	-0.0687***	-0.207***	-0.116***	0.0408***	0.0355***	-0.0365	0.0112
	(0.0268)	(0.0267)	(0.00729)	(0.00735)	(0.0277)	(0.0275)	(0.00980)	(0.00981)	(0.0414)	(0.0416)
Sick or disabled	-0.187***	-0.107***	-0.107***	-0.0996***	-0.294***	-0.207***	0.0332**	0.0291**	-0.0634	0.00312
	(0.0357)	(0.0353)	(0.00858)	(0.00858)	(0.0366)	(0.0362)	(0.0148)	(0.0148)	(0.0571)	(0.0570)
Other	-0.117*	-0.0500	-0.0807***	-0.0753***	-0.197***	-0.125**	0.0293	0.0258	-0.0884	-0.0502
	(0.0625)	(0.0617)	(0.0109)	(0.0109)	(0.0635)	(0.0627)	(0.0308)	(0.0309)	(0.104)	(0.104)
Never held paid job	-0.161***	-0.111***	0.00187	0.00475*	-0.159***	-0.106***	-0.0509***	-0.0533***	-0.154***	-0.110*
	(0.0270)	(0.0267)	(0.00275)	(0.00280)	(0.0272)	(0.0269)	(0.0120)	(0.0121)	(0.0567)	(0.0565)
Constant	-2.645***	-2.632***	0.0164	0.00361	-2.629***	-2.628***	-0.382	-0.380	3.210***	3.417***
	(0.650)	(0.642)	(0.187)	(0.189)	(0.678)	(0.669)	(0.249)	(0.249)	(1.012)	(1.009)
Observations	21,987	21,987	21,987	21,987	21,987	21,987	21,987	21,987	21,987	21,987
R-squared	0.121	0.149	0.041	0.045	0.129	0.160	0.019	0.022	0.106	0.119
Controls										
demo, health...	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
education, wealth, location	no	yes	no	yes	no	yes	no	yes	no	yes

All models include country dummies interacted with age and age squared. Demographics and resources controls not shown are those of table 5, col. 6.
Robust standard errors clustered at the household level in parentheses. *** p<0.01, ** p<0.05, * p<0.1, §§ p<0.15, § p<0.2

Table 4w. Females OLS (weighted specification)

VARIABLES	friend		colleague		friend or colleague		neighbour		Family member	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(self-) employed	ref	ref	ref	ref	ref	ref	ref	ref	ref	ref
retired	**-0.108§§**	**-0.0471**	**-0.0807*** **	**-0.0805*** **	**-0.189*** **	**-0.128** **	**0.0207***	0.0169	**-0.0306**	**0.00187**
	(0.0657)	**(0.0627)**	**(0.0173)**	**(0.0175)**	**(0.0677)**	**(0.0648)**	**(0.0124)**	(0.0125)	**(0.0808)**	**(0.0766)**
Retired and employed	0.272**	0.264**	-0.0716***	-0.0705***	0.200	0.194	-0.00477	-0.00739	-0.0739	-0.0743
	(0.137)	(0.133)	(0.0206)	(0.0193)	(0.136)	(0.133)	(0.0184)	(0.0182)	(0.107)	(0.101)
Employed and pensioner	-0.0788	-0.0631	-0.0169	-0.0124	-0.0957	-0.0754	-0.0535***	-0.0506***	0.210	0.197
	(0.231)	(0.227)	(0.0329)	(0.0319)	(0.232)	(0.227)	(0.0158)	(0.0166)	(0.202)	(0.212)
unemployed	-0.284***	-0.196**	-0.0868***	-0.0870***	-0.371***	-0.283***	-0.00511	-0.00910	0.103	0.168
	(0.0911)	(0.0907)	(0.0162)	(0.0169)	(0.0938)	(0.0930)	(0.0242)	(0.0241)	(0.145)	(0.147)
Homemaker	-0.0868	-0.0250	-0.0823***	-0.0815***	-0.169*	-0.106	0.0299*	0.0250	-0.00995	0.0227
	(0.0878)	(0.0810)	(0.0146)	(0.0151)	(0.0888)	(0.0818)	(0.0157)	(0.0159)	(0.102)	(0.0972)
Sick or disabled	-0.198*	-0.125	-0.107***	-0.101***	-0.304***	-0.226**	0.00367	-0.00283	0.0677	0.141
	(0.103)	(0.0958)	(0.0180)	(0.0179)	(0.103)	(0.0960)	(0.0184)	(0.0191)	(0.119)	(0.116)
Other	-0.215**	-0.203**	-0.0855***	-0.0875***	-0.301***	-0.290***	0.0291	0.0269	-0.120	-0.0979
	(0.0886)	(0.0889)	(0.0141)	(0.0141)	(0.0896)	(0.0905)	(0.0577)	(0.0567)	(0.148)	(0.145)
Never held paid job	-0.176***	-0.121**	0.00137	0.00205	-0.175***	-0.119**	-0.0137	-0.0164	-0.186*	-0.152
	(0.0511)	(0.0489)	(0.00543)	(0.00634)	(0.0515)	(0.0493)	(0.0221)	(0.0222)	(0.109)	(0.104)
Constant	-4.285**	-4.390**	-0.312	-0.335	-4.597**	-4.725**	-0.411	-0.474	4.969*	4.615*
	(1.853)	(1.806)	(0.496)	(0.482)	(1.915)	(1.863)	(0.525)	(0.509)	(2.580)	(2.462)
Observations	21,953	21,953	21,953	21,953	21,953	21,953	21,953	21,953	21,953	21,953
R-squared	0.141	0.181	0.049	0.061	0.157	0.197	0.032	0.036	0.096	0.117
Controls										
demo, health...	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
education, wealth, location	no	yes	no	yes	no	yes	no	yes	no	yes

All models include country dummies interacted with age and age squared. Demographics and resources controls not shown are those of table 5, col. 6.
Robust standard errors clustered at the household level in parentheses. *** p<0.01, ** p<0.05, * p<0.1, §§ p<0.15, § p<0.2

Table 5. Males OLS number of friends or (ex-)colleagues in the PN (unweighted specification)

	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	demo ctrl	+education	+wealth	+tenure	+location	+early ret
(self-) employed	ref	ref	ref	ref	ref	ref
Retired	**-0.111*** **	**-0.0791*** **	**-0.0539** **	**-0.0479** **	**-0.0440** **	**-0.0493** **
	(0.0219)	**(0.0219)**	**(0.0220)**	**(0.0220)**	**(0.0220)**	**(0.0222)**
Early retired						**0.0271**
						(0.0227)
Retired and employed	0.0288	0.0361	0.0346	0.0392	0.0391	0.0399
	(0.0342)	(0.0340)	(0.0338)	(0.0338)	(0.0337)	(0.0338)
unemployed	-0.162***	-0.129***	-0.0912**	-0.0915**	-0.0918**	-0.0927**
	(0.0371)	(0.0368)	(0.0373)	(0.0373)	(0.0372)	(0.0372)
Homemaker	0.0323	0.0651	0.107	0.103	0.0963	0.0958
	(0.142)	(0.140)	(0.140)	(0.139)	(0.139)	(0.139)
Sick or disabled	-0.120***	-0.0851**	-0.0574	-0.0544	-0.0492	-0.0492
	(0.0374)	(0.0375)	(0.0374)	(0.0374)	(0.0372)	(0.0372)
Other	0.0291	0.0403	0.0514	0.0541	0.0555	0.0557
	(0.123)	(0.122)	(0.121)	(0.120)	(0.121)	(0.121)
Never held paid job	0.00409	0.0227	0.0595	0.0664	0.0549	0.0537
	(0.111)	(0.110)	(0.111)	(0.109)	(0.110)	(0.110)
No brother	0.0224*	0.0151	0.0116	0.0117	0.00938	0.00935
	(0.0129)	(0.0129)	(0.0128)	(0.0128)	(0.0128)	(0.0128)
No sister	0.0287**	0.0170	0.0162	0.0156	0.0109	0.0109
	(0.0133)	(0.0133)	(0.0132)	(0.0132)	(0.0132)	(0.0132)
Nb grand child	-0.00686**	-0.00337	-0.00217	-0.00167	-0.000187	-0.000225
	(0.00293)	(0.00292)	(0.00291)	(0.00291)	(0.00291)	(0.00291)
Registered partnership	-0.00353	0.00597	0.00294	-0.00184	-0.00958	-0.00942
	(0.0476)	(0.0474)	(0.0469)	(0.0470)	(0.0472)	(0.0472)
Married separated	0.242***	0.240***	0.266***	0.262***	0.262***	0.261***
	(0.0596)	(0.0594)	(0.0595)	(0.0596)	(0.0596)	(0.0596)
Never married	0.299***	0.320***	0.352***	0.353***	0.365***	0.365***
	(0.0435)	(0.0433)	(0.0436)	(0.0435)	(0.0434)	(0.0434)
Divorced	0.397***	0.398***	0.435***	0.427***	0.422***	0.421***
	(0.0382)	(0.0379)	(0.0380)	(0.0381)	(0.0380)	(0.0380)
Widowed	0.175***	0.184***	0.200***	0.202***	0.203***	0.204***
	(0.0348)	(0.0345)	(0.0345)	(0.0345)	(0.0343)	(0.0344)
unregistered partnership	0.0296	0.0412	0.0451*	0.0413	0.0372	0.0365
	(0.0260)	(0.0259)	(0.0257)	(0.0257)	(0.0257)	(0.0257)
Household size	-0.000342	0.00357	0.00299	0.00496	0.00826	0.00833
	(0.00720)	(0.00719)	(0.00714)	(0.00715)	(0.00718)	(0.00718)
One child	-0.0462	-0.0489	-0.0537	-0.0547*	-0.0554*	-0.0557*
	(0.0330)	(0.0328)	(0.0326)	(0.0326)	(0.0326)	(0.0326)
2 children	-0.0571*	-0.0636**	-0.0773**	-0.0770**	-0.0730**	-0.0732**
	(0.0310)	(0.0308)	(0.0307)	(0.0307)	(0.0307)	(0.0307)
3 children	-0.0807**	-0.0871***	-0.102***	-0.102***	-0.0913***	-0.0914***
	(0.0338)	(0.0336)	(0.0335)	(0.0335)	(0.0336)	(0.0336)
4+ children	-0.0781**	-0.0874**	-0.101***	-0.104***	-0.0960***	-0.0959***
	(0.0374)	(0.0371)	(0.0369)	(0.0369)	(0.0369)	(0.0369)
1+ adl limitations	0.00353	0.00612	0.00616	0.00500	0.00211	0.00237
	(0.0239)	(0.0238)	(0.0237)	(0.0237)	(0.0238)	(0.0238)
1+ iadl limitations	-0.0322	-0.0225	-0.0135	-0.0124	-0.00743	-0.00752
	(0.0219)	(0.0219)	(0.0218)	(0.0218)	(0.0217)	(0.0217)
GALI (lim. with act.)	-0.0145	-0.00719	-0.00207	-0.00159	0.000765	0.000588
	(0.0144)	(0.0143)	(0.0143)	(0.0143)	(0.0143)	(0.0143)
EURO-D (depr. scale)	0.00463	0.00599*	0.00571*	0.00593*	0.00606*	0.00608*
	(0.00337)	(0.00336)	(0.00335)	(0.00335)	(0.00334)	(0.00334)
Year education		0.00739*	0.00582	0.00550	0.00503	0.00501
		(0.00394)	(0.00393)	(0.00393)	(0.00392)	(0.00393)
edu quartile _2		0.0402**	0.0353*	0.0348*	0.0298	0.0296
		(0.0204)	(0.0204)	(0.0204)	(0.0204)	(0.0204)
edu quartile _3		0.0781***	0.0698**	0.0678**	0.0564*	0.0562*
		(0.0289)	(0.0288)	(0.0288)	(0.0289)	(0.0289)
edu quartile _4		0.174***	0.149***	0.146***	0.126***	0.126***
		(0.0427)	(0.0427)	(0.0426)	(0.0428)	(0.0428)
Own 2d home			0.0736***	0.0650***	0.0599***	0.0600***
			(0.0174)	(0.0175)	(0.0176)	(0.0176)
asset			0.0258***	0.0318***	0.0318***	0.0318***

			(0.00663)	(0.00673)	(0.00672)	(0.00672)
mortgage			0.0167	0.0495**	0.0391*	0.0389*
			(0.0220)	(0.0229)	(0.0231)	(0.0231)
debt			0.0948***	0.0888***	0.0865***	0.0861***
			(0.0177)	(0.0177)	(0.0177)	(0.0177)
Asset quartile_2			-0.000654	0.0308	0.0275	0.0272
			(0.0175)	(0.0200)	(0.0199)	(0.0199)
Asset quartile_3			0.0213	0.0594***	0.0585***	0.0580***
			(0.0189)	(0.0216)	(0.0216)	(0.0216)
Asset quartile_4			0.0523**	0.0923***	0.0930***	0.0923***
			(0.0210)	(0.0238)	(0.0241)	(0.0241)
owner				0.0337	0.0241	0.0246
				(0.0271)	(0.0273)	(0.0273)
tenant				0.158***	0.0974***	0.0979***
				(0.0334)	(0.0350)	(0.0350)
Submarket rent				0.00912	0.00543	0.00544
				(0.0389)	(0.0390)	(0.0390)
Length of tenure					-0.000578	-0.000603
					(0.000429)	(0.000429)
Big city					0.110***	0.111***
					(0.0256)	(0.0256)
suburbs					-0.00944	-0.00939
					(0.0252)	(0.0252)
Small town					0.00272	0.00258
					(0.0203)	(0.0203)
Rural area					-0.0447**	-0.0447**
					(0.0214)	(0.0214)
house					0.0163	0.0161
					(0.0238)	(0.0238)
Row house					0.0555*	0.0550*
					(0.0304)	(0.0304)
flat 3 to 8 floors					0.0441	0.0435
					(0.0324)	(0.0325)
flat 9 +					0.0455	0.0450
					(0.0304)	(0.0304)
High rise					0.0422	0.0413
					(0.0462)	(0.0462)
Constant	-1.743**	-1.573**	-1.309*	-1.324*	-1.252*	-1.195*
	(0.706)	(0.703)	(0.704)	(0.704)	(0.703)	(0.704)
Observations	18,073	18,073	18,073	18,073	18,073	18,073
R-squared	0.068	0.078	0.085	0.086	0.090	0.090
Test ret + early ret=0						0.4483

All models include age and age squared interacted with country dummies.
Robust standard errors clustered at the household level in parentheses. *** p<0.01, ** p<0.05, * p<0.1, §§ p<0.15, § p<0.2

Table 5w. Males OLS number of friends or (ex-)colleagues in the PN (weighted specification)

VARIABLES	(1) demo ctrl	(2) +education	(3) +wealth	(4) +tenure	(5) +location	(6) +early ret
(self-) employed	ref	ref	ref	ref	ref	ref
Retired	**-0.131****	**-0.0976***	**-0.0763§**	**-0.0640**	**-0.0692**	**-0.0695**
	(0.0561)	**(0.0559)**	**(0.0561)**	**(0.0547)**	**(0.0552)**	**(0.0556)**
Early retired						**0.000748**
						(0.0414)
Retired and employed	-0.0169	-0.0137	-0.0247	-0.0122	-0.0144	-0.0144
	(0.0844)	(0.0823)	(0.0808)	(0.0789)	(0.0791)	(0.0790)
unemployed	-0.0440	0.000651	0.0405	0.0422	0.0406	0.0406
	(0.111)	(0.109)	(0.108)	(0.103)	(0.0988)	(0.0988)
Homemaker	-0.308***	-0.240**	-0.154§§	-0.179§§	-0.174§§	-0.174§§
	(0.116)	(0.105)	(0.0994)	(0.114)	(0.113)	(0.113)
Sick or disabled	-0.0993	-0.0620	-0.0479	-0.0392	-0.0414	-0.0414
	(0.0858)	(0.0859)	(0.0849)	(0.0830)	(0.0839)	(0.0839)
Other	-0.119	-0.0934	-0.0691	-0.0470	-0.0745	-0.0745
	(0.0965)	(0.0952)	(0.0907)	(0.0902)	(0.0911)	(0.0911)
Never held paid job	-0.206**	-0.178**	-0.138*	-0.119	-0.141*	-0.141*
	(0.0865)	(0.0874)	(0.0824)	(0.0837)	(0.0803)	(0.0801)
No brother	0.000137	-0.0148	-0.0192	-0.0223	-0.0263	-0.0263
	(0.0337)	(0.0336)	(0.0325)	(0.0327)	(0.0331)	(0.0331)
No sister	-0.0515	-0.0564	-0.0543	-0.0481	-0.0532	-0.0532
	(0.0359)	(0.0358)	(0.0348)	(0.0335)	(0.0339)	(0.0338)
Nb grand child	-0.0126	-0.00845	-0.00771	-0.00769	-0.00635	-0.00635
	(0.00805)	(0.00804)	(0.00764)	(0.00779)	(0.00747)	(0.00747)
Registered partnership	0.0648	0.0880	0.0735	0.0546	0.0566	0.0566
	(0.0890)	(0.0875)	(0.0866)	(0.0876)	(0.0879)	(0.0880)
Married separated	0.192	0.189	0.213	0.201	0.208	0.208
	(0.179)	(0.180)	(0.188)	(0.186)	(0.183)	(0.182)
Never married	0.299***	0.328***	0.370***	0.363***	0.374***	0.374***
	(0.0728)	(0.0737)	(0.0750)	(0.0766)	(0.0753)	(0.0753)
Divorced	0.305***	0.313***	0.352***	0.341***	0.329***	0.329***
	(0.0721)	(0.0726)	(0.0712)	(0.0711)	(0.0717)	(0.0718)
Widowed	0.0476	0.0663	0.0773	0.0757	0.0731	0.0731
	(0.0634)	(0.0625)	(0.0637)	(0.0630)	(0.0632)	(0.0634)
unregistered partnership	0.0125	0.0308	0.0464	0.0432	0.0388	0.0388
	(0.0581)	(0.0561)	(0.0542)	(0.0534)	(0.0541)	(0.0541)
Household size	-0.0248	-0.0182	-0.0163	-0.0147	-0.0136	-0.0136
	(0.0173)	(0.0171)	(0.0171)	(0.0168)	(0.0172)	(0.0172)
One child	0.109	0.111	0.113	0.0979	0.0936	0.0937
	(0.0778)	(0.0774)	(0.0767)	(0.0742)	(0.0736)	(0.0735)
2 children	0.00982	0.0116	0.0107	0.00171	0.00182	0.00183
	(0.0528)	(0.0525)	(0.0527)	(0.0537)	(0.0526)	(0.0526)
3 children	0.00653	0.01000	0.00925	0.00778	0.0118	0.0118
	(0.0636)	(0.0629)	(0.0632)	(0.0636)	(0.0624)	(0.0624)
4+ children	0.0653	0.0679	0.0800	0.0681	0.0656	0.0656
	(0.0748)	(0.0742)	(0.0727)	(0.0733)	(0.0724)	(0.0725)
1+ adl limitations	-0.0466	-0.0474	-0.0403	-0.0452	-0.0508	-0.0507
	(0.0520)	(0.0526)	(0.0499)	(0.0503)	(0.0510)	(0.0510)
1+ iadl limitations	0.0831*	0.0987**	0.106**	0.103**	0.105**	0.105**
	(0.0504)	(0.0500)	(0.0492)	(0.0485)	(0.0491)	(0.0491)
GALI (lim. with act.)	-0.0697	-0.0586	-0.0542	-0.0518	-0.0451	-0.0451
	(0.0429)	(0.0421)	(0.0430)	(0.0416)	(0.0397)	(0.0397)
EURO-D (depr. scale)	0.0160*	0.0167*	0.0169*	0.0179**	0.0172**	0.0172**
	(0.00895)	(0.00892)	(0.00890)	(0.00887)	(0.00853)	(0.00853)
Year education		0.00467	0.000971	0.000334	0.000237	0.000237
		(0.00857)	(0.00841)	(0.00846)	(0.00844)	(0.00843)
edu quartile _2		0.0953**	0.0993**	0.0938**	0.0857*	0.0857*
		(0.0479)	(0.0476)	(0.0476)	(0.0471)	(0.0471)
edu quartile _3		0.126*	0.127*	0.125*	0.113	0.113
		(0.0729)	(0.0721)	(0.0716)	(0.0701)	(0.0702)
edu quartile _4		0.240**	0.237**	0.229**	0.212*	0.212*
		(0.116)	(0.115)	(0.116)	(0.115)	(0.115)
Own 2d home			0.220***	0.205***	0.200***	0.200***
			(0.0789)	(0.0752)	(0.0726)	(0.0726)
asset			0.0178	0.0312**	0.0307**	0.0307**

			(0.0137)	(0.0145)	(0.0144)	(0.0144)
mortgage			-0.0711	-0.0214	-0.0332	-0.0332
			(0.0455)	(0.0448)	(0.0460)	(0.0460)
debt			0.0784**	0.0703*	0.0695*	0.0695*
			(0.0366)	(0.0367)	(0.0370)	(0.0370)
Asset quartile_2			0.0637	0.146**	0.144**	0.144**
			(0.0508)	(0.0722)	(0.0702)	(0.0702)
Asset quartile_3			0.0718*	0.169***	0.168***	0.168***
			(0.0406)	(0.0544)	(0.0542)	(0.0542)
Asset quartile_4			0.0158	0.114*	0.111*	0.111*
			(0.0554)	(0.0615)	(0.0624)	(0.0624)
owner				-0.0478	-0.0563	-0.0563
				(0.0699)	(0.0715)	(0.0717)
tenant				0.227**	0.176**	0.176**
				(0.0892)	(0.0819)	(0.0818)
Submarket rent				-0.201*	-0.188*	-0.188*
				(0.105)	(0.0982)	(0.0982)
Length of tenure					-0.00117	-0.00117
					(0.00106)	(0.00107)
Big city					0.0793	0.0793
					(0.0781)	(0.0781)
suburbs					-0.0225	-0.0225
					(0.0602)	(0.0600)
Small town					-0.0906**	-0.0906**
					(0.0438)	(0.0437)
Rural area					-0.0930**	-0.0930**
					(0.0473)	(0.0473)
house					-0.00425	-0.00426
					(0.0581)	(0.0582)
Row house					-0.0210	-0.0210
					(0.0693)	(0.0695)
flat 3 to 8 floors					0.0147	0.0147
					(0.0773)	(0.0775)
flat 9 +					-0.0673	-0.0673
					(0.0812)	(0.0813)
High rise					-0.154	-0.154
					(0.108)	(0.108)
Constant	-2.536	-2.726*	-2.082	-2.035	-2.123	-2.122
	(1.628)	(1.621)	(1.634)	(1.619)	(1.617)	(1.619)
Observations	18,039	18,039	18,039	18,039	18,039	18,039
R-squared	0.061	0.073	0.086	0.092	0.096	0.096
Test ret + early ret=0						0.2842

All models include age and age squared interacted with country dummies.
Robust standard errors clustered at the household level in parentheses. *** p<0.01, ** p<0.05, * p<0.1, §§ p<0.15, § p<0.2

Table 6. Females OLS number of friends or (ex-)colleagues in the PN (unweighted specification)

	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	demo ctrl	+education	+wealth	+tenure	+location	+early ret
(self-) employed	ref	ref	ref	ref	ref	ref
Retired	**-0.159*** **	**-0.122*** **	**-0.100*** **	**-0.0935*** **	**-0.0861*** **	**-0.0941*** **
	(0.0227)	**(0.0226)**	**(0.0227)**	**(0.0227)**	**(0.0226)**	**(0.0228)**
Early retired						**0.0560** **
						(0.0264)
Retired and employed	0.0616	0.0662	0.0618	0.0615	0.0646	0.0663
	(0.0412)	(0.0409)	(0.0407)	(0.0407)	(0.0405)	(0.0405)
unemployed	-0.241***	-0.200***	-0.155***	-0.151***	-0.156***	-0.157***
	(0.0448)	(0.0447)	(0.0445)	(0.0445)	(0.0444)	(0.0444)
Homemaker	-0.209***	-0.150***	-0.128***	-0.119***	-0.113***	-0.113***
	(0.0269)	(0.0268)	(0.0267)	(0.0268)	(0.0267)	(0.0267)
Sick or disabled	-0.296***	-0.244***	-0.211***	-0.210***	-0.205***	-0.204***
	(0.0361)	(0.0359)	(0.0357)	(0.0357)	(0.0356)	(0.0356)
Other	-0.199***	-0.162***	-0.149**	-0.136**	-0.123**	-0.121*
	(0.0631)	(0.0622)	(0.0621)	(0.0621)	(0.0623)	(0.0622)
Never held paid job	-0.159***	-0.134***	-0.111***	-0.108***	-0.106***	-0.108***
	(0.0272)	(0.0270)	(0.0269)	(0.0269)	(0.0269)	(0.0269)
No brother	0.0327**	0.0208	0.0190	0.0188	0.0149	0.0149
	(0.0129)	(0.0128)	(0.0127)	(0.0127)	(0.0127)	(0.0127)
No sister	0.0998***	0.0841***	0.0823***	0.0820***	0.0791***	0.0792***
	(0.0130)	(0.0129)	(0.0129)	(0.0128)	(0.0128)	(0.0128)
Nb grand child	-0.0196***	-0.0149***	-0.0136***	-0.0135***	-0.0117***	-0.0118***
	(0.00265)	(0.00263)	(0.00261)	(0.00262)	(0.00262)	(0.00261)
Registered partnership	0.0871	0.0835	0.0872	0.0829	0.0739	0.0735
	(0.0641)	(0.0635)	(0.0632)	(0.0628)	(0.0626)	(0.0626)
Married separated	0.193***	0.190***	0.244***	0.242***	0.235***	0.234***
	(0.0430)	(0.0426)	(0.0430)	(0.0428)	(0.0426)	(0.0426)
Never married	0.377***	0.370***	0.438***	0.439***	0.430***	0.429***
	(0.0398)	(0.0397)	(0.0400)	(0.0399)	(0.0398)	(0.0398)
Divorced	0.420***	0.413***	0.482***	0.477***	0.454***	0.454***
	(0.0277)	(0.0274)	(0.0279)	(0.0279)	(0.0280)	(0.0280)
Widowed	0.188***	0.204***	0.257***	0.263***	0.261***	0.261***
	(0.0181)	(0.0180)	(0.0186)	(0.0186)	(0.0185)	(0.0185)
unregistered partnership	0.0714**	0.0776**	0.0861***	0.0838***	0.0773**	0.0767**
	(0.0313)	(0.0312)	(0.0308)	(0.0309)	(0.0308)	(0.0308)
Household size	-0.0178***	-0.0154**	-0.0161**	-0.0143**	-0.00868	-0.00856
	(0.00652)	(0.00642)	(0.00644)	(0.00647)	(0.00647)	(0.00648)
One child	-0.136***	-0.121***	-0.125***	-0.125***	-0.125***	-0.126***
	(0.0320)	(0.0318)	(0.0316)	(0.0315)	(0.0314)	(0.0314)
2 children	-0.122***	-0.113***	-0.125***	-0.124***	-0.118***	-0.118***
	(0.0312)	(0.0309)	(0.0308)	(0.0307)	(0.0306)	(0.0306)
3 children	-0.166***	-0.159***	-0.171***	-0.170***	-0.152***	-0.153***
	(0.0336)	(0.0334)	(0.0333)	(0.0332)	(0.0331)	(0.0331)
4+ children	-0.190***	-0.179***	-0.185***	-0.184***	-0.173***	-0.172***
	(0.0378)	(0.0375)	(0.0372)	(0.0372)	(0.0370)	(0.0370)
1+ adl limitations	-0.0152	-0.0110	-0.00867	-0.0112	-0.0120	-0.0118
	(0.0219)	(0.0218)	(0.0216)	(0.0217)	(0.0216)	(0.0216)
1+ iadl limitations	-0.0606***	-0.0464***	-0.0401**	-0.0383**	-0.0337*	-0.0338*
	(0.0177)	(0.0176)	(0.0175)	(0.0175)	(0.0174)	(0.0174)
GALI (lim. with act.)	0.0194	0.0260*	0.0343**	0.0359***	0.0370***	0.0368***
	(0.0138)	(0.0137)	(0.0137)	(0.0137)	(0.0136)	(0.0136)
EURO-D (depr. scale)	0.00947***	0.0131***	0.0136***	0.0135***	0.0137***	0.0137***
	(0.00275)	(0.00274)	(0.00274)	(0.00275)	(0.00274)	(0.00274)
Year education		0.0189***	0.0172***	0.0170***	0.0164***	0.0164***
		(0.00410)	(0.00408)	(0.00407)	(0.00406)	(0.00406)
edu quartile _2		0.00716	-0.00283	-0.00381	-0.0109	-0.0115
		(0.0212)	(0.0212)	(0.0211)	(0.0211)	(0.0211)
edu quartile _3		-0.00970	-0.0246	-0.0276	-0.0431	-0.0437
		(0.0272)	(0.0271)	(0.0271)	(0.0271)	(0.0271)
edu quartile _4		0.150***	0.110***	0.105**	0.0759*	0.0754*
		(0.0419)	(0.0418)	(0.0417)	(0.0418)	(0.0418)
Own 2d home			0.0548***	0.0411**	0.0354**	0.0349**
			(0.0172)	(0.0173)	(0.0173)	(0.0173)
asset			0.0551***	0.0641***	0.0630***	0.0629***
			(0.00673)	(0.00700)	(0.00698)	(0.00697)
mortgage			0.0293	0.0683***	0.0504**	0.0502**

			(0.0230)	(0.0237)	(0.0238)	(0.0238)
debt			0.0974***	0.0927***	0.0907***	0.0903***
			(0.0185)	(0.0185)	(0.0184)	(0.0184)
Asset quartile_2			0.00758	0.0550***	0.0477**	0.0474**
			(0.0169)	(0.0188)	(0.0188)	(0.0188)
Asset quartile_3			0.0251	0.0821***	0.0756***	0.0750***
			(0.0183)	(0.0207)	(0.0208)	(0.0208)
Asset quartile_4			0.0464**	0.106***	0.101***	0.100***
			(0.0213)	(0.0233)	(0.0235)	(0.0235)
owner				-0.0609**	-0.0693***	-0.0683***
				(0.0253)	(0.0255)	(0.0255)
tenant				0.0641**	-0.0209	-0.0205
				(0.0308)	(0.0324)	(0.0324)
Submarket rent				0.0583	0.0615*	0.0619*
				(0.0361)	(0.0361)	(0.0361)
Length of tenure					-0.00151***	-0.00154***
					(0.000420)	(0.000420)
Big city					0.135***	0.137***
					(0.0238)	(0.0238)
suburbs					0.00474	0.00567
					(0.0252)	(0.0252)
Small town					0.00117	0.00162
					(0.0200)	(0.0200)
Rural area					-0.0630***	-0.0626***
					(0.0207)	(0.0207)
house					0.0418*	0.0418*
					(0.0220)	(0.0220)
Row house					0.0616**	0.0617**
					(0.0281)	(0.0281)
flat 3 to 8 floors					0.0705**	0.0705**
					(0.0295)	(0.0295)
flat 9 +					0.0821***	0.0819***
					(0.0283)	(0.0283)
High rise					0.0529	0.0521
					(0.0432)	(0.0433)
Constant	-2.681***	-2.733***	-2.794***	-2.826***	-2.559***	-2.492***
	(0.663)	(0.657)	(0.656)	(0.655)	(0.654)	(0.655)
Observations	21,987	21,987	21,987	21,987	21,987	21,987
R-squared	0.129	0.144	0.152	0.154	0.160	0.160
Test ret + early ret=0						0.2397

All models include age and age squared interacted with country dummies.
Robust standard errors clustered at the household level in parentheses. *** p<0.01, ** p<0.05, * p<0.1, §§ p<0.15, § p<0.2

Table 6w. Females OLS number of friends or (ex-)colleagues in the PN (weighted specification)

	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	demo ctrl	+education	+wealth	+tenure	+location	+early ret
(self-) employed	ref	ref	ref	ref	ref	ref
Retired	**-0.180*** **	**-0.148** **	**-0.136** **	**-0.129** **	**-0.121***	**-0.137** **
	(0.0651)	**(0.0636)**	**(0.0630)**	**(0.0629)**	**(0.0618)**	**(0.0627)**
Early retired						**0.0648§§**
						(0.0429)
Retired and employed	0.208	0.215	0.197	0.198	0.200	0.201
	(0.135)	(0.136)	(0.132)	(0.131)	(0.130)	(0.130)
unemployed	-0.366***	-0.332***	-0.292***	-0.287***	-0.279***	-0.281***
	(0.0932)	(0.0942)	(0.0926)	(0.0931)	(0.0924)	(0.0923)
Homemaker	-0.163*	-0.115	-0.117	-0.111	-0.102	-0.104
	(0.0870)	(0.0830)	(0.0811)	(0.0808)	(0.0799)	(0.0800)
Sick or disabled	-0.299***	-0.237**	-0.217**	-0.225**	-0.222**	-0.221**
	(0.103)	(0.103)	(0.101)	(0.0992)	(0.0954)	(0.0955)
Other	-0.294***	-0.294***	-0.306***	-0.291***	-0.285***	-0.284***
	(0.0886)	(0.0897)	(0.0878)	(0.0884)	(0.0894)	(0.0893)
Never held paid job	-0.175***	-0.150***	-0.108**	-0.107**	-0.119**	-0.124**
	(0.0516)	(0.0489)	(0.0491)	(0.0494)	(0.0493)	(0.0494)
No brother	0.0480	0.0311	0.0267	0.0279	0.0241	0.0239
	(0.0325)	(0.0316)	(0.0311)	(0.0311)	(0.0308)	(0.0308)
No sister	0.0800**	0.0676**	0.0615*	0.0619*	0.0585*	0.0586*
	(0.0321)	(0.0322)	(0.0316)	(0.0317)	(0.0315)	(0.0315)
Nb grand child	-0.0145***	-0.00895*	-0.00675	-0.00630	-0.00567	-0.00576
	(0.00488)	(0.00486)	(0.00486)	(0.00489)	(0.00491)	(0.00490)
Registered partnership	0.213	0.186	0.183	0.176	0.170	0.170
	(0.144)	(0.147)	(0.147)	(0.147)	(0.147)	(0.147)
Married separated	0.186**	0.191**	0.245***	0.247***	0.242***	0.242***
	(0.0944)	(0.0932)	(0.0942)	(0.0944)	(0.0914)	(0.0915)
Never married	0.364***	0.343***	0.429***	0.428***	0.416***	0.417***
	(0.0861)	(0.0854)	(0.0860)	(0.0864)	(0.0854)	(0.0854)
Divorced	0.420***	0.408***	0.485***	0.474***	0.460***	0.459***
	(0.0756)	(0.0761)	(0.0770)	(0.0755)	(0.0752)	(0.0752)
Widowed	0.164***	0.181***	0.239***	0.243***	0.243***	0.244***
	(0.0373)	(0.0372)	(0.0383)	(0.0383)	(0.0379)	(0.0379)
unregistered partnership	0.230***	0.237***	0.253***	0.249***	0.242***	0.242***
	(0.0771)	(0.0756)	(0.0749)	(0.0748)	(0.0755)	(0.0754)
Household size	-0.0187	-0.0179	-0.0198	-0.0166	-0.0100	-0.00986
	(0.0135)	(0.0132)	(0.0131)	(0.0132)	(0.0133)	(0.0133)
One child	-0.180**	-0.169**	-0.163**	-0.167**	-0.165**	-0.166**
	(0.0763)	(0.0762)	(0.0732)	(0.0731)	(0.0715)	(0.0715)
2 children	-0.133*	-0.133*	-0.135*	-0.136*	-0.126*	-0.127*
	(0.0751)	(0.0747)	(0.0717)	(0.0715)	(0.0698)	(0.0699)
3 children	-0.215***	-0.212***	-0.215***	-0.215***	-0.198***	-0.198***
	(0.0781)	(0.0781)	(0.0754)	(0.0752)	(0.0733)	(0.0734)
4+ children	-0.264***	-0.250***	-0.242***	-0.246***	-0.233***	-0.233***
	(0.0808)	(0.0809)	(0.0777)	(0.0777)	(0.0759)	(0.0759)
1+ adl limitations	-0.0593	-0.0491	-0.0475	-0.0507	-0.0441	-0.0440
	(0.0491)	(0.0487)	(0.0492)	(0.0494)	(0.0488)	(0.0488)
1+ iadl limitations	0.00551	0.0116	0.0204	0.0196	0.0118	0.0128
	(0.0461)	(0.0456)	(0.0460)	(0.0459)	(0.0453)	(0.0453)
GALI (lim. with act.)	0.0118	0.0284	0.0386	0.0426	0.0431	0.0427
	(0.0354)	(0.0340)	(0.0340)	(0.0342)	(0.0340)	(0.0340)
EURO-D (depr. scale)	0.00944	0.0130**	0.0143**	0.0139**	0.0143**	0.0142**
	(0.00615)	(0.00616)	(0.00615)	(0.00617)	(0.00610)	(0.00611)
Year education		0.0405***	0.0367***	0.0360***	0.0349***	0.0349***
		(0.0114)	(0.0109)	(0.0110)	(0.0110)	(0.0110)
edu quartile _2		-0.0163	-0.0260	-0.0259	-0.0283	-0.0281
		(0.0559)	(0.0549)	(0.0548)	(0.0545)	(0.0545)
edu quartile _3		-0.0858	-0.0954	-0.0938	-0.102	-0.102
		(0.0663)	(0.0641)	(0.0638)	(0.0642)	(0.0641)
edu quartile _4		-0.0260	-0.0643	-0.0621	-0.0782	-0.0786
		(0.107)	(0.105)	(0.104)	(0.104)	(0.104)
Own 2d home			0.121***	0.111**	0.113***	0.113***
			(0.0433)	(0.0431)	(0.0429)	(0.0429)
asset			0.0450***	0.0530***	0.0521***	0.0520***
			(0.0161)	(0.0173)	(0.0173)	(0.0173)

mortgage			-0.0368	-0.00508	-0.0261	-0.0255
			(0.0506)	(0.0523)	(0.0537)	(0.0537)
debt			0.101***	0.101***	0.0988***	0.0982***
			(0.0364)	(0.0362)	(0.0359)	(0.0358)
Asset quartile_2			-0.00731	0.0375	0.0383	0.0374
			(0.0361)	(0.0442)	(0.0442)	(0.0441)
Asset quartile_3			0.0888*	0.140**	0.135**	0.135**
			(0.0459)	(0.0557)	(0.0565)	(0.0565)
Asset quartile_4			0.0857*	0.141***	0.144***	0.143***
			(0.0479)	(0.0530)	(0.0538)	(0.0538)
owner				-0.00984	-0.0288	-0.0280
				(0.0518)	(0.0530)	(0.0528)
tenant				0.107*	0.0166	0.0167
				(0.0587)	(0.0614)	(0.0612)
Submarket rent				0.0287	0.0399	0.0403
				(0.0833)	(0.0823)	(0.0823)
Length of tenure					-0.00165	-0.00166
					(0.00110)	(0.00110)
Big city					0.0317	0.0331
					(0.0540)	(0.0539)
suburbs					-0.0175	-0.0170
					(0.0537)	(0.0536)
Small town					-0.0550	-0.0544
					(0.0462)	(0.0462)
Rural area					-0.115**	-0.115**
					(0.0481)	(0.0481)
house					0.0164	0.0174
					(0.0469)	(0.0468)
Row house					0.0527	0.0528
					(0.0621)	(0.0620)
flat 3 to 8 floors					0.128*	0.128*
					(0.0668)	(0.0667)
flat 9 +					0.0103	0.0103
					(0.0627)	(0.0626)
High rise					0.0173	0.0194
					(0.100)	(0.100)
Constant	-4.443**	-4.930***	-4.585**	-4.754**	-4.507**	-4.384**
	(1.896)	(1.830)	(1.847)	(1.865)	(1.878)	(1.879)
Observations	21,953	21,953	21,953	21,953	21,953	21,953
R-squared	0.157	0.175	0.187	0.188	0.194	0.194
Test ret + early ret=0						0.3019

All models include age and age squared interacted with country dummies.

Robust standard errors clustered at the household level in parentheses. *** p<0.01, ** p<0.05, * p<0.1, §§ p<0.15, § p<0.2

Table 5bis. Males number of family confidants OLS (unweighted specification)

	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	demo ctrl	+education	+wealth	+tenure	+location	+early ret
(self-) employed	ref	ref	ref	ref	ref	ref
Retired	**-0.00482**	**0.0148**	**0.0526***	**0.0585***	**0.0590***	**0.0664****
	(0.0308)	**(0.0310)**	**(0.0312)**	**(0.0312)**	**(0.0312)**	**(0.0321)**
Early retired						**-0.0377**
						(0.0335)
Retired and employed	0.0961**	0.100**	0.100**	0.103**	0.101**	0.0994**
	(0.0443)	(0.0442)	(0.0441)	(0.0442)	(0.0442)	(0.0442)
unemployed	-0.135**	-0.113**	-0.0438	-0.0430	-0.0441	-0.0429
	(0.0556)	(0.0555)	(0.0559)	(0.0558)	(0.0557)	(0.0557)
Homemaker	-0.111	-0.0870	-0.0338	-0.0310	-0.0278	-0.0271
	(0.136)	(0.136)	(0.134)	(0.136)	(0.136)	(0.136)
Sick or disabled	-0.0639	-0.0412	-0.000286	0.00249	0.00700	0.00696
	(0.0542)	(0.0542)	(0.0544)	(0.0544)	(0.0543)	(0.0543)
Other	0.226	0.236	0.242	0.234	0.241	0.240
	(0.156)	(0.158)	(0.156)	(0.156)	(0.156)	(0.156)
Never held paid job	-0.326**	-0.313**	-0.253*	-0.256*	-0.267*	-0.266*
	(0.147)	(0.148)	(0.149)	(0.149)	(0.148)	(0.148)
No brother	-0.0790***	-0.0843***	-0.0891***	-0.0898***	-0.0914***	-0.0914***
	(0.0188)	(0.0188)	(0.0187)	(0.0187)	(0.0188)	(0.0188)
No sister	-0.0728***	-0.0811***	-0.0819***	-0.0821***	-0.0848***	-0.0847***
	(0.0191)	(0.0192)	(0.0191)	(0.0191)	(0.0191)	(0.0191)
Nb grand child	0.00925*	0.0116**	0.0136***	0.0133***	0.0144***	0.0145***
	(0.00490)	(0.00491)	(0.00490)	(0.00489)	(0.00490)	(0.00491)
Registered partnership	-0.176***	-0.169***	-0.155**	-0.158**	-0.160**	-0.160**
	(0.0652)	(0.0647)	(0.0652)	(0.0653)	(0.0655)	(0.0655)
Married separated	-0.471***	-0.473***	-0.427***	-0.431***	-0.429***	-0.429***
	(0.0774)	(0.0774)	(0.0773)	(0.0772)	(0.0770)	(0.0770)
Never married	-0.365***	-0.347***	-0.293***	-0.296***	-0.289***	-0.289***
	(0.0456)	(0.0457)	(0.0459)	(0.0459)	(0.0462)	(0.0462)
Divorced	-0.621***	-0.618***	-0.547***	-0.552***	-0.548***	-0.548***
	(0.0433)	(0.0431)	(0.0435)	(0.0436)	(0.0437)	(0.0437)
Widowed	-0.266***	-0.260***	-0.232***	-0.236***	-0.233***	-0.234***
	(0.0496)	(0.0495)	(0.0492)	(0.0491)	(0.0491)	(0.0491)
unregistered partnership	-0.153***	-0.144***	-0.133***	-0.137***	-0.134***	-0.133***
	(0.0380)	(0.0380)	(0.0379)	(0.0379)	(0.0380)	(0.0380)
Household size	-0.0122	-0.00886	-0.00583	-0.00668	-0.00322	-0.00332
	(0.0129)	(0.0129)	(0.0128)	(0.0129)	(0.0129)	(0.0129)
One child	0.366***	0.364***	0.359***	0.358***	0.357***	0.358***
	(0.0327)	(0.0327)	(0.0326)	(0.0326)	(0.0327)	(0.0327)
2 children	0.606***	0.601***	0.582***	0.582***	0.583***	0.583***
	(0.0321)	(0.0321)	(0.0321)	(0.0321)	(0.0321)	(0.0321)
3 children	0.732***	0.729***	0.714***	0.715***	0.723***	0.723***
	(0.0400)	(0.0400)	(0.0399)	(0.0399)	(0.0400)	(0.0400)
4+ children	0.711***	0.707***	0.702***	0.702***	0.711***	0.711***
	(0.0520)	(0.0520)	(0.0518)	(0.0518)	(0.0519)	(0.0519)
1+ adl limitations	-0.0332	-0.0314	-0.0298	-0.0303	-0.0325	-0.0329
	(0.0366)	(0.0365)	(0.0364)	(0.0365)	(0.0364)	(0.0364)
1+ iadl limitations	0.136***	0.143***	0.161***	0.161***	0.164***	0.164***
	(0.0354)	(0.0354)	(0.0352)	(0.0352)	(0.0353)	(0.0353)
GALI (lim. with act.)	0.0494**	0.0543***	0.0612***	0.0616***	0.0624***	0.0627***
	(0.0208)	(0.0208)	(0.0208)	(0.0208)	(0.0207)	(0.0207)
EURO-D (depr. scale)	-0.0284***	-0.0274***	-0.0256***	-0.0255***	-0.0253***	-0.0253***
	(0.00507)	(0.00507)	(0.00510)	(0.00509)	(0.00510)	(0.00510)
Year education		0.00276	0.000696	0.000417	9.53e-05	0.000110
		(0.00525)	(0.00524)	(0.00524)	(0.00525)	(0.00525)
edu quartile _2		0.0673**	0.0581*	0.0579*	0.0532*	0.0535*
		(0.0312)	(0.0313)	(0.0313)	(0.0313)	(0.0313)
edu quartile _3		0.121***	0.106**	0.104**	0.0969**	0.0971**
		(0.0421)	(0.0421)	(0.0421)	(0.0422)	(0.0422)
edu quartile _4		0.135**	0.0933	0.0909	0.0791	0.0792
		(0.0608)	(0.0608)	(0.0608)	(0.0609)	(0.0609)
Own 2d home			0.118***	0.107***	0.105***	0.105***
			(0.0252)	(0.0255)	(0.0257)	(0.0257)
asset			0.0632***	0.0684***	0.0676***	0.0676***
			(0.00958)	(0.00979)	(0.00981)	(0.00981)

mortgage			-0.0215	0.00374	0.00553	0.00575
			(0.0298)	(0.0315)	(0.0317)	(0.0317)
debt			0.00696	0.00533	0.00364	0.00423
			(0.0228)	(0.0229)	(0.0229)	(0.0229)
Asset quartile_2			0.00492	0.0481	0.0469	0.0473
			(0.0280)	(0.0313)	(0.0313)	(0.0313)
Asset quartile_3			-0.0134	0.0383	0.0399	0.0406
			(0.0295)	(0.0335)	(0.0337)	(0.0337)
Asset quartile_4			0.0447	0.0992***	0.104***	0.105***
			(0.0334)	(0.0373)	(0.0378)	(0.0378)
owner				-0.140***	-0.159***	-0.159***
				(0.0482)	(0.0484)	(0.0485)
tenant				-0.0622	-0.105*	-0.106*
				(0.0535)	(0.0555)	(0.0555)
Submarket rent				0.0409	0.0334	0.0334
				(0.0505)	(0.0507)	(0.0507)
Length of tenure					0.000779	0.000815
					(0.000656)	(0.000656)
Big city					0.0703**	0.0696**
					(0.0348)	(0.0347)
suburbs					0.0192	0.0191
					(0.0359)	(0.0359)
Small town					0.0615**	0.0617**
					(0.0303)	(0.0303)
Rural area					0.00170	0.00170
					(0.0313)	(0.0313)
house					0.0985**	0.0989**
					(0.0402)	(0.0402)
Row house					0.0690	0.0697
					(0.0470)	(0.0470)
flat 3 to 8 floors					0.116**	0.117**
					(0.0498)	(0.0498)
flat 9 +					0.146***	0.147***
					(0.0479)	(0.0479)
High rise					0.206***	0.208***
					(0.0691)	(0.0691)
Constant	3.109***	3.150***	3.687***	3.792***	3.708***	3.629***
	(1.016)	(1.015)	(1.016)	(1.016)	(1.016)	(1.019)
Observations	18,073	18,073	18,073	18,073	18,073	18,073
R-squared	0.085	0.087	0.093	0.094	0.096	0.096
						0.4786

All models include age and age squared interacted with country dummies.
Robust standard errors clustered at the household level in parentheses. *** p<0.01, ** p<0.05, * p<0.1, §§ p<0.15, § p<0.2

Table 5bisw. Males number of family confidants OLS (weighted specification)

VARIABLES	(1) demo ctrl	(2) +education	(3) +wealth	(4) +tenure	(5) +location	(6) +early ret
(self-) employed	ref	ref	ref	ref	ref	ref
Retired	**-0.0109**	**0.000605**	**0.0492**	**0.0625**	**0.0711**	**0.0862**
	(0.0700)	**(0.0709)**	**(0.0684)**	**(0.0682)**	**(0.0664)**	**(0.0690)**
Early retired						**-0.0473**
						(0.0565)
Retired and employed	0.0256	0.0265	0.0302	0.0368	0.0511	0.0484
	(0.0852)	(0.0855)	(0.0860)	(0.0861)	(0.0844)	(0.0845)
unemployed	-0.435***	-0.417***	-0.309***	-0.299***	-0.300***	-0.299**
	(0.130)	(0.129)	(0.117)	(0.116)	(0.116)	(0.116)
Homemaker	-0.420	-0.396	-0.233	-0.244	-0.233	-0.232
	(0.319)	(0.330)	(0.318)	(0.331)	(0.329)	(0.329)
Sick or disabled	-0.0435	-0.0233	0.0357	0.0503	0.0629	0.0629
	(0.128)	(0.127)	(0.119)	(0.118)	(0.118)	(0.118)
Other	0.170	0.180	0.262	0.228	0.247	0.245
	(0.204)	(0.200)	(0.205)	(0.211)	(0.206)	(0.206)
Never held paid job	-0.443	-0.431	-0.363	-0.364	-0.365	-0.360
	(0.294)	(0.295)	(0.291)	(0.285)	(0.278)	(0.278)
No brother	-0.0939**	-0.0994**	-0.108**	-0.110**	-0.111**	-0.112**
	(0.0454)	(0.0453)	(0.0449)	(0.0444)	(0.0436)	(0.0437)
No sister	-0.0491	-0.0511	-0.0566	-0.0574	-0.0659	-0.0656
	(0.0483)	(0.0483)	(0.0475)	(0.0468)	(0.0458)	(0.0458)
Nb grand child	0.0143	0.0153	0.0158	0.0152	0.0169	0.0169
	(0.0122)	(0.0121)	(0.0120)	(0.0118)	(0.0116)	(0.0116)
Registered partnership	-0.191**	-0.181**	-0.167*	-0.172*	-0.181*	-0.182*
	(0.0882)	(0.0881)	(0.0899)	(0.0910)	(0.0941)	(0.0940)
Married separated	0.0571	0.0499	0.100	0.0649	0.0724	0.0729
	(0.312)	(0.306)	(0.310)	(0.291)	(0.297)	(0.297)
Never married	-0.336***	-0.326***	-0.246**	-0.243**	-0.245**	-0.245**
	(0.105)	(0.105)	(0.105)	(0.106)	(0.104)	(0.104)
Divorced	-0.730***	-0.729***	-0.662***	-0.667***	-0.677***	-0.678***
	(0.0883)	(0.0887)	(0.0896)	(0.0901)	(0.0898)	(0.0899)
Widowed	-0.0847	-0.0774	-0.0535	-0.0688	-0.0684	-0.0714
	(0.114)	(0.114)	(0.112)	(0.108)	(0.105)	(0.105)
unregistered partnership	-0.0655	-0.0545	-0.0710	-0.0807	-0.0825	-0.0816
	(0.0795)	(0.0794)	(0.0783)	(0.0785)	(0.0776)	(0.0777)
Household size	0.0140	0.0160	0.0155	0.0147	0.0211	0.0210
	(0.0287)	(0.0287)	(0.0277)	(0.0278)	(0.0269)	(0.0270)
One child	0.447***	0.446***	0.450***	0.441***	0.440***	0.439***
	(0.0812)	(0.0808)	(0.0806)	(0.0787)	(0.0781)	(0.0781)
2 children	0.536***	0.538***	0.530***	0.531***	0.538***	0.537***
	(0.0731)	(0.0729)	(0.0717)	(0.0712)	(0.0708)	(0.0709)
3 children	0.625***	0.630***	0.630***	0.637***	0.643***	0.643***
	(0.103)	(0.103)	(0.0993)	(0.0986)	(0.0969)	(0.0969)
4+ children	0.454***	0.459***	0.472***	0.472***	0.496***	0.495***
	(0.108)	(0.108)	(0.106)	(0.106)	(0.106)	(0.106)
1+ adl limitations	-0.0762	-0.0765	-0.0513	-0.0555	-0.0525	-0.0527
	(0.0800)	(0.0807)	(0.0780)	(0.0779)	(0.0775)	(0.0775)
1+ iadl limitations	0.118*	0.122*	0.141**	0.145**	0.148**	0.148**
	(0.0685)	(0.0688)	(0.0672)	(0.0669)	(0.0668)	(0.0669)
GALI (lim. with act.)	0.129***	0.134***	0.137***	0.133***	0.132***	0.132***
	(0.0491)	(0.0491)	(0.0481)	(0.0475)	(0.0468)	(0.0468)
EURO-D (depr. scale)	-0.0355***	-0.0353***	-0.0340***	-0.0331***	-0.0338***	-0.0338***
	(0.0118)	(0.0118)	(0.0118)	(0.0118)	(0.0116)	(0.0116)
Year education		0.00104	-0.00441	-0.00604	-0.00817	-0.00812
		(0.0110)	(0.0113)	(0.0113)	(0.0114)	(0.0114)
edu quartile _2		0.0130	0.00789	0.00596	-0.000187	2.15e-05
		(0.0717)	(0.0699)	(0.0696)	(0.0679)	(0.0679)
edu quartile _3		0.104	0.105	0.107	0.107	0.107
		(0.0937)	(0.0917)	(0.0916)	(0.0916)	(0.0916)
edu quartile _4		0.0806	0.0652	0.0672	0.0650	0.0642
		(0.136)	(0.135)	(0.135)	(0.136)	(0.135)
Own 2d home			0.0102	-0.0110	-0.0308	-0.0314
			(0.0548)	(0.0567)	(0.0570)	(0.0571)
asset			0.0967***	0.108***	0.103***	0.103***

			(0.0214)	(0.0221)	(0.0219)	(0.0219)
mortgage			0.147**	0.197**	0.188**	0.188***
			(0.0743)	(0.0771)	(0.0729)	(0.0728)
debt			0.0331	0.0329	0.0246	0.0253
			(0.0505)	(0.0503)	(0.0506)	(0.0506)
Asset quartile_2			-0.127*	-0.0403	-0.0253	-0.0252
			(0.0662)	(0.0771)	(0.0762)	(0.0763)
Asset quartile_3			-0.107	0.00220	0.0191	0.0198
			(0.0697)	(0.0823)	(0.0807)	(0.0808)
Asset quartile_4			-0.0627	0.0528	0.100	0.101
			(0.0751)	(0.0862)	(0.0859)	(0.0860)
owner				-0.205**	-0.240**	-0.242**
				(0.0966)	(0.0965)	(0.0966)
tenant				-0.0446	-0.182	-0.184
				(0.109)	(0.113)	(0.114)
Submarket rent				0.148	0.154	0.153
				(0.135)	(0.135)	(0.135)
Length of tenure					-0.000170	-0.000110
					(0.00145)	(0.00146)
Big city					0.0598	0.0596
					(0.0706)	(0.0706)
suburbs					0.248***	0.247***
					(0.0863)	(0.0862)
Small town					0.0684	0.0680
					(0.0611)	(0.0611)
Rural area					0.120*	0.120*
					(0.0668)	(0.0668)
house					0.00282	0.00364
					(0.113)	(0.113)
Row house					0.0253	0.0265
					(0.123)	(0.123)
flat 3 to 8 floors					0.155	0.156
					(0.126)	(0.125)
flat 9 +					0.253*	0.254**
					(0.130)	(0.129)
High rise					0.462*	0.463*
					(0.256)	(0.256)
Constant	3.092	2.917	3.234	3.358	3.839	3.729
	(2.486)	(2.453)	(2.401)	(2.368)	(2.358)	(2.367)
Observations	18,039	18,039	18,039	18,039	18,039	18,039
R-squared	0.083	0.084	0.094	0.097	0.105	0.105
						0.6110

All models include age and age squared interacted with country dummies.
Robust standard errors clustered at the household level in parentheses. *** p<0.01, ** p<0.05, * p<0.1, §§ p<0.15, § p<0.2

Table 6bis. Females number of family confidants OLS (unweighted specification)

	(1)	(2)	(3)	(4)	(5)	(6)
VARIABLES	demo ctrl	+education	+wealth	+tenure	+location	+early ret
(self-) employed	ref	ref	ref	ref	ref	ref
Retired	**-0.0380**	**-0.0248**	**8.60e-05**	**0.00369**	**0.00924**	**0.00343**
	(0.0313)	**(0.0314)**	**(0.0314)**	**(0.0314)**	**(0.0314)**	**(0.0318)**
Early retired						**0.0404**
						(0.0382)
Retired and employed	0.0605	0.0576	0.0508	0.0519	0.0535	0.0547
	(0.0501)	(0.0500)	(0.0499)	(0.0499)	(0.0500)	(0.0500)
unemployed	-0.124*	-0.108	-0.0544	-0.0507	-0.0512	-0.0521
	(0.0684)	(0.0684)	(0.0686)	(0.0687)	(0.0682)	(0.0682)
Homemaker	-0.0533	-0.0305	-0.00646	-0.00235	-0.00156	-0.00180
	(0.0401)	(0.0404)	(0.0403)	(0.0404)	(0.0404)	(0.0404)
Sick or disabled	-0.0776	-0.0561	-0.0159	-0.0148	-0.00769	-0.00742
	(0.0565)	(0.0565)	(0.0564)	(0.0564)	(0.0564)	(0.0564)
Other	-0.105	-0.0896	-0.0784	-0.0710	-0.0631	-0.0623
	(0.104)	(0.104)	(0.103)	(0.104)	(0.104)	(0.104)
Never held paid job	-0.156***	-0.145**	-0.114**	-0.114**	-0.111**	-0.113**
	(0.0567)	(0.0567)	(0.0565)	(0.0565)	(0.0565)	(0.0565)
No brother	-0.0513***	-0.0581***	-0.0617***	-0.0619***	-0.0646***	-0.0646***
	(0.0183)	(0.0184)	(0.0183)	(0.0183)	(0.0183)	(0.0183)
No sister	-0.178***	-0.186***	-0.190***	-0.191***	-0.193***	-0.193***
	(0.0181)	(0.0181)	(0.0180)	(0.0180)	(0.0180)	(0.0180)
Nb grand child	0.0149***	0.0174***	0.0191***	0.0186***	0.0199***	0.0198***
	(0.00463)	(0.00465)	(0.00464)	(0.00464)	(0.00465)	(0.00465)
Registered partnership	-0.125	-0.127	-0.115	-0.117	-0.114	-0.115
	(0.0811)	(0.0809)	(0.0809)	(0.0806)	(0.0808)	(0.0808)
Married separated	-0.387***	-0.389***	-0.318***	-0.319***	-0.319***	-0.320***
	(0.0580)	(0.0579)	(0.0579)	(0.0579)	(0.0579)	(0.0579)
Never married	-0.490***	-0.489***	-0.399***	-0.397***	-0.407***	-0.407***
	(0.0428)	(0.0428)	(0.0430)	(0.0430)	(0.0429)	(0.0429)
Divorced	-0.558***	-0.560***	-0.462***	-0.460***	-0.471***	-0.471***
	(0.0330)	(0.0330)	(0.0340)	(0.0340)	(0.0341)	(0.0341)
Widowed	-0.396***	-0.386***	-0.313***	-0.313***	-0.314***	-0.314***
	(0.0270)	(0.0270)	(0.0276)	(0.0276)	(0.0275)	(0.0275)
unregistered partnership	-0.115***	-0.111***	-0.0986**	-0.0992**	-0.0952**	-0.0956**
	(0.0421)	(0.0421)	(0.0419)	(0.0420)	(0.0421)	(0.0421)
Household size	0.0153	0.0182	0.0177	0.0161	0.0195	0.0196
	(0.0124)	(0.0124)	(0.0124)	(0.0124)	(0.0124)	(0.0124)
One child	0.356***	0.361***	0.358***	0.356***	0.355***	0.354***
	(0.0328)	(0.0328)	(0.0325)	(0.0325)	(0.0325)	(0.0325)
2 children	0.683***	0.684***	0.671***	0.670***	0.673***	0.672***
	(0.0334)	(0.0334)	(0.0331)	(0.0331)	(0.0331)	(0.0331)
3 children	0.802***	0.804***	0.793***	0.792***	0.802***	0.802***
	(0.0406)	(0.0406)	(0.0403)	(0.0403)	(0.0403)	(0.0403)
4+ children	0.868***	0.872***	0.872***	0.874***	0.881***	0.882***
	(0.0521)	(0.0521)	(0.0519)	(0.0518)	(0.0518)	(0.0518)
1+ adl limitations	-0.0554*	-0.0537	-0.0483	-0.0490	-0.0517	-0.0515
	(0.0332)	(0.0332)	(0.0331)	(0.0332)	(0.0331)	(0.0331)
1+ iadl limitations	0.115***	0.123***	0.131***	0.133***	0.137***	0.137***
	(0.0281)	(0.0281)	(0.0280)	(0.0280)	(0.0280)	(0.0280)
GALI (lim. with act.)	0.0257	0.0305	0.0428**	0.0438**	0.0449**	0.0448**
	(0.0199)	(0.0198)	(0.0198)	(0.0198)	(0.0198)	(0.0198)
EURO-D (depr. scale)	-0.0332***	-0.0312***	-0.0297***	-0.0296***	-0.0296***	-0.0295***
	(0.00409)	(0.00409)	(0.00409)	(0.00409)	(0.00409)	(0.00409)
Year education		-0.00973*	-0.0120**	-0.0121**	-0.0122**	-0.0122**
		(0.00537)	(0.00535)	(0.00535)	(0.00536)	(0.00536)
edu quartile _2		0.114***	0.102***	0.100***	0.0949***	0.0945***
		(0.0314)	(0.0314)	(0.0313)	(0.0314)	(0.0314)
edu quartile _3		0.180***	0.159***	0.157***	0.148***	0.147***
		(0.0401)	(0.0401)	(0.0401)	(0.0401)	(0.0401)
edu quartile _4		0.265***	0.209***	0.206***	0.192***	0.192***
		(0.0586)	(0.0587)	(0.0587)	(0.0589)	(0.0589)
Own 2d home			0.125***	0.115***	0.106***	0.105***
			(0.0246)	(0.0249)	(0.0251)	(0.0251)
asset			0.0800***	0.0858***	0.0859***	0.0858***
			(0.00928)	(0.00954)	(0.00955)	(0.00955)

mortgage			0.00635	0.0243	0.0288	0.0286
			(0.0300)	(0.0315)	(0.0316)	(0.0316)
debt			0.0444*	0.0440*	0.0414*	0.0411*
			(0.0235)	(0.0236)	(0.0236)	(0.0236)
Asset quartile_2			-0.0544**	-0.0148	-0.0174	-0.0176
			(0.0254)	(0.0277)	(0.0278)	(0.0278)
Asset quartile_3			0.0140	0.0608**	0.0634**	0.0630**
			(0.0277)	(0.0310)	(0.0312)	(0.0312)
Asset quartile_4			0.0141	0.0629*	0.0753**	0.0750**
			(0.0321)	(0.0352)	(0.0357)	(0.0357)
owner				-0.162***	-0.182***	-0.182***
				(0.0428)	(0.0431)	(0.0431)
tenant				-0.109**	-0.159***	-0.159***
				(0.0477)	(0.0491)	(0.0491)
Submarket rent				0.0302	0.0256	0.0259
				(0.0453)	(0.0453)	(0.0453)
Length of tenure					0.000865	0.000842
					(0.000631)	(0.000632)
Big city					0.0674**	0.0687**
					(0.0318)	(0.0318)
suburbs					0.0488	0.0495
					(0.0344)	(0.0344)
Small town					0.0922***	0.0926***
					(0.0289)	(0.0289)
Rural area					0.0336	0.0339
					(0.0300)	(0.0300)
house					0.0328	0.0328
					(0.0409)	(0.0409)
Row house					0.0305	0.0306
					(0.0477)	(0.0477)
Flat 3 to 8					0.0653	0.0653
					(0.0496)	(0.0496)
Flat 9 +					0.146***	0.146***
					(0.0478)	(0.0478)
High rise					0.293***	0.292***
					(0.0663)	(0.0663)
Constant	2.764***	2.707***	2.842***	2.963***	3.075***	3.124***
	(0.976)	(0.976)	(0.973)	(0.973)	(0.974)	(0.975)
Observations	21,987	21,987	21,987	21,987	21,987	21,987
R-squared	0.106	0.108	0.116	0.116	0.119	0.119
						0.3349

All models include age and age squared interacted with country dummies.
Robust standard errors clustered at the household level in parentheses. *** p<0.01, ** p<0.05, * p<0.1, §§ p<0.15, § p<0.2

Table 6bisw. Females number of family confidants OLS (weighted specification)

VARIABLES	(1) demo ctrl	(2) +education	(3) +wealth	(4) +tenure	(5) +location	(6) +early ret
(self-) employed						
Retired	**-0.0495**	**-0.0458**	**-0.0237**	**-0.0213**	**-0.0158**	**-0.0108**
	(0.0782)	**(0.0779)**	**(0.0760)**	**(0.0760)**	**(0.0750)**	**(0.0776)**
Early retired						-0.0200
						(0.0722)
Retired and employed	-0.0913	-0.0942	-0.106	-0.105	-0.0907	-0.0909
	(0.105)	(0.104)	(0.102)	(0.102)	(0.100)	(0.100)
unemployed	0.0936	0.101	0.148	0.152	0.159	0.160
	(0.145)	(0.145)	(0.147)	(0.146)	(0.146)	(0.146)
Homemaker	-0.0233	-0.0103	-0.000234	0.00350	0.0103	0.0111
	(0.100)	(0.101)	(0.0986)	(0.0986)	(0.0960)	(0.0961)
Sick or disabled	0.0562	0.0737	0.106	0.104	0.131	0.130
	(0.118)	(0.118)	(0.118)	(0.117)	(0.116)	(0.116)
Other	-0.135	-0.130	-0.0979	-0.0939	-0.111	-0.112
	(0.147)	(0.146)	(0.142)	(0.142)	(0.145)	(0.144)
Never held paid job	-0.187*	-0.191*	-0.153	-0.152	-0.153	-0.151
	(0.108)	(0.109)	(0.106)	(0.106)	(0.104)	(0.104)
No brother	-0.0544	-0.0664	-0.0701	-0.0695	-0.0691	-0.0690
	(0.0468)	(0.0472)	(0.0465)	(0.0465)	(0.0457)	(0.0457)
No sister	-0.176***	-0.182***	-0.182***	-0.183***	-0.184***	-0.184***
	(0.0452)	(0.0453)	(0.0446)	(0.0446)	(0.0435)	(0.0435)
Nb grand child	0.00602	0.00942	0.00966	0.00930	0.0105	0.0105
	(0.00899)	(0.00900)	(0.00893)	(0.00892)	(0.00877)	(0.00877)
Registered partnership	0.240	0.230	0.238	0.235	0.205	0.206
	(0.278)	(0.275)	(0.277)	(0.276)	(0.265)	(0.265)
Married separated	-0.305***	-0.317***	-0.255**	-0.259**	-0.268**	-0.268**
	(0.115)	(0.111)	(0.113)	(0.112)	(0.117)	(0.117)
Never married	-0.575***	-0.579***	-0.474***	-0.477***	-0.480***	-0.481***
	(0.105)	(0.105)	(0.105)	(0.106)	(0.105)	(0.105)
Divorced	-0.460***	-0.464***	-0.378***	-0.379***	-0.402***	-0.401***
	(0.105)	(0.105)	(0.108)	(0.108)	(0.107)	(0.108)
Widowed	-0.348***	-0.334***	-0.266***	-0.268***	-0.270***	-0.270***
	(0.0619)	(0.0619)	(0.0628)	(0.0628)	(0.0614)	(0.0614)
unregistered partnership	-0.232***	-0.231***	-0.218***	-0.218***	-0.201**	-0.201**
	(0.0820)	(0.0804)	(0.0811)	(0.0812)	(0.0802)	(0.0801)
Household size	0.0355	0.0396	0.0393	0.0362	0.0353	0.0352
	(0.0250)	(0.0248)	(0.0247)	(0.0247)	(0.0247)	(0.0247)
One child	0.416***	0.417***	0.429***	0.430***	0.426***	0.426***
	(0.0894)	(0.0889)	(0.0882)	(0.0881)	(0.0869)	(0.0869)
2 children	0.645***	0.644***	0.656***	0.656***	0.659***	0.659***
	(0.0847)	(0.0845)	(0.0832)	(0.0833)	(0.0821)	(0.0821)
3 children	0.763***	0.759***	0.774***	0.774***	0.783***	0.783***
	(0.101)	(0.100)	(0.0984)	(0.0984)	(0.0969)	(0.0969)
4+ children	0.893***	0.895***	0.921***	0.925***	0.940***	0.940***
	(0.111)	(0.111)	(0.110)	(0.110)	(0.108)	(0.108)
1+ adl limitations	0.0627	0.0700	0.0835	0.0825	0.0826	0.0826
	(0.0832)	(0.0829)	(0.0820)	(0.0820)	(0.0806)	(0.0806)
1+ iadl limitations	0.0751	0.0830	0.0962	0.0965	0.0945	0.0942
	(0.0640)	(0.0635)	(0.0633)	(0.0632)	(0.0627)	(0.0627)
GALI (lim. with act.)	-0.0119	-0.00425	0.000120	0.000955	-0.0101	-0.0100
	(0.0459)	(0.0455)	(0.0455)	(0.0455)	(0.0450)	(0.0451)
EURO-D (depr. scale)	-0.0432***	-0.0416***	-0.0409***	-0.0408***	-0.0392***	-0.0392***
	(0.0101)	(0.0100)	(0.00983)	(0.00983)	(0.00967)	(0.00967)
Year education		-0.0111	-0.0150	-0.0152	-0.0168	-0.0168
		(0.0126)	(0.0126)	(0.0126)	(0.0125)	(0.0125)
edu quartile _2		0.179***	0.176***	0.177***	0.181***	0.181***
		(0.0686)	(0.0684)	(0.0684)	(0.0677)	(0.0677)
edu quartile _3		0.265***	0.259***	0.259***	0.254***	0.255***

		(0.0924)	(0.0904)	(0.0903)	(0.0883)	(0.0883)
edu quartile _4		0.269**	0.235*	0.235*	0.238*	0.238*
		(0.130)	(0.128)	(0.128)	(0.127)	(0.127)
Own 2d home			0.0863	0.0800	0.0690	0.0690
			(0.0631)	(0.0639)	(0.0630)	(0.0630)
asset			0.113***	0.116***	0.118***	0.118***
			(0.0241)	(0.0247)	(0.0243)	(0.0243)
mortgage			0.0273	0.0362	0.0393	0.0391
			(0.0768)	(0.0774)	(0.0759)	(0.0759)
debt			0.00845	0.00954	0.00944	0.00965
			(0.0481)	(0.0481)	(0.0474)	(0.0474)
Asset quartile_2			-0.171***	-0.144**	-0.137**	-0.137**
			(0.0613)	(0.0679)	(0.0676)	(0.0676)
Asset quartile_3			-0.0886	-0.0581	-0.0624	-0.0622
			(0.0672)	(0.0783)	(0.0776)	(0.0776)
Asset quartile_4			-0.157**	-0.125	-0.113	-0.113
			(0.0787)	(0.0871)	(0.0874)	(0.0873)
owner				-0.138	-0.150	-0.151
				(0.0926)	(0.0939)	(0.0940)
tenant				-0.105	-0.166	-0.166
				(0.104)	(0.111)	(0.111)
Submarket rent				0.00259	-0.0154	-0.0155
				(0.104)	(0.102)	(0.102)
Length of tenure					0.000914	0.000919
					(0.00146)	(0.00146)
Big city					0.0238	0.0234
					(0.0700)	(0.0702)
suburbs					0.154*	0.154*
					(0.0900)	(0.0900)
Small town					-0.0956	-0.0958
					(0.0610)	(0.0610)
Rural area					0.117*	0.117*
					(0.0658)	(0.0658)
house					0.00410	0.00379
					(0.0998)	(0.0997)
Row house					-0.0250	-0.0250
					(0.109)	(0.109)
Flat 3 to 8					0.0744	0.0745
					(0.114)	(0.114)
Flat 9 +					0.242**	0.242**
					(0.113)	(0.113)
High rise					0.259	0.258
					(0.172)	(0.172)
Constant	4.631*	4.196	4.145*	4.300*	4.334*	4.296*
	(2.554)	(2.560)	(2.476)	(2.474)	(2.446)	(2.448)
Observations	21,953	21,953	21,953	21,953	21,953	21,953
R-squared	0.095	0.099	0.107	0.108	0.115	0.115
						0.7356

All models include age and age squared interacted with country dummies.
Robust standard errors clustered at the household level in parentheses. *** p<0.01, ** p<0.05, * p<0.1, §§ p<0.15, § p<0.2

Table 7. Effect of being retired on males' number of friends: OLS and IV strategy (unweighted)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
VARIABLES	OLS all	OLS all	OLS all	OLS non SE	OLS non SE active	IV all	IV all	IV all	IV non SE	IV non SE active
(self-)employed	ref	ref	ref	ref	ref	ref	ref	ref	ref	ref
Retired	**-0.0440****	**-0.0791*****	**-0.0754*****	**-0.0799*****	**-0.0817*****	0.0821	**0.0547**	**0.0871**	**0.152**	**0.192§**
	(0.0220)	**(0.0219)**	**(0.0220)**	**(0.0242)**	**(0.0247)**	(0.132)	**(0.130)**	**(0.132)**	**(0.146)**	**(0.149)**
unemployed	-0.0918**	-0.129***	-0.0774**	-0.0864**	-0.0832**	-0.0439	-0.0806	-0.0193	0.00103	0.0164
	(0.0372)	(0.0368)	(0.0371)	(0.0387)	(0.0388)	(0.0632)	(0.0609)	(0.0608)	(0.0681)	(0.0677)
Retired and employed	0.0391	0.0361	0.0335	0.0386	0.0360	0.129	0.133	0.152	0.207*	0.236**
	(0.0337)	(0.0340)	(0.0343)	(0.0403)	(0.0405)	(0.0995)	(0.0994)	(0.102)	(0.114)	(0.116)
homemaker	0.0963	0.0651	0.114	0.0681		0.168	0.139	0.203	0.201	
	(0.139)	(0.140)	(0.147)	(0.141)		(0.156)	(0.157)	(0.163)	(0.164)	
Sick or disabled	-0.0492	-0.0851**	-0.0407	-0.0733**		0.00742	-0.0263	0.0236	0.0223	
	(0.0372)	(0.0375)	(0.0367)	(0.0355)		(0.0694)	(0.0678)	(0.0634)	(0.0682)	
other	0.0555	0.0403	0.0970	0.0402		0.115	0.104	0.173	0.153	
	(0.121)	(0.122)	(0.125)	(0.149)		(0.134)	(0.134)	(0.137)	(0.163)	
Never held paid job	0.0549	0.0227	0.0288	0.0658		0.0740	0.0406	0.0519	0.100	
	(0.110)	(0.110)	(0.115)	(0.116)		(0.113)	(0.112)	(0.117)	(0.119)	
Year education	0.00503	0.00739*	0.00720*	0.00470	0.00344	0.00554	0.00807**	0.00808**	0.00551	0.00442
	(0.00392)	(0.00394)	(0.00396)	(0.00428)	(0.00439)	(0.00398)	(0.00402)	(0.00405)	(0.00435)	(0.00447)
Edu quartile_2	0.0298	0.0402**	0.0401*	0.0396*	0.0441**	0.0302	0.0409**	0.0412**	0.0426*	0.0480**
	(0.0204)	(0.0204)	(0.0205)	(0.0218)	(0.0221)	(0.0204)	(0.0204)	(0.0205)	(0.0218)	(0.0222)
Edu quartile _3	0.0564*	0.0781***	0.0783***	0.0802**	0.0874***	0.0559*	0.0784***	0.0791***	0.0838***	0.0921***
	(0.0289)	(0.0289)	(0.0291)	(0.0312)	(0.0319)	(0.0289)	(0.0289)	(0.0291)	(0.0313)	(0.0320)
Edu quartile _4	0.126***	0.174***	0.178***	0.202***	0.221***	0.128***	0.179***	0.185***	0.215***	0.236***
	(0.0428)	(0.0427)	(0.0430)	(0.0459)	(0.0470)	(0.0427)	(0.0427)	(0.0431)	(0.0463)	(0.0475)
Own 2d home	0.0599***					0.0613***				
	(0.0176)					(0.0176)				
asset	0.0318***					0.0353***				
	(0.00672)					(0.00757)				
mortgage	0.0391*					0.0432*				
	(0.0231)					(0.0237)				
debt	0.0865***					0.0893***				
	(0.0177)					(0.0177)				
Asset quartile_2	0.0275					0.0284				
	(0.0199)					(0.0200)				
Asset quartile_3	0.0585***					0.0591***				
	(0.0216)					(0.0216)				
Asset quartile_4	0.0930***					0.0972***				
	(0.0241)					(0.0247)				
Home owner	0.0241					0.0183				
	(0.0273)					(0.0281)				
tenant	0.0974***					0.0999***				
	(0.0350)					(0.0352)				
Submarket rent	0.00543					0.00549				
	(0.0390)					(0.0390)				
Length of tenure	-0.000578					-0.000582				
	(0.000429)					(0.000428)				
Big city	0.110***					0.113***				
	(0.0256)					(0.0257)				
suburbs	-0.00944					-0.00659				
	(0.0252)					(0.0252)				
Small town	0.00272					0.00323				
	(0.0203)					(0.0203)				
rural	-0.0447**					-0.0459**				
	(0.0214)					(0.0214)				
house	0.0163					0.0132				
	(0.0238)					(0.0241)				
Row house	0.0555*					0.0538*				
	(0.0304)					(0.0304)				
flat 3 to 8 floors	0.0441					0.0407				
	(0.0324)					(0.0327)				
Flat 9 +	0.0455					0.0416				
	(0.0304)					(0.0308)				
High rise	0.0422					0.0387				
	(0.0462)					(0.0464)				

Constant	-1.252*	-1.573**	-1.136	-1.651**	-1.768**	0.440	0.232	1.083	1.648	2.391
	(0.703)	(0.703)	(0.701)	(0.738)	(0.767)	(1.898)	(1.880)	(1.930)	(2.188)	(2.370)
Observations	18,073	18,073	18,073	15,328	14,647	18,073	18,073	18,073	15,328	14,647
R-squared	0.090	0.078	0.057	0.060	0.061	0.089	0.076	0.054	0.054	0.053
controls										
demographics	yes	yes	no	no	no	yes	yes	no	no	no
education	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
resources	yes	no	no	no	no	yes	no	no	no	no
F test of endogeneity						0.9991	1.0935	1.5688	2.6363	3.5292
						(0.3325)	(0.2957)	(0.2104)	(0.1045)	(0.0603)

All models include age and age squared interacted with country dummies. Non SE: non self-employed.

Robust standard errors clustered at the household level in parentheses. *** p<0.01, ** p<0.05, * p<0.1, §§ p<0.15, § p<0.2

Table 8. Effect of being retired on females' number of friends: OLS and IV strategy (unweighted)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
VARIABLES	OLS all	OLS all	OLS all	OLS non SE	OLS non SE active	IV all	IV all	IV all	IV non SE	IV non SE active
(self-)employed										
Retired	**-0.0861*** **	**-0.122*** **	**-0.142*** **	**-0.155*** **	**-0.148*** **	-0.256*	**-0.303** **	**-0.337** **	**-0.384*** **	**-0.332** **
	(0.0226)	**(0.0226)**	**(0.0231)**	**(0.0245)**	**(0.0274)**	(0.140)	**(0.139)**	**(0.142)**	**(0.149)**	**(0.136)**
unemployed	-0.156***	-0.200***	-0.189***	-0.203***	-0.207***	-0.231***	-0.278***	-0.273***	-0.302***	-0.276***
	(0.0444)	(0.0447)	(0.0447)	(0.0462)	(0.0465)	(0.0743)	(0.0733)	(0.0742)	(0.0777)	(0.0670)
Retired and employed	0.0646	0.0662	0.0742*	0.0575	0.0635	-0.0600	-0.0672	-0.0705	-0.112	-0.0731
	(0.0405)	(0.0409)	(0.0418)	(0.0465)	(0.0475)	(0.108)	(0.109)	(0.112)	(0.118)	(0.110)
homemaker	-0.113***	-0.150***	-0.223***	-0.254***		-0.227**	-0.270***	-0.352***	-0.408***	
	(0.0267)	(0.0268)	(0.0272)	(0.0289)		(0.0961)	(0.0953)	(0.0967)	(0.102)	
Sick or disabled	-0.205***	-0.244***	-0.200***	-0.224***		-0.289***	-0.332***	-0.290***	-0.330***	
	(0.0356)	(0.0359)	(0.0349)	(0.0357)		(0.0767)	(0.0760)	(0.0734)	(0.0767)	
other	-0.123**	-0.162***	-0.144**	-0.151**		-0.235**	-0.280**	-0.272**	-0.303***	
	(0.0623)	(0.0622)	(0.0636)	(0.0657)		(0.110)	(0.109)	(0.111)	(0.117)	
Never held paid job	-0.106***	-0.134***	-0.153***	-0.154***		-0.126***	-0.155***	-0.175***	-0.180***	
	(0.0269)	(0.0270)	(0.0271)	(0.0277)		(0.0317)	(0.0315)	(0.0316)	(0.0327)	
Year education	0.0164***	0.0189***	0.0208***	0.0172***	0.0185***	0.0160***	0.0183***	0.0201***	0.0164***	0.0179***
	(0.00406)	(0.00410)	(0.00418)	(0.00431)	(0.00494)	(0.00406)	(0.00411)	(0.00420)	(0.00432)	(0.00495)
Edu quartile_2	-0.0109	0.00716	0.0142	0.0176	0.0199	-0.00929	0.00838	0.0153	0.0184	0.0195
	(0.0211)	(0.0212)	(0.0216)	(0.0223)	(0.0251)	(0.0211)	(0.0212)	(0.0216)	(0.0223)	(0.0251)
Edu quartile _3	-0.0431	-0.00970	0.00306	0.0127	0.00490	-0.0406	-0.00789	0.00428	0.0144	0.00439
	(0.0271)	(0.0272)	(0.0276)	(0.0285)	(0.0323)	(0.0271)	(0.0272)	(0.0276)	(0.0285)	(0.0323)
Edu quartile _4	0.0759*	0.150***	0.170***	0.182***	0.184***	0.0716*	0.143***	0.162***	0.174***	0.176***
	(0.0418)	(0.0419)	(0.0426)	(0.0440)	(0.0496)	(0.0419)	(0.0422)	(0.0431)	(0.0444)	(0.0499)
Own 2d home	0.0354**					0.0348**				
	(0.0173)					(0.0173)				
asset	0.0630***					0.0600***				
	(0.00698)					(0.00730)				
mortgage	0.0504**					0.0431*				
	(0.0238)					(0.0245)				
debt	0.0907***					0.0866***				
	(0.0184)					(0.0187)				
Asset quartile_2	0.0477**					0.0454**				
	(0.0188)					(0.0189)				
Asset quartile_3	0.0756***					0.0749***				
	(0.0208)					(0.0208)				
Asset quartile_4	0.101***					0.0976***				
	(0.0235)					(0.0236)				
Home owner	-0.0693***					-0.0640**				
	(0.0255)					(0.0259)				
tenant	-0.0209					-0.0243				
	(0.0324)					(0.0325)				
Submarket rent	0.0615*					0.0621*				
	(0.0361)					(0.0360)				
Length of tenure	-0.00151***					-0.00155***				
	(0.000420)					(0.000419)				
Big city	0.135***					0.131***				
	(0.0238)					(0.0240)				
suburbs	0.00474					0.00277				
	(0.0252)					(0.0253)				
Small town	0.00117					0.000790				
	(0.0200)					(0.0200)				
rural	-0.0630***					-0.0626***				

	(0.0207)					(0.0207)				
house	0.0418*					0.0404*				
	(0.0220)					(0.0221)				
Row house	0.0616**					0.0583**				
	(0.0281)					(0.0283)				
flat 3 to 8 floors	0.0705**					0.0687**				
	(0.0295)					(0.0295)				
Flat 9 +	0.0821***					0.0800***				
	(0.0283)					(0.0284)				
High rise	0.0529					0.0495				
	(0.0432)					(0.0434)				
Constant	-2.559***	-2.733***	-2.333***	-2.324***	-1.879**	-4.600**	-4.922***	-4.702**	-5.145***	-4.626**
	(0.654)	(0.657)	(0.663)	(0.689)	(0.826)	(1.789)	(1.803)	(1.848)	(1.946)	(2.173)
Observations	21,987	21,987	21,987	19,905	16,466	21,987	21,987	21,987	19,905	16,466
R-squared	0.160	0.144	0.108	0.107	0.103	0.157	0.141	0.105	0.102	0.100
controls										
demographics	yes	yes	no	no	no	yes	yes	no	no	no
education	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
resources	yes	no	no	no	no	yes	no	no	no	no
F test of endogeneity						1.5335	1.7383	1.9355	2.4618	1.9269
						(0.2156)	(0.1874)	(0.1642)	(0.1167)	(0.1651)

All models include age and age squared interacted with country dummies. Non SE: non self-employed.

Robust standard errors clustered at the household level in parentheses. *** p<0.01, ** p<0.05, * p<0.1, §§ p<0.15, § p<0.2

Table 9. Effect of being retired on males' number of family members in PN (unweighted)

VARIABLES	(1) OLS all	(2) OLS all	(3) OLS all	(4) OLS non SE	(5) OLS non SE active	(6) IV all	(7) IV all	(8) IV all	(9) IV non SE	(10) IV non SE active
(self-)employed										
Retired	**0.0590***	**0.0148**	**0.00601**	**-0.00630**	**-0.00137**	**0.00331**	**-0.0156**	**-0.0593**	**-0.0859**	**-0.0563**
	(0.0312)	**(0.0310)**	**(0.0318)**	**(0.0358)**	**(0.0365)**	**(0.187)**	**(0.184)**	**(0.189)**	**(0.210)**	**(0.212)**
unemployed	-0.0441	-0.113**	-0.226***	-0.263***	-0.264***	-0.0653	-0.124	-0.249***	-0.293***	-0.284***
	(0.0557)	(0.0555)	(0.0577)	(0.0603)	(0.0604)	(0.0903)	(0.0869)	(0.0891)	(0.0991)	(0.0977)
Retired and employed	0.101**	0.100**	0.109**	0.0868*	0.0904*	0.0608	0.0782	0.0613	0.0291	0.0504
	(0.0442)	(0.0442)	(0.0453)	(0.0522)	(0.0525)	(0.139)	(0.139)	(0.144)	(0.159)	(0.162)
homemaker	-0.0278	-0.0870	-0.211	-0.148		-0.0594	-0.104	-0.246	-0.194	
	(0.136)	(0.136)	(0.141)	(0.152)		(0.172)	(0.169)	(0.175)	(0.194)	
Sick or disabled	0.00700	-0.0412	-0.126**	-0.150***		-0.0180	-0.0545	-0.152*	-0.183*	
	(0.0543)	(0.0542)	(0.0542)	(0.0568)		(0.0980)	(0.0952)	(0.0904)	(0.102)	
other	0.241	0.236	0.0929	-0.0349		0.214	0.222	0.0622	-0.0734	
	(0.156)	(0.158)	(0.168)	(0.188)		(0.178)	(0.179)	(0.189)	(0.213)	
Never held paid job	-0.267*	-0.313**	-0.320**	-0.306**		-0.276*	-0.317**	-0.329**	-0.317**	
	(0.148)	(0.148)	(0.149)	(0.150)		(0.150)	(0.150)	(0.151)	(0.153)	
Year education	9.53e-05	0.00276	0.00153	0.00226	0.00179	-0.000133	0.00261	0.00118	0.00198	0.00159
	(0.00525)	(0.00525)	(0.00542)	(0.00590)	(0.00604)	(0.00529)	(0.00532)	(0.00551)	(0.00594)	(0.00608)
Edu quartile_2	0.0532*	0.0673**	0.0576*	0.0668*	0.0639*	0.0530*	0.0671**	0.0572*	0.0658*	0.0632*
	(0.0313)	(0.0312)	(0.0320)	(0.0346)	(0.0356)	(0.0312)	(0.0312)	(0.0320)	(0.0346)	(0.0356)
Edu quartile _3	0.0969**	0.121***	0.110**	0.115**	0.127***	0.0971**	0.121***	0.110**	0.113**	0.126***
	(0.0422)	(0.0421)	(0.0432)	(0.0468)	(0.0481)	(0.0421)	(0.0421)	(0.0431)	(0.0468)	(0.0482)
Edu quartile _4	0.0791	0.135**	0.122*	0.108	0.120*	0.0780	0.134**	0.119*	0.104	0.117*
	(0.0609)	(0.0608)	(0.0624)	(0.0672)	(0.0689)	(0.0608)	(0.0611)	(0.0628)	(0.0680)	(0.0697)
Own 2d home	0.105***					0.104***				
	(0.0257)					(0.0257)				
asset	0.0676***					0.0660***				
	(0.00981)					(0.0111)				
mortgage	0.00553					0.00371				
	(0.0317)					(0.0322)				
debt	0.00364					0.00239				
	(0.0229)					(0.0232)				
Asset quartile_2	0.0469					0.0464				
	(0.0313)					(0.0313)				
Asset quartile_3	0.0399					0.0396				
	(0.0337)					(0.0336)				
Asset quartile_4	0.104***					0.102***				
	(0.0378)					(0.0382)				
Home owner	-0.159***					-0.156***				
	(0.0484)					(0.0491)				
tenant	-0.105*					-0.106*				
	(0.0555)					(0.0555)				
Submarket rent	0.0334					0.0333				
	(0.0507)					(0.0505)				
Length of tenure	0.000779					0.000781				
	(0.000656)					(0.000654)				
Big city	0.0703**					0.0691**				
	(0.0348)					(0.0349)				
suburbs	0.0192					0.0179				
	(0.0359)					(0.0360)				
Small town	0.0615**					0.0613**				
	(0.0303)					(0.0302)				
rural	0.00170					0.00223				
	(0.0313)					(0.0313)				
house	0.0985**					0.0999**				
	(0.0402)					(0.0404)				

Row house	0.0690					0.0698				
	(0.0470)					(0.0470)				
flat 3 to 8 floors	0.116**					0.118**				
	(0.0498)					(0.0499)				
Flat 9 +	0.146***					0.148***				
	(0.0479)					(0.0482)				
High rise	0.206***					0.208***				
	(0.0691)					(0.0692)				
Constant	3.708***	3.150***	2.521**	2.959***	3.085***	2.960	2.741	1.630	1.829	2.252
	(1.016)	(1.015)	(1.034)	(1.130)	(1.173)	(2.673)	(2.646)	(2.751)	(3.139)	(3.378)
Observations	18,073	18,073	18,073	15,328	14,647	18,073	18,073	18,073	15,328	14,647
R-squared	0.096	0.087	0.026	0.027	0.026	0.095	0.087	0.026	0.026	0.026
controls										
demographics	yes	yes	no	no	no	yes	yes	no	no	no
education	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
resources	yes	no	no	no	no	yes	no	no	no	no
Tests of endogeneity Ho: variables are exogenous										
F test						.9140	.0280	.1229	.1482	.0691
						0.7624	(0.8670)	(0.7260)	(0.7003)	(0.7927)

All models include age and age squared interacted with country dummies. Non SE: non self-employed.
Robust standard errors (clustered at the household level) in parentheses. *** p<0.01, ** p<0.05, * p<0.1, § p<0.2

Table 10. Effect of being retired on females' number of family members in PN (unweighted)

VARIABLES	(1) OLS all	(2) OLS all	(3) OLS all	(4) OLS non SE	(5) OLS non SE active	(6) IV all	(7) IV all	(8) IV all	(9) IV non SE	(10) IV non SE active
(self-)employed										
Retired	0.00924	-0.0248	0.00687	0.0132	0.0293	-0.0626	-0.0910	-0.0184	-0.0459	-0.00425
	(0.0314)	(0.0314)	(0.0327)	(0.0347)	(0.0379)	(0.194)	(0.192)	(0.200)	(0.210)	(0.185)
unemployed	-0.0512	-0.108	-0.112	-0.0858	-0.0736	-0.0830	-0.136	-0.123	-0.112	-0.0861
	(0.0682)	(0.0684)	(0.0700)	(0.0724)	(0.0727)	(0.108)	(0.107)	(0.110)	(0.115)	(0.0988)
Retired and employed	0.0535	0.0576	0.0395	0.0413	0.0520	0.000951	0.00876	0.0207	-0.00243	0.0271
	(0.0500)	(0.0500)	(0.0521)	(0.0575)	(0.0587)	(0.148)	(0.148)	(0.156)	(0.163)	(0.146)
homemaker	-0.00156	-0.0305	0.126***	0.134***		-0.0499	-0.0747	0.109	0.0943	
	(0.0404)	(0.0404)	(0.0412)	(0.0432)		(0.135)	(0.133)	(0.138)	(0.146)	
Sick or disabled	-0.00769	-0.0561	-0.118**	-0.110*		-0.0432	-0.0885	-0.130	-0.137	
	(0.0564)	(0.0565)	(0.0581)	(0.0601)		(0.109)	(0.108)	(0.107)	(0.112)	
other	-0.0631	-0.0896	-0.142	-0.125		-0.111	-0.133	-0.158	-0.165	
	(0.104)	(0.104)	(0.108)	(0.115)		(0.165)	(0.163)	(0.169)	(0.181)	
Never held paid job	-0.111**	-0.145**	-0.126**	-0.113*		-0.120**	-0.153**	-0.129**	-0.120*	
	(0.0565)	(0.0567)	(0.0575)	(0.0582)		(0.0605)	(0.0603)	(0.0614)	(0.0624)	
Year education	-0.0122**	-0.00973*	-0.0144**	-0.0165***	-0.0131**	-0.0124**	-0.00993*	-0.0145**	-0.0167***	-0.0132**
	(0.00536)	(0.00537)	(0.00564)	(0.00598)	(0.00660)	(0.00537)	(0.00540)	(0.00567)	(0.00601)	(0.00663)
Edu quartile_2	0.0949***	0.114***	0.0902***	0.112***	0.0978***	0.0956***	0.115***	0.0904***	0.112***	0.0977***
	(0.0314)	(0.0314)	(0.0327)	(0.0343)	(0.0376)	(0.0314)	(0.0314)	(0.0326)	(0.0342)	(0.0376)
Edu quartile_3	0.148***	0.180***	0.147***	0.173***	0.165***	0.149***	0.181***	0.147***	0.173***	0.165***
	(0.0401)	(0.0401)	(0.0418)	(0.0441)	(0.0484)	(0.0402)	(0.0401)	(0.0418)	(0.0441)	(0.0484)
Edu quartile_4	0.192***	0.265***	0.218***	0.257***	0.218***	0.190***	0.263***	0.217***	0.255***	0.217***
	(0.0589)	(0.0586)	(0.0611)	(0.0646)	(0.0705)	(0.0589)	(0.0589)	(0.0616)	(0.0650)	(0.0709)
Own 2d home	0.106***					0.105***				
	(0.0251)					(0.0250)				
asset	0.0859***					0.0846***				
	(0.00955)					(0.0102)				
mortgage	0.0288					0.0257				
	(0.0316)					(0.0326)				
debt	0.0414*					0.0397*				
	(0.0236)					(0.0241)				
Asset quartile_2	-0.0174					-0.0184				
	(0.0278)					(0.0278)				
Asset quartile_3	0.0634**					0.0631**				
	(0.0312)					(0.0311)				
Asset quartile_4	0.0753**					0.0740**				
	(0.0357)					(0.0358)				
Home owner	-0.182***					-0.180***				
	(0.0431)					(0.0435)				
tenant	-0.159***					-0.160***				
	(0.0491)					(0.0492)				
Submarket rent	0.0256					0.0258				
	(0.0453)					(0.0452)				
Length of tenure	0.000865					0.000847				
	(0.000631)					(0.000633)				
Big city	0.0674**					0.0656**				
	(0.0318)					(0.0321)				
suburbs	0.0488					0.0480				
	(0.0344)					(0.0344)				
Small town	0.0922***					0.0921***				
	(0.0289)					(0.0289)				

rural	0.0336					0.0338				
	(0.0300)					(0.0300)				
house	0.0328					0.0322				
	(0.0409)					(0.0408)				
Row house	0.0305					0.0291				
	(0.0477)					(0.0478)				
flat 3 to 8 floors	0.0653					0.0645				
	(0.0496)					(0.0496)				
Flat 9 +	0.146***					0.145***				
	(0.0478)					(0.0477)				
High rise	0.293***					0.291***				
	(0.0663)					(0.0662)				
Constant	3.075***	2.707***	2.339**	1.948*	1.980*	2.214	1.904	2.031	1.220	1.478
	(0.974)	(0.976)	(1.004)	(1.054)	(1.198)	(2.494)	(2.502)	(2.609)	(2.762)	(2.953)
Observations	21,987	21,987	21,987	19,905	16,466	21,987	21,987	21,987	19,905	16,466
R-squared	0.119	0.108	0.025	0.027	0.026	0.118	0.108	0.025	0.026	0.026
controls										
demographics	yes	yes	no	no	no	yes	yes	no	no	no
education	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
resources	yes	no	no	no	no	yes	no	no	no	no
Ho: variables are exogenous										
F test						.1404	.1213	.0163	.08117	.03418
						(0.7079)	(0.7276)	(0.8985)	(0.7757)	(0.8533)

All models include age and age squared interacted with country dummies. Non SE: non self-employed.
Robust standard errors clustered at the household level in parentheses. *** p<0.01, ** p<0.05, * p<0.1, §§ p<0.15, § p<0.2

Table 7w. Effect of being retired on males' number of friends (weighted specification)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
VARIABLES	OLS all	OLS all	OLS all	OLS non SE	OLS non SE active	IV all	IV all	IV all	IV non SE	IV non SE active
(self-)employed										
Retired	**-0.0692**	**-0.0976***	**-0.0878**	**-0.107**	**-0.113**	-0.00735	**-0.0290**	**-0.0475**	**0.0827**	**0.172**
	(0.0552)	**(0.0559)**	**(0.0589)**	**(0.0722)**	**(0.0737)**	(0.233)	**(0.223)**	**(0.230)**	**(0.284)**	**(0.303)**
unemployed	0.0406	0.000651	0.0556	0.0317	0.0314	0.0608	0.0214	0.0675	0.0906	0.117
	(0.0988)	(0.109)	(0.106)	(0.117)	(0.116)	(0.121)	(0.125)	(0.122)	(0.139)	(0.138)
Retired and employed	-0.0144	-0.0137	-0.00961	-0.0141	-0.0198	0.0275	0.0332	0.0181	0.117	0.178
	(0.0791)	(0.0823)	(0.0860)	(0.114)	(0.113)	(0.178)	(0.172)	(0.179)	(0.228)	(0.239)
homemaker	-0.174	-0.240**	-0.275**	-0.396***		-0.142	-0.205	-0.256	-0.302*	
	(0.113)	(0.105)	(0.116)	(0.0958)		(0.166)	(0.152)	(0.157)	(0.174)	
Sick or disabled	-0.0414	-0.0620	-0.000393	-0.0139		-0.0201	-0.0395	0.0119	0.0492	
	(0.0839)	(0.0859)	(0.0892)	(0.100)		(0.116)	(0.113)	(0.114)	(0.140)	
other	-0.0745	-0.0934	-0.0689	-0.174**		-0.0500	-0.0672	-0.0539	-0.104	
	(0.0911)	(0.0952)	(0.101)	(0.0766)		(0.127)	(0.124)	(0.129)	(0.128)	
Never held paid job	-0.141*	-0.178**	-0.201**	-0.188**		-0.125	-0.161	-0.190*	-0.135	
	(0.0803)	(0.0874)	(0.0871)	(0.0942)		(0.100)	(0.103)	(0.107)	(0.122)	
Year education	0.000237	0.00467	0.00181	-0.00292	-0.00829	0.000720	0.00536	0.00224	-0.00145	-0.00571
	(0.00844)	(0.00857)	(0.00893)	(0.00999)	(0.0102)	(0.00871)	(0.00896)	(0.00932)	(0.0102)	(0.0106)
Edu quartile_2	0.0857*	0.0953**	0.0988**	0.0961*	0.130**	0.0848*	0.0944*	0.0982*	0.0946	0.127**
	(0.0471)	(0.0479)	(0.0504)	(0.0578)	(0.0571)	(0.0474)	(0.0482)	(0.0507)	(0.0582)	(0.0577)
Edu quartile _3	0.113	0.126*	0.144*	0.143*	0.180**	0.112	0.124*	0.143*	0.141	0.174**
	(0.0701)	(0.0729)	(0.0764)	(0.0857)	(0.0857)	(0.0707)	(0.0733)	(0.0769)	(0.0860)	(0.0865)
Edu quartile _4	0.212*	0.240**	0.266**	0.303**	0.388***	0.211*	0.240**	0.266**	0.306**	0.388***
	(0.115)	(0.116)	(0.119)	(0.136)	(0.138)	(0.116)	(0.116)	(0.120)	(0.136)	(0.139)
Own 2d home	0.200***					0.202***				
	(0.0726)					(0.0722)				
asset	0.0307**					0.0322**				
	(0.0144)					(0.0151)				
mortgage	-0.0332					-0.0299				
	(0.0460)					(0.0487)				
debt	0.0695*					0.0694*				
	(0.0370)					(0.0371)				
Asset quartile_2	0.144**					0.144**				
	(0.0702)					(0.0702)				
Asset quartile_3	0.168***					0.169***				
	(0.0542)					(0.0547)				
Asset quartile_4	0.111*					0.113*				
	(0.0624)					(0.0631)				
Home owner	-0.0563					-0.0584				
	(0.0715)					(0.0715)				
tenant	0.176**					0.178**				
	(0.0819)					(0.0822)				
Submarket rent	-0.188*					-0.188*				
	(0.0982)					(0.0985)				
Length of tenure	-0.00117					-0.00115				
	(0.00106)					(0.00107)				
Big city	0.0793					0.0779				
	(0.0781)					(0.0789)				
suburbs	-0.0225					-0.0215				
	(0.0602)					(0.0600)				

Small town	-0.0906**					-0.0902**				
	(0.0438)					(0.0436)				
rural	-0.0930**					-0.0930**				
	(0.0473)					(0.0473)				
house	-0.00425					-0.00661				
	(0.0581)					(0.0586)				
Row house	-0.0210					-0.0225				
	(0.0693)					(0.0696)				
flat 3 to 8 floors	0.0147					0.0127				
	(0.0773)					(0.0780)				
Flat 9 +	-0.0673					-0.0684				
	(0.0812)					(0.0810)				
High rise	-0.154					-0.154				
	(0.108)					(0.107)				
Constant	-2.123	-2.726*	-2.703	-2.330	-2.705	-1.343	-1.865	-2.190	0.299	1.507
	(1.617)	(1.621)	(1.645)	(1.934)	(1.997)	(3.506)	(3.402)	(3.549)	(4.601)	(5.100)
Observations	18,039	18,039	18,039	15,299	14,618	18,039	18,039	18,039	15,299	14,618
R-squared	0.096	0.073	0.049	0.051	0.056	0.096	0.072	0.049	0.048	0.047
controls										
demographics	yes	yes	no	no	no	yes	yes	no	no	no
education	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
resources	yes	no	no	no	no	yes	no	no	no	no
Tests of endogeneity Ho: variables are exogenous										
F test						.07463	.097844	.032464	.4766	.937058
						(0.7847)	(0.7544)	(0.8570)	(0.4900)	(0.3331)
						F(1,18019)	F(1,17976)	F(1,17994)	F(1,15254)	F(1,14577)

All models include age and age squared interacted with country dummies. Non SE: non self-employed.
Robust standard errors clustered at the household level in parentheses. *** p<0.01, ** p<0.05, * p<0.1, §§ p<0.15, § p<0.2

Table 8w. Effect of being retired on females' number of friends (weighted specification)

VARIABLES	(1) OLS all	(2) OLS all	(3) OLS all	(4) OLS non SE	(5) OLS non SE active	(6) IV all	(7) IV all	(8) IV all	(9) IV non SE	(10) IV non SE active
(self-)employed										
Retired	**-0.121***	**-0.148****	**-0.164****	**-0.208*****	**-0.171****	**-0.461***	**-0.502***	**-0.487***	**-0.570****	**-0.362§**
	(0.0618)	**(0.0636)**	**(0.0648)**	**(0.0640)**	**(0.0811)**	**(0.254)**	**(0.258)**	**(0.264)**	**(0.264)**	**(0.262)**
unemployed	-0.279***	-0.332***	-0.314***	-0.341***	-0.343***	-0.428***	-0.484***	-0.451***	-0.500***	-0.412***
	(0.0924)	(0.0942)	(0.0944)	(0.0973)	(0.0960)	(0.142)	(0.144)	(0.144)	(0.150)	(0.132)
Retired and employed	0.200	0.215	0.237	0.260	0.286	-0.0284	-0.0249	0.0172	0.0145	0.156
	(0.130)	(0.136)	(0.146)	(0.166)	(0.177)	(0.213)	(0.218)	(0.228)	(0.242)	(0.244)
homemaker	-0.102	-0.115	-0.193**	-0.278***		-0.305*	-0.326*	-0.384**	-0.499***	
	(0.0799)	(0.0830)	(0.0821)	(0.0629)		(0.171)	(0.176)	(0.178)	(0.164)	
Sick or disabled	-0.222**	-0.237**	-0.155	-0.269***		-0.387**	-0.409**	-0.306*	-0.439***	
	(0.0954)	(0.103)	(0.105)	(0.0751)		(0.156)	(0.161)	(0.157)	(0.139)	
other	-0.285***	-0.294***	-0.246***	-0.281***		-0.520***	-0.536***	-0.465**	-0.529***	
	(0.0894)	(0.0897)	(0.0870)	(0.0878)		(0.191)	(0.194)	(0.195)	(0.195)	
Never held paid job	-0.119**	-0.150***	-0.161***	-0.145***		-0.159***	-0.190***	-0.196***	-0.181***	
	(0.0493)	(0.0489)	(0.0478)	(0.0444)		(0.0569)	(0.0559)	(0.0542)	(0.0529)	
Year education	0.0349***	0.0405***	0.0417***	0.0276***	0.0376***	0.0350***	0.0402***	0.0413***	0.0266***	0.0369***
	(0.0110)	(0.0114)	(0.0114)	(0.00902)	(0.0108)	(0.0114)	(0.0119)	(0.0118)	(0.00902)	(0.0107)
Edu quartile_2	-0.0283	-0.0163	0.000280	0.0191	-0.000483	-0.0310	-0.0192	-0.00293	0.0162	-0.00148
	(0.0545)	(0.0559)	(0.0583)	(0.0564)	(0.0674)	(0.0547)	(0.0562)	(0.0586)	(0.0563)	(0.0674)
Edu quartile _3	-0.102	-0.0858	-0.0642	-0.00705	-0.0393	-0.0974	-0.0811	-0.0609	-0.000215	-0.0356
	(0.0642)	(0.0663)	(0.0660)	(0.0600)	(0.0722)	(0.0657)	(0.0679)	(0.0674)	(0.0598)	(0.0716)
Edu quartile _4	-0.0782	-0.0260	0.00773	0.101	0.0545	-0.0936	-0.0439	-0.0102	0.0900	0.0498
	(0.104)	(0.107)	(0.106)	(0.0984)	(0.114)	(0.106)	(0.109)	(0.109)	(0.101)	(0.116)
Own 2d home	0.113***					0.108**				
	(0.0429)					(0.0437)				
asset	0.0521***					0.0473***				
	(0.0173)					(0.0173)				
mortgage	-0.0261					-0.0479				
	(0.0537)					(0.0541)				
debt	0.0988***					0.0983***				
	(0.0359)					(0.0356)				
Asset quartile_2	0.0383					0.0361				
	(0.0442)					(0.0437)				
Asset quartile_3	0.135**					0.138**				
	(0.0565)					(0.0565)				
Asset quartile_4	0.144***					0.137**				
	(0.0538)					(0.0539)				
Home owner	-0.0288					-0.0137				
	(0.0530)					(0.0545)				
tenant	0.0166					0.0142				
	(0.0614)					(0.0629)				
Submarket rent	0.0399					0.0404				
	(0.0823)					(0.0826)				
Length of tenure	-0.00165					-0.00171				
	(0.00110)					(0.00109)				
Big city	0.0317					0.0319				
	(0.0540)					(0.0538)				
suburbs	-0.0175					-0.0236				
	(0.0537)					(0.0542)				
Small town	-0.0550					-0.0542				
	(0.0462)					(0.0457)				
rural	-0.115**					-0.111**				
	(0.0481)					(0.0477)				

house	0.0164					0.0167				
	(0.0469)					(0.0470)				
Row house	0.0527					0.0501				
	(0.0621)					(0.0621)				
flat 3 to 8 floors	0.128*					0.121*				
	(0.0668)					(0.0668)				
Flat 9 +	0.0103					0.00691				
	(0.0627)					(0.0632)				
High rise	0.0173					0.0121				
	(0.100)					(0.101)				
Constant	-4.507**	-4.930***	-4.467**	-4.812***	-3.559	-8.408**	-9.053**	-8.265**	-9.138**	-6.541
	(1.878)	(1.830)	(1.851)	(1.780)	(2.520)	(3.747)	(3.759)	(3.871)	(3.787)	(4.899)
Observations	21,953	21,953	21,953	19,873	16,437	21,953	21,953	21,953	19,873	16,437
R-squared	0.194	0.175	0.139	0.130	0.117	0.184	0.165	0.130	0.120	0.115
controls										
demographics	yes	yes	no	no	no	yes	yes	no	no	no
education	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
resources	yes	no	no	no	no	yes	no	no	no	no
Tests of endogeneity Ho: variables are exogenous										
Robust regression F(1,.)						2.0368	2.1678	1.7189	1.9764	.5746
						(0.1535)	(0.1409)	(0.1898)	(0.1598)	(0.4485)

All models include age and age squared interacted with country dummies. Non SE: non self-employed.
Robust standard errors clustered at the household level in parentheses. *** p<0.01, ** p<0.05, * p<0.1, §§ p<0.15, § p<0.2

Table 9w. Effect of being retired on males' number of family members in PN (weighted)

VARIABLES	(1) OLS all	(2) OLS all	(3) OLS all	(4) OLS non SE	(5) OLS non SE active	(6) IV all	(7) IV all	(8) IV all	(9) IV non SE	(10) IV non SE active
Retired	0.0711	0.000605	-0.0189	-0.0500	-0.0484	0.716**	0.488	0.509	0.636	0.669
	(0.0664)	(0.0709)	(0.0798)	(0.0988)	(0.102)	(0.331)	(0.330)	(0.350)	(0.429)	(0.465)
unemployed	-0.300***	-0.417***	-0.518***	-0.609***	-0.605***	-0.0904	-0.270	-0.363**	-0.396**	-0.390**
	(0.116)	(0.129)	(0.119)	(0.132)	(0.131)	(0.163)	(0.171)	(0.155)	(0.184)	(0.188)
Retired and employed	0.0511	0.0265	-0.0210	-0.0416	-0.0463	0.488**	0.360	0.343	0.433	0.453
	(0.0844)	(0.0855)	(0.0948)	(0.118)	(0.119)	(0.235)	(0.236)	(0.252)	(0.309)	(0.334)
homemaker	-0.233	-0.396	-0.472**	-0.540**		0.101	-0.154	-0.223	-0.199	
	(0.329)	(0.330)	(0.229)	(0.242)		(0.316)	(0.323)	(0.238)	(0.268)	
Sick or disabled	0.0629	-0.0233	-0.0985	-0.113		0.284*	0.137	0.0621	0.114	
	(0.118)	(0.127)	(0.118)	(0.129)		(0.165)	(0.171)	(0.161)	(0.196)	
other	0.247	0.180	0.0475	-0.0784		0.503**	0.366	0.243	0.174	
	(0.206)	(0.200)	(0.215)	(0.260)		(0.241)	(0.236)	(0.251)	(0.302)	
Never held paid job	-0.365	-0.431	-0.391	-0.379		-0.190	-0.310	-0.248	-0.188	
	(0.278)	(0.295)	(0.287)	(0.292)		(0.298)	(0.312)	(0.311)	(0.324)	
Year education	-0.00817	0.00104	0.00312	0.0109	0.0122	-0.00314	0.00594	0.00876	0.0162	0.0187
	(0.0114)	(0.0110)	(0.0113)	(0.0124)	(0.0128)	(0.0118)	(0.0117)	(0.0120)	(0.0129)	(0.0134)
Edu quartile_2	-0.000187	0.0130	-0.0187	-0.0398	-0.0589	-0.00979	0.00617	-0.0268	-0.0452	-0.0665
	(0.0679)	(0.0717)	(0.0733)	(0.0811)	(0.0834)	(0.0689)	(0.0727)	(0.0744)	(0.0819)	(0.0839)
Edu quartile _3	0.107	0.104	0.0572	0.0151	0.0260	0.0930	0.0927	0.0437	0.00727	0.0113
	(0.0916)	(0.0937)	(0.0980)	(0.106)	(0.108)	(0.0922)	(0.0946)	(0.0988)	(0.107)	(0.109)
Edu quartile _4	0.0650	0.0806	0.0218	-0.0698	-0.0735	0.0566	0.0755	0.0157	-0.0584	-0.0733
	(0.136)	(0.136)	(0.138)	(0.151)	(0.156)	(0.138)	(0.138)	(0.141)	(0.154)	(0.159)
own2dhome	-0.0308					-0.0143				
	(0.0570)					(0.0578)				
asset	0.103***					0.119***				
	(0.0219)					(0.0236)				
mortgage	0.188**					0.222***				
	(0.0729)					(0.0754)				
debt	0.0246					0.0241				
	(0.0506)					(0.0514)				
Asset quartile_2	-0.0253					-0.0263				
	(0.0762)					(0.0754)				
Asset quartile_3	0.0191					0.0299				
	(0.0807)					(0.0814)				
Asset quartile_4	0.100					0.122				
	(0.0859)					(0.0881)				
Home owner	-0.240**					-0.261***				
	(0.0965)					(0.0980)				
tenant	-0.182					-0.155				
	(0.113)					(0.115)				
Submarket rent	0.154					0.156				
	(0.135)					(0.130)				
Length of tenure	-0.000170					3.29e-05				
	(0.00145)					(0.00147)				
Big city	0.0598					0.0457				
	(0.0706)					(0.0721)				
suburbs	0.248***					0.259***				
	(0.0863)					(0.0867)				
Small town	0.0684					0.0721				
	(0.0611)					(0.0621)				
rural	0.120*					0.119*				
	(0.0668)					(0.0667)				
house	0.00282					-0.0218				
	(0.113)					(0.114)				
Row house	0.0253					0.00952				
	(0.123)					(0.123)				
flat 3 to 8 floors	0.155					0.134				

	(0.126)					(0.126)				
Flat 9 +	0.253*					0.241*				
	(0.130)					(0.129)				
High rise	0.462*					0.469*				
	(0.256)					(0.260)				
Constant	3.839	2.917	3.284	2.527	2.079	11.97**	9.044*	10.00*	12.01*	12.68
	(2.358)	(2.453)	(2.636)	(3.001)	(3.147)	(5.254)	(5.328)	(5.742)	(7.250)	(8.150)
Observations	18,039	18,039	18,039	15,299	14,618	18,039	18,039	18,039	15,299	14,618
R-squared	0.105	0.084	0.022	0.028	0.027	0.084	0.072	0.008	0.005	0.002
controls										
demographics	yes	yes	no	no	no	yes	yes	no	no	no
education	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
resources	yes	no	no	no	no	yes	no	no	no	no
F test						4.1558	2.3733	2.4916	2.8400	2.6488
						(0.0415)	(0.1234)	(0.1145)	(.0920)	(.1036)

All models include age and age squared interacted with country dummies. Non SE: non self-employed.
Robust standard errors clustered at the household level in parentheses. *** p<0.01, ** p<0.05, * p<0.1, §§ p<0.15, § p<0.2

Table 10w. Effect of being retired on females' number of family members in PN (weighted)

VARIABLES	(1) OLS all	(2) OLS all	(3) OLS all	(4) OLS non SE	(5) OLS non SE active	(6) IV all	(7) IV all	(8) IV all	(9) IV non SE	(10) IV non SE active
Retired	**-0.0158**	**-0.0458**	**-0.0416**	**-0.0634**	**0.0412**	**-0.0414**	**-0.0582**	**-0.123**	**-0.319**	**-0.0978**
	(0.0750)	**(0.0779)**	**(0.0813)**	**(0.0900)**	**(0.0981)**	**(0.346)**	**(0.354)**	**(0.380)**	**(0.401)**	**(0.369)**
unemployed	0.159	0.101	0.0751	0.111	0.172	0.148	0.0953	0.0406	-0.000734	0.122
	(0.146)	(0.145)	(0.157)	(0.163)	(0.161)	(0.204)	(0.204)	(0.220)	(0.235)	(0.203)
Retired and employed	-0.0907	-0.0942	-0.156	-0.216*	-0.128	-0.108	-0.103	-0.211	-0.390	-0.223
	(0.100)	(0.104)	(0.115)	(0.127)	(0.134)	(0.245)	(0.253)	(0.273)	(0.288)	(0.270)
homemaker	0.0103	-0.0103	0.140	0.106		-0.00501	-0.0177	0.0918	-0.0493	
	(0.0960)	(0.101)	(0.105)	(0.113)		(0.222)	(0.231)	(0.245)	(0.266)	
Sick or disabled	0.131	0.0737	-0.0752	-0.0939		0.118	0.0677	-0.113	-0.214	
	(0.116)	(0.118)	(0.137)	(0.137)		(0.195)	(0.201)	(0.221)	(0.221)	
other	-0.111	-0.130	-0.280*	-0.264		-0.129	-0.138	-0.336	-0.439	
	(0.145)	(0.146)	(0.156)	(0.170)		(0.274)	(0.277)	(0.295)	(0.318)	
Never held paid job	-0.153	-0.191*	-0.195*	-0.200*		-0.0687	-0.192	-0.204*	-0.226*	
	(0.104)	(0.109)	(0.112)	(0.115)		(0.0452)	(0.117)	(0.119)	(0.122)	
Year education	-0.0168	-0.0111	-0.0166	-0.0221*	-0.0267*	0.181***	-0.0111	-0.0167	-0.0228*	-0.0272*
	(0.0125)	(0.0126)	(0.0124)	(0.0134)	(0.0156)	(0.0678)	(0.0126)	(0.0124)	(0.0135)	(0.0158)
Edu quartile_2	0.181***	0.179***	0.149**	0.175**	0.206**	0.255***	0.179***	0.149**	0.173**	0.205**
	(0.0677)	(0.0686)	(0.0721)	(0.0774)	(0.0889)	(0.0883)	(0.0686)	(0.0723)	(0.0775)	(0.0890)
Edu quartile _3	0.254***	0.265***	0.219**	0.237**	0.266**	0.236*	0.265***	0.219**	0.242**	0.269**
	(0.0883)	(0.0924)	(0.0964)	(0.105)	(0.120)	(0.127)	(0.0925)	(0.0964)	(0.105)	(0.121)
Edu quartile _4	0.238*	0.269**	0.224*	0.282*	0.313*	-0.0687	0.268**	0.219	0.273*	0.310*
	(0.127)	(0.130)	(0.134)	(0.146)	(0.164)	(0.0452)	(0.131)	(0.135)	(0.146)	(0.164)
own2dhome	0.0690					0.0686				
	(0.0630)					(0.0630)				
asset	0.118***					0.117***				
	(0.0243)					(0.0248)				
mortgage	0.0393					0.0376				
	(0.0759)					(0.0813)				
debt	0.00944					0.00940				
	(0.0474)					(0.0473)				
Asset quartile_2	-0.137**					-0.137**				
	(0.0676)					(0.0672)				
Asset quartile_3	-0.0624					-0.0623				
	(0.0776)					(0.0778)				
Asset quartile_4	-0.113					-0.114				
	(0.0874)					(0.0864)				
Home owner	-0.150					-0.149				
	(0.0939)					(0.0945)				
tenant	-0.166					-0.167				
	(0.111)					(0.110)				
Submarket rent	-0.0154					-0.0154				
	(0.102)					(0.102)				
Length of tenure	0.000914					0.000910				
	(0.00146)					(0.00146)				
Big city	0.0238					0.0238				
	(0.0700)					(0.0699)				
suburbs	0.154*					0.154*				
	(0.0900)					(0.0895)				
Small town	-0.0956					-0.0955				
	(0.0610)					(0.0609)				
rural	0.117*					0.118*				
	(0.0658)					(0.0662)				
house	0.00410					0.00413				
	(0.0998)					(0.0995)				
Row house	-0.0250					-0.0252				
	(0.109)					(0.109)				
flat 3 to 8 floors	0.0744					0.0739				
	(0.114)					(0.114)				
Flat 9 +	0.242**					0.241**				
	(0.113)					(0.113)				

High rise	0.259					0.258				
	(0.172)					(0.172)				
Constant	4.334*	4.196	3.551	2.157	6.562*	4.040	4.051	2.592	-0.896	4.392
	(2.446)	(2.560)	(2.654)	(2.837)	(3.395)	(4.905)	(5.119)	(5.524)	(5.940)	(7.023)
Observations	21,953	21,953	21,953	19,873	16,437	21,953	21,953	21,953	19,873	16,437
R-squared	0.115	0.099	0.018	0.021	0.025	0.115	0.099	0.017	0.018	0.024
controls										
demographics	yes	yes	no	no	no	yes	yes	no	no	no
education	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
resources	yes	no	no	no	no	yes	no	no	no	no
F test						0.0058	0.0013	0.0484	0.4292	0.15073
						(0.9395)	(0.9712)	(0.8259)	(0.5124)	(0.6966)

All models include age and age squared interacted with country dummies. Non SE: non self-employed.
Robust standard errors clustered at the household level in parentheses. *** p<0.01, ** p<0.05, * p<0.1, , §§ p<0.15, § p<0.2

Table 11. Effect of being retired on PN size: OLS and IV (non SE active)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
VARIABLES	OLS	IV	OLS	IV	OLS	IV	OLS	IV
		Non weighted specification				Weighted specification		
	male	male	female	female	male	male	female	female
employed	ref	ref	ref	ref	ref	ref	ref	ref
retired	**-0.0830****	**0.136**	**-0.119*****	**-0.337§§**	**-0.161§§**	**0.841***	**-0.130**	**-0.460**
	(0.0418)	**(0.244)**	**(0.0430)**	**(0.211)**	**(0.108)**	**(0.490)**	**(0.107)**	**(0.388)**
unemployed	-0.348***	-0.268**	-0.281***	-0.362***	-0.573***	-0.273	-0.171	-0.290
	(0.0679)	(0.112)	(0.0798)	(0.110)	(0.134)	(0.195)	(0.182)	(0.230)
Retired and employed	0.126**	0.286	0.115*	-0.0461	-0.0661	0.631*	0.158	-0.0672
	(0.0618)	(0.186)	(0.0689)	(0.168)	(0.151)	(0.370)	(0.161)	(0.310)
Years education	0.00523	0.00602	0.00538	0.00465	0.00390	0.0130	0.0109	0.00967
	(0.00702)	(0.00709)	(0.00771)	(0.00773)	(0.0156)	(0.0165)	(0.0182)	(0.0183)
lower edu quartile	ref	ref	ref	ref	ref	ref	ref	ref
edu quartile _2	0.108***	0.111***	0.118***	0.117***	0.0709	0.0603	0.206**	0.204**
	(0.0396)	(0.0397)	(0.0419)	(0.0418)	(0.0953)	(0.0971)	(0.0930)	(0.0933)
edu quartile _3	0.214***	0.218***	0.170***	0.169***	0.206	0.185	0.227*	0.233*
	(0.0546)	(0.0548)	(0.0545)	(0.0545)	(0.128)	(0.130)	(0.130)	(0.131)
edu quartile _4	0.341***	0.353***	0.402***	0.393***	0.315	0.315	0.368**	0.360*
	(0.0786)	(0.0797)	(0.0813)	(0.0818)	(0.194)	(0.201)	(0.185)	(0.187)
Constant	1.317	4.643	0.100	-3.147	-0.626	14.19*	3.002	-2.148
	(1.332)	(3.891)	(1.351)	(3.374)	(3.261)	(8.527)	(3.513)	(7.164)
Observations	14,647	14,647	16,466	16,466	14,618	14,618	16,437	16,437
R-squared	0.045	0.043	0.067	0.065	0.038	0.001	0.067	0.064
Tests of endogeneity Ho: variables are exogenous								
Durbin (score)								
Robust score chi2(1)		.856284		1.11415		26.7269		4.13726
P =		(0.3548)		(0.2912)		(0.0000)		(0.0419)
Wu-Hausman F test		0.853937		1.11145		4.66302		.783905
Robust regression		(0.3555)		(0.2918)		(0.0308)		(0.3760)

All models include age and age squared interacted with country dummies.
Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1, §§ p<0.15.

Table 13. Effect of being retired and of partner being retired on non self-employed' s number of friends

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
VARIABLES	OLS	OLS	IV	IV	OLS	OLS	IV	IV
	male	**male**	**male**	**male**	**female**	**female**	**female**	**female**
	All non SE	active non SE	All non SE	active non SE	All non SE	active non SE	All non SE	active non SE
Retired	**-0.0577****	**-0.0615****	**0.0647**	**0.102**	**-0.0851*****	**-0.0643***	**-0.205**	**-0.136**
	(0.0274)	**(0.0279)**	**(0.153)**	**(0.152)**	**(0.0314)**	**(0.0353)**	**(0.186)**	**(0.175)**
Partner retired	**0.00825**	**0.00746**	**0.0898**	**-0.0462**	**-0.0868*****	**-0.0848****	**-0.110**	**-0.0263**
	(0.0318)	**(0.0349)**	**(0.201)**	**(0.227)**	**(0.0252)**	**(0.0371)**	**(0.130)**	**(0.166)**
Both retired	**-0.00328**	**-0.00372**	**0.0681**	**0.168**	**-0.00805**	**-0.00574**	**-0.147**	**-0.200**
	(0.0351)	**(0.0378)**	**(0.210)**	**(0.238)**	**(0.0318)**	**(0.0417)**	**(0.222)**	**(0.237)**
unemployed	-0.125***	-0.124***	-0.0656	-0.0470	-0.105*	-0.106*	-0.194**	-0.169**
	(0.0405)	(0.0405)	(0.0724)	(0.0715)	(0.0555)	(0.0558)	(0.0852)	(0.0744)
Retired and active	0.0535	0.0493	0.177	0.229*	0.0795	0.0978*	-0.0739	-0.0407
	(0.0421)	(0.0424)	(0.126)	(0.131)	(0.0533)	(0.0548)	(0.125)	(0.118)
homemaker	-0.0484		0.0316		-0.162***		-0.294***	
	(0.112)		(0.141)		(0.0318)		(0.107)	
disabled	-0.0856**		-0.0192		-0.196***		-0.292***	
	(0.0375)		(0.0744)		(0.0400)		(0.0820)	
other	-0.0707		0.00915		-0.127		-0.247*	
	(0.0904)		(0.111)		(0.0915)		(0.131)	
never held paid job	-0.00526		0.0250		-0.136***		-0.160***	
	(0.0722)		(0.0756)		(0.0296)		(0.0368)	
Nb years education	0.00574	0.00489	0.00618	0.00546	0.0122**	0.0132**	0.0112**	0.0127**
	(0.00456)	(0.00465)	(0.00466)	(0.00474)	(0.00487)	(0.00562)	(0.00489)	(0.00564)
edu quartile _2	0.0263	0.0346	0.0265	0.0364	0.00184	0.00159	0.000677	-0.00163
	(0.0224)	(0.0230)	(0.0224)	(0.0230)	(0.0252)	(0.0287)	(0.0254)	(0.0289)
edu quartile _3	0.0560*	0.0635*	0.0587*	0.0674**	0.0146	0.00164	0.0158	-0.000911
	(0.0325)	(0.0331)	(0.0326)	(0.0332)	(0.0319)	(0.0367)	(0.0320)	(0.0369)
edu quartile _4	0.183***	0.197***	0.194***	0.211***	0.151***	0.157***	0.140***	0.145**
	(0.0479)	(0.0489)	(0.0483)	(0.0494)	(0.0502)	(0.0570)	(0.0507)	(0.0575)
Constant	-0.834	-1.108	2.047	2.263	-2.977***	-1.953*	-6.549***	-5.256**
	(0.786)	(0.819)	(2.157)	(2.307)	(0.835)	(1.011)	(2.072)	(2.386)
Observations	12,952	12,444	12,952	12,444	13,429	10,851	13,429	10,851
R-squared	0.061	0.061	0.053	0.052	0.102	0.100	0.094	0.093
Tests of endogeneity Ho: variables are exogenous								
Robust Wu-Hausman F(3,.)			1.1731	1.1017			1.6685	1.0752
			(0.3183)	(0.3470)			(0.1715)	(0.3582)
test _Iret_1 +_Ipartnerre_1 +_IretXpar_1_1=0								
chi2(1) or F(1,.)	3.45	3.93	2,02	1,90	34.03	19.09	9.31	6,61
Prob > chi2 or Prob > F	0.0634	0.0475	0.1556	0.1683	0.0000	0.0000	0.0023	0.0101

Couples. All models include age and age squared interacted with country dummies, age of partner interacted with country dummies.
Robust standard errors clustered at the household level in parentheses. *** p<0.01, ** p<0.05, * p<0.1, , §§ p<0.15, § p<0.2

Table 14. Effect of being retired on the number of friends of (non self-employed) singles

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	male	male	male	male	female	female	female	female
	OLS	OLS	IV	IV	OLS	OLS	IV	IV
	All	active	All	active	All	active	All	active
VARIABLES	non SE	non SE	non SE	non SE	non SE	non SE	non SE	non SE
Retired	**-0.222*** **	**-0.218*** **	**-0.391**	**-0.299**	**-0.213*** **	**-0.228*** **	**-0.428**	**-0.429§**
	(0.0780)	**(0.0799)**	**(0.551)**	**(0.589)**	**(0.0511)**	**(0.0547)**	**(0.340)**	**(0.310)**
Unemployed	-0.163*	-0.150	-0.226	-0.179	-0.465***	-0.474***	-0.553***	-0.547***
	(0.0970)	(0.0973)	(0.227)	(0.228)	(0.0840)	(0.0842)	(0.162)	(0.140)
Retired and employed	-0.00793	-0.00277	-0.138	-0.0658	-0.0248	-0.0364	-0.190	-0.191
	(0.130)	(0.130)	(0.443)	(0.476)	(0.0878)	(0.0891)	(0.272)	(0.250)
Homemaker	0.158		0.0444		-0.291***		-0.467*	
	(0.377)		(0.524)		(0.0659)		(0.284)	
Sick or disabled	-0.204**		-0.273		-0.352***		-0.451***	
	(0.0936)		(0.241)		(0.0696)		(0.169)	
Other	0.0571		-0.0391		-0.263***		-0.426	
	(0.415)		(0.488)		(0.0997)		(0.269)	
Never held paid job	0.231		0.212		-0.158**		-0.183**	
	(0.350)		(0.358)		(0.0665)		(0.0768)	
Nb years education	0.000495	-0.00351	-5.22e-06	-0.00387	0.0223***	0.0212**	0.0215***	0.0204**
	(0.0122)	(0.0128)	(0.0123)	(0.0130)	(0.00817)	(0.00908)	(0.00821)	(0.00909)
edu quartile _2	0.117*	0.0978	0.115*	0.0971	0.0648	0.0740	0.0653	0.0736
	(0.0684)	(0.0690)	(0.0678)	(0.0684)	(0.0426)	(0.0462)	(0.0426)	(0.0461)
edu quartile _3	0.217**	0.228**	0.212**	0.227**	0.0277	0.0422	0.0310	0.0446
	(0.0951)	(0.0991)	(0.0950)	(0.0986)	(0.0555)	(0.0606)	(0.0556)	(0.0606)
edu quartile _4	0.301**	0.362**	0.293**	0.360**	0.276***	0.283***	0.267***	0.272***
	(0.138)	(0.144)	(0.139)	(0.144)	(0.0833)	(0.0914)	(0.0846)	(0.0927)
Constant	-7.849***	-7.123***	-10.18	-8.367	-2.404*	-2.861*	-4.982	-5.564
	(2.213)	(2.307)	(7.870)	(9.160)	(1.359)	(1.536)	(4.247)	(4.387)
Observations	2,342	2,171	2,342	2,171	6,450	5,594	6,450	5,594
R-squared	0.086	0.087	0.083	0.087	0.154	0.150	0.151	0.148
Tests of endogeneity Ho: variables are exogenous								
Wu-Hausman F test			.095853	.01960			.4088	.43344
			(0.7569)	(0.8887)			(0.5226)	(05103)

Individuals living as single. All models include age and age squared interacted with country dummies.
Robust standard errors clustered at the household level in parentheses. *** p<0.01, ** p<0.05, * p<0.1, §§ p<0.15, § p<0.2
Singles: persons without a partner in the same household.

Table 15. Effect of being retired on the number of family members in PN of couples

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	couple	couple	couple	couple	couple	couple	couple	couple
	male	male	male	male	female	female	female	female
VARIABLES	OLS	OLS	IV	IV	OLS	OLS	IV	IV
	All non SE	active non SE	All non SE	active non SE	All non SE	active non SE	All non SE	active non SE
Retired	**-0.0126**	**-0.0120**	**-0.00342**	**-0.00561**	**0.0134**	**-0.00232**	**-0.211**	**-0.192**
	(0.0419)	**(0.0426)**	**(0.231)**	**(0.227)**	**(0.0478)**	**(0.0519)**	**(0.268)**	**(0.247)**
Partner retired	**-0.0160**	**-0.0246**	**-0.692****	**-0.966*****	**0.0331**	**-0.0535**	**-0.0436**	**-0.256**
	(0.0528)	**(0.0571)**	**(0.317)**	**(0.353)**	**(0.0397)**	**(0.0528)**	**(0.207)**	**(0.245)**
Both retired	**0.00244**	**0.0134**	**0.558***	**0.865****	**-0.0173**	**0.0664**	**0.248**	**0.411**
	(0.0587)	**(0.0624)**	**(0.334)**	**(0.375)**	**(0.0513)**	**(0.0620)**	**(0.334)**	**(0.338)**
unemployed	-0.163**	-0.168**	-0.127	-0.116	-0.0794	-0.0603	-0.117	-0.0733
	(0.0694)	(0.0694)	(0.110)	(0.109)	(0.0854)	(0.0860)	(0.133)	(0.114)
Retired and employed	0.0500	0.0543	0.210	0.304	0.109	0.126*	0.0632	0.133
	(0.0552)	(0.0556)	(0.186)	(0.193)	(0.0707)	(0.0725)	(0.189)	(0.172)
homemaker	-0.194		-0.0732		0.0136		-0.0200	
	(0.191)		(0.238)		(0.0503)		(0.169)	
disabled	-0.128**		-0.0429		-0.0211		-0.0537	
	(0.0622)		(0.117)		(0.0744)		(0.133)	
other	-0.0464		-0.0151		-0.262		-0.297	
	(0.183)		(0.216)		(0.163)		(0.220)	
never held paid job	-0.241		-0.257		-0.139**		-0.143*	
	(0.162)		(0.168)		(0.0676)		(0.0748)	
Nb years education	0.00164	0.00105	0.00203	0.00119	-0.0146**	-0.00804	-0.0149**	-0.00868
	(0.00647)	(0.00660)	(0.00653)	(0.00669)	(0.00727)	(0.00807)	(0.00731)	(0.00811)
edu quartile _2	0.0570	0.0513	0.0591	0.0566	0.0864**	0.0653	0.0898**	0.0690
	(0.0376)	(0.0386)	(0.0378)	(0.0391)	(0.0421)	(0.0471)	(0.0423)	(0.0473)
edu quartile _3	0.101**	0.112**	0.101**	0.115**	0.166***	0.150**	0.167***	0.151**
	(0.0509)	(0.0523)	(0.0511)	(0.0527)	(0.0538)	(0.0598)	(0.0538)	(0.0598)
edu quartile _4	0.0889	0.0967	0.0908	0.104	0.231***	0.163*	0.233***	0.166*
	(0.0734)	(0.0751)	(0.0745)	(0.0767)	(0.0785)	(0.0863)	(0.0790)	(0.0869)
Constant	2.250*	2.391*	1.159	1.638	3.052**	2.519	2.429	2.012
	(1.250)	(1.291)	(3.278)	(3.482)	(1.349)	(1.543)	(3.121)	(3.472)
Observations	12,952	12,444	12,952	12,444	13,429	10,851	13,429	10,851
R-squared	0.031	0.031	0.017	0.007	0.030	0.032	0.027	0.029
Tests of endogeneity Ho: variables are exogenous								
Wu-Hausman								
F(3, .) (2.. in col. 4)			1.6128	0.11944			0.36607	.386404
			(0.1841)	(0.8874)			(0.7776)	(0.7628)
Test: ret + partner ret + retXpar = 0								
chi2(1)(IV) or F (1,.) (OLS)	0.33	0.25	0.32	0.18	0.39	0.04	0.00	0.03
Prob>chi² or > F	0.5683	0.6161	0.5727	0.6686	0.5329	0.8387	0.9765	0.8589

Couples. All models include age, age squared and age of partner, all interacted with country dummies.
Robust standard errors clustered at the household level in parentheses. *** p<0.01, ** p<0.05, * p<0.1, §§ p<0.15, § p<0.2

Table 16. Effect of being retired on the number of family members in PN of those with no partner in household

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	male	male	male	male	female	female	female	female
	OLS	OLS	IV	IV	OLS	OLS	IV	IV
	All	active	All	active	All	active	All	active
VARIABLES	non SE	non SE	non SE	non SE	non SE	non SE	non SE	non SE
Retired	**0.0843**	**0.0978**	**0.657**	**0.883**	**-0.0931**	**-0.0759**	**-0.212**	**-0.120**
	(0.0899)	**(0.0930)**	**(0.650)**	**(0.721)**	**(0.0616)**	**(0.0658)**	**(0.383)**	**(0.340)**
Unemployed	-0.182	-0.179	0.0333	0.0967	-0.0128	-0.0130	-0.0616	-0.0292
	(0.119)	(0.120)	(0.271)	(0.282)	(0.129)	(0.130)	(0.205)	(0.180)
Retired and employed	0.277*	0.274*	0.716	0.882	-0.0491	-0.0272	-0.140	-0.0614
	(0.154)	(0.156)	(0.516)	(0.573)	(0.0933)	(0.0949)	(0.304)	(0.272)
Homemaker	0.323		0.708		0.127		0.0292	
	(0.263)		(0.507)		(0.0834)		(0.322)	
Sick or disabled	0.0453		0.281		-0.187*		-0.241	
	(0.129)		(0.287)		(0.0959)		(0.193)	
Other	0.390		0.716		0.147		0.0569	
	(0.456)		(0.582)		(0.170)		(0.332)	
Never held paid job	-0.393		-0.329		-0.151		-0.164	
	(0.316)		(0.331)		(0.113)		(0.121)	
Year education	-0.00422	-0.000907	-0.00252	0.00257	-0.0166*	-0.0164	-0.0171*	-0.0166
	(0.0130)	(0.0135)	(0.0132)	(0.0140)	(0.00982)	(0.0106)	(0.00992)	(0.0107)
edu quartile _2	0.122	0.134	0.129	0.142*	0.122**	0.107*	0.123**	0.107*
	(0.0809)	(0.0830)	(0.0815)	(0.0839)	(0.0558)	(0.0590)	(0.0557)	(0.0588)
edu quartile _3	0.220**	0.218*	0.235**	0.235**	0.141*	0.131*	0.142*	0.131*
	(0.110)	(0.113)	(0.112)	(0.115)	(0.0727)	(0.0776)	(0.0730)	(0.0775)
edu quartile _4	0.270*	0.277*	0.297*	0.303*	0.254**	0.235**	0.249**	0.233**
	(0.156)	(0.162)	(0.161)	(0.166)	(0.108)	(0.115)	(0.108)	(0.116)
Constant	9.735***	9.683***	17.66*	21.68*	0.955	1.656	-0.466	1.059
	(2.711)	(2.865)	(9.301)	(11.27)	(1.783)	(1.967)	(4.909)	(4.935)
Observations	2,342	2,171	2,342	2,171	6,450	5,594	6,450	5,594
R-squared	0.043	0.047	0.027	0.015	0.028	0.026	0.027	0.026
Tests of endogeneity Ho: variables are exogenous								
Wu-Hausman F(1,.)			.7919	1.2273			.08979	.01746
			(0.3736)	(0.2181)			(0.7544)	(0.8943)

Individuals living as single. All models include age and age squared interacted with country dummies. Non SE: non self-employed.
Robust standard errors clustered at the household level in parentheses. *** p<0.01, ** p<0.05, * p<0.1, §§ p<0.15, § p<0.2

Table 17. Effect of being retired on PN size of non self-employed living in couples

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	male	male	male	male	female	female	female	female
	OLS	OLS	IV	IV	OLS	OLS	IV	IV
	All	active	All	active	All	active	All	active
VARIABLES	non SE	non SE	non SE	non SE	non SE	non SE	non SE	non SE
Retired	**-0.0703**	**-0.0735**	**0.0613**	**0.0961**	**-0.0717§**	**-0.0666**	**-0.417§**	**-0.328**
	(0.0483)	**(0.0491)**	**(0.266)**	**(0.263)**	**(0.0536)**	**(0.0588)**	**(0.305)**	**(0.280)**
Partner retired	-0.00770	-0.0171	-0.602*	-1.012**	-0.0537	-0.138**	-0.153	-0.282
	(0.0602)	(0.0652)	(0.360)	(0.403)	(0.0444)	(0.0611)	(0.234)	(0.281)
Both retired	-0.000844	0.00968	0.626*	1.033**	-0.0254	0.0607	0.101	0.212
	(0.0666)	(0.0710)	(0.379)	(0.428)	(0.0570)	(0.0707)	(0.377)	(0.385)
Unemployed	-0.288***	-0.292***	-0.193	-0.163	-0.185*	-0.167*	-0.310**	-0.242*
	(0.0797)	(0.0797)	(0.128)	(0.126)	(0.0966)	(0.0973)	(0.150)	(0.130)
Retired and employed	0.103	0.104	0.387*	0.533**	0.189**	0.224***	-0.0107	0.0925
	(0.0657)	(0.0663)	(0.215)	(0.225)	(0.0814)	(0.0836)	(0.216)	(0.198)
homemaker	-0.242		-0.0416		-0.148***		-0.314*	
	(0.231)		(0.279)		(0.0563)		(0.190)	
disabled	-0.213***		-0.0621		-0.217***		-0.345**	
	(0.0709)		(0.134)		(0.0814)		(0.149)	
other	-0.117		-0.00597		-0.389**		-0.544**	
	(0.191)		(0.232)		(0.176)		(0.242)	
never held paid job	-0.247		-0.231		-0.275***		-0.302***	
	(0.171)		(0.177)		(0.0709)		(0.0802)	
Nb years education	0.00738	0.00593	0.00821	0.00665	-0.00240	0.00516	-0.00371	0.00406
	(0.00746)	(0.00759)	(0.00755)	(0.00773)	(0.00845)	(0.00957)	(0.00848)	(0.00960)
edu quartile _2	0.0833**	0.0859**	0.0856**	0.0931**	0.0883*	0.0669	0.0905*	0.0673
	(0.0418)	(0.0428)	(0.0420)	(0.0434)	(0.0466)	(0.0525)	(0.0468)	(0.0526)
edu quartile _3	0.157***	0.176***	0.160***	0.182***	0.181***	0.151**	0.183***	0.150**
	(0.0577)	(0.0590)	(0.0579)	(0.0597)	(0.0600)	(0.0675)	(0.0598)	(0.0675)
edu quartile _4	0.272***	0.294***	0.284***	0.315***	0.382***	0.320***	0.373***	0.311***
	(0.0832)	(0.0850)	(0.0843)	(0.0868)	(0.0900)	(0.101)	(0.0903)	(0.101)
Constant	1.416	1.283	3.207	3.902	0.0743	0.566	-4.120	-3.245
	(1.431)	(1.480)	(3.786)	(4.045)	(1.504)	(1.755)	(3.543)	(3.981)
Observations	12,952	12,444	12,952	12,444	13,429	10,851	13,429	10,851
R-squared	0.045	0.045	0.035	0.020	0.057	0.061	0.054	0.059
Tests of endogeneity Ho: variables are exogenous								
Wu-Hausman F(3,.)			1.621 (0.3222)	2.542 (0.0545)			.6305 (0.5953)	.4763 (0.699)
ret + partnerret + retXpar = 0 chi2(1) =								
F(1,.) chi2(1) =	2.29	2.32	0.09	0.16	7.91	5.97	3,24	2,86
Prob > chi2 P> F =	0.1299	0.1275	0.7586	0.6846	0.0043	0.0145	0.0720	0.0906

Couples. All models include age and age squared interacted with country dummies

Robust standard errors clustered at the household level in parentheses. *** p<0.01, ** p<0.05, * p<0.1, , §§ p<0.15, § p<0.2

Table 18. Effect of being retired on the on PN size of those with no partner in household

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
VARIABLES	single male OLS	single male OLS	single male IV	single male IV	single female OLS	single female OLS	single female IV	single female IV
	non SE	non SE active	non SE	non SE active	non SE	non SE active	non SE	non SE active
ret	**-0.138**	**-0.120**	**0.265**	**0.583**	**-0.306*** **	**-0.304*** **	**-0.639**	**-0.550**
	(0.110)	**(0.113)**	**(0.781)**	**(0.862)**	**(0.0742)**	**(0.0793)**	**(0.474)**	**(0.421)**
une	-0.344**	-0.330**	-0.193	-0.0822	-0.478***	-0.487***	-0.615***	-0.577***
	(0.135)	(0.136)	(0.319)	(0.329)	(0.136)	(0.136)	(0.236)	(0.203)
rac	0.269	0.271	0.579	0.816	-0.0739	-0.0636	-0.330	-0.252
	(0.185)	(0.186)	(0.625)	(0.691)	(0.119)	(0.121)	(0.379)	(0.340)
hmk	0.481		0.753		-0.164		-0.438	
	(0.496)		(0.715)		(0.100)		(0.396)	
disa	-0.158		0.00806		-0.539***		-0.692***	
	(0.142)		(0.345)		(0.116)		(0.237)	
oth	0.447		0.677		-0.116		-0.369	
	(0.558)		(0.707)		(0.166)		(0.390)	
neverjob_w4	-0.162		-0.116		-0.308**		-0.347**	
	(0.468)		(0.478)		(0.125)		(0.136)	
Nb years education	-0.00372	-0.00442	-0.00252	-0.00130	0.00566	0.00480	0.00438	0.00382
	(0.0175)	(0.0183)	(0.0175)	(0.0186)	(0.0119)	(0.0129)	(0.0120)	(0.0130)
edu quartile _2	0.239**	0.232**	0.244**	0.239**	0.187***	0.181***	0.188***	0.180***
	(0.0993)	(0.102)	(0.0992)	(0.102)	(0.0649)	(0.0690)	(0.0649)	(0.0689)
edu quartile _3	0.436***	0.447***	0.447***	0.462***	0.168**	0.173*	0.173**	0.176*
	(0.140)	(0.145)	(0.140)	(0.144)	(0.0857)	(0.0922)	(0.0860)	(0.0923)
edu quartile _4	0.571***	0.639***	0.591***	0.662***	0.530***	0.518***	0.515***	0.505***
	(0.200)	(0.208)	(0.202)	(0.209)	(0.127)	(0.137)	(0.128)	(0.138)
Constant	1.886	2.560	7.476	13.31	-1.449	-1.205	-5.448	-4.506
	(3.188)	(3.340)	(11.20)	(13.49)	(2.089)	(2.322)	(6.017)	(6.058)
Observations	2,342	2,171	2,342	2,171	6,450	5,594	6,450	5,594
R-squared	0.071	0.078	0.066	0.061	0.086	0.087	0.083	0.085
Tests of endogeneity Ho: variables are exogenous								
Wu-Hausman F(1,.)								
Robust F test			0.2750	0.76667			0.50815	0.35368
P =			(0.6000)	(0.4024)			(0.4760)	(0.5533)

Individuals living as single All models include age and age squared interacted with country dummies. Non SE: non self-employed.
Robust standard errors clustered at the household level in parentheses. *** p<0.01, ** p<0.05, * p<0.1, § p<0.2.

Table 20. Effect of the size of the SN on the life satisfaction of the non self-employed

	(1)	(2)	(3)	(4)
VARIABLES	male	female	male	female
	OLS	OLS	IV	IV
Number of family members	**0.0574*** **	**0.0932*** **	**0.0566*** **	**0.0932*** **
	(0.00947)	**(0.00849)**	**(0.00947)**	**(0.00847)**
Number of friends	**0.0438*** **	**0.0440*** **	**0.0418*** **	**0.0438*** **
	(0.0147)	**(0.0119)**	**(0.0148)**	**(0.0119)**
Number of (ex-)colleagues	**-0.0793** **	**0.0138**	**-0.0453**	**0.00696**
	(0.0388)	**(0.0448)**	**(0.0453)**	**(0.0502)**
Number of neighbours	**0.0199**	**0.0264**	**0.0105**	**0.0273**
	(0.0458)	**(0.0381)**	**(0.0461)**	**(0.0382)**
Retired	-0.201***	-0.0781*	0.162	-0.150
	(0.0423)	(0.0405)	(0.250)	(0.241)
Retired & active	-0.0527	-0.0199	0.207	-0.0726
	(0.0554)	(0.0600)	(0.183)	(0.182)
Unemployed	-0.816***	-0.404***	-0.674***	-0.436***
	(0.0923)	(0.0940)	(0.133)	(0.140)
Homemaker	-0.490*	-0.00686	-0.276	-0.0561
	(0.287)	(0.0480)	(0.322)	(0.169)
disabled	-0.307***	-0.245***	-0.139	-0.282**
	(0.0890)	(0.0810)	(0.145)	(0.143)
other	-0.415	0.167	-0.234	0.118
	(0.299)	(0.132)	(0.320)	(0.207)
Never held a job	-0.216	-0.118*	-0.161	-0.127*
	(0.251)	(0.0655)	(0.252)	(0.0707)
Constant	6.591***	8.278***	11.64***	7.406**
	(1.428)	(1.265)	(3.672)	(3.110)
Observations	15,262	19,829	15,262	19,829
R-squared	0.298	0.311	0.294	0.311
Tests of endogeneity Ho: variables are exogenous				
Wu-Hausman F(1 , .)			2.1657	0.0912
			(0.1411)	(0.7627)
Test nb family member in PN= nb pure friends				
F(1,.) or chi2(1)	0.65	12.77	0.78	12.88
Prob >F (col. 1-2) or chi2 (col. 3-4)	0.4195	0.0004	0.3773	0.0003

NB. Controlling for country interacted with age and age², demographics and all resources variables in table 5 col. 6.

Robust standard error in parenthesis, clustered by household. *** p<0.01, ** p<0.05, * p<0.1