

**Substitution through network composition or higher tie efficiency?
A cross-national comparison of the personal networks and patterns of support
provision among parents and lifetime non-parents in later life.**

Sebastian Schnettler, Dept. of Sociology, University of Konstanz
sebastian.schnettler@uni-konstanz.de

Valeria Bordone, Wittgenstein Centre for Demography and Global Human Capital
(IIASA, VID/ÖAW, WU)

Extended Abstract prepared for EPC 2014

Please do not cite without authors permission

Background

Adult children are important supporters for their elderly parents (Lye, 1996; Rossi & Rossi, 1990; Schnettler, 2008; Silverstein, Bengtson, & Lawton, 1997; Szydlik, 1995). But a growing number of individuals remains permanently childless in the US and many European populations, thus forgoing this potential form of support in later life (Dykstra, 2009; Kohli & Albertini, 2009; Morgan, 1991; Rowland, 2007). For welfare planning, it is important to understand if and how non-parents can compensate the non-existence of adult children in their support networks.

Previous research suggests that on average non-parents are disadvantaged on a number of indicators of potential and actual support. Extended kin and non-kin play a numerically bigger role in the personal networks of non-parents, but the difference is not sufficient to match the average number of children in the networks of parents (Connidis & Davies, 1990; Dykstra, 2006; Künemund & Hollstein, 2000; Schnettler, 2008). Thus, on average the networks of non-parents are smaller than those of parents (Dykstra, 1995, 2006; Künemund & Hollstein, 2000; Lang, 2004; Schnettler, 2008; Wenger, Scott, & Patterson, 2000). When it comes to contact frequency to extended kin and non kin, there seems to be no clear difference between parents and non-parents (Wenger, Dykstra, Melkas, & Knipscheer, 2007). Longitudinal evidence on the role of siblings over the life course even shows only modest support that sibling ties substitute relationships to partners or adult children (White, 2001). Yet, non-parents are found to receive less informal support and are more likely to live in eldercare homes than parents (Dykstra, 2009; Kohli & Albertini, 2009, p. 1178; Koropecjy-Cox & Call, 2007; Larsson & Silverstein, 2004), but this difference is most pronounced for individuals in bad health (Albertini & Mencarini, 2012; Wenger et al., 2007).

Research has shown that non-parents not only receive but also provide slightly less informal support than parents (Kohli & Albertini, 2009). However, they are a potential source for broader civic engagement and philanthropy (Adloff, 2009). Empirical evidence supports this assumption with regard to voluntary work and charitable contributions (Kohli & Albertini, 2009), but not for community participation (Wenger et al., 2007).

In sum, little evidence supports the assumption of a substitution of adult children in the networks of non-parents. This is evident in group differences in network size and composition and in the amount of support received or provided. Schnettler & Wöhler (2013), however, argue that in fact little is known about the mechanisms responsible for these

differences between parents and non-parents and on the types of relationships that play a role in this. Specifically, we don't know whether non-parents have fewer potential supporters and less actual support because they simply have smaller networks, or if the difference is due to the fact that their existing contacts are less likely to be available as supporters. Or it could be the other way around: non-parents have smaller networks, but their existing ties actually are more likely to provide support, thus providing a limited degree of substitution that results in a gap between parents and non-parents in terms of support received that is smaller than the gap in network size. Using data from three waves of the German Aging Survey, Schnettler & Wöhler (2013) confirm that although non-parents name slightly more members of extended kin and friends as part of their personal networks, this is not sufficient to substitute for the difference in network size. But the relative gap in the number of potential supporters is smaller than the gap in personal network size. In their multivariate analysis they show that each friend and each extended kin is more probable to be considered as potential supporters for non-parents than parents. Overall thus, the authors show that two types of compensation, compensation through network size and composition through higher tie efficiency both act to reduce the difference between parents and non-parents in old age.

There are two important limitations to the study by Schnettler & Wöhler (2013): First, it is restricted to Germany only and, second, it does not take into account actual support exchange. Here, we therefore propose to extend the study to include a cross-national comparison by using data from the Survey of Health, Ageing and Retirement in Europe (SHARE) and to examine differences in both potential and *actual* support provision, and the role of friends and extended kin in reducing perceived isolation and loneliness.

Data & Methods

We extend the findings of Schnettler & Wöhler (2013) to a cross-national comparison of Europeans aged 50+ from 16 countries, namely Denmark and Sweden (from Northern Europe); Austria, Belgium, Germany, France, Switzerland, and the Netherlands (from Western Europe); Italy, Portugal, and Spain (from Southern Europe); Czech Republic, Estonia, Hungary, Poland, and Slovenia (from Eastern Europe). We use data from SHARE wave 4 as it includes a module on social networks of respondents (Malter & Börsch-Supan, 2013). The sample size includes 39,666 respondents. We select a working sample aged 55-85¹, which counts 13,990 men and 18,721 women. Of them, 29,093 respondents have at least one child and 3,618 are childless.

Previous research shows that there is a close relationship between geographical proximity and frequency of contact between parents and children (e.g., Bordone, 2009; Hank, 2007). We therefore distinguish parents with all children living more than 25 km away (N = 4,706) and those with at least one child living within 25 km (N = 24,387).

Analytically, inferring actual support exchange from network composition involves several steps: a potential supporter needs to exist in the personal network; it needs to be recognized as potential supporter; in case of a particular need, the person has to be available; and, if need and availability are given, the potential supporter has to actually provide support. In order to distinguish the role different substitution mechanisms play at each step of this analytical pathway, at each step we need to control whether the previous condition is fulfilled. E.g., in order to examine if there are differences in the number of potential support persons, we control for network size and composition. Otherwise we cannot distinguish whether group

¹ In order to replicate the study by Schnettler & Wöhler (2013).

differences are due to compositional differences or differences in the willingness of network members to act as potential supporters. Similarly, at later steps in the analytical pathway, we control for residential proximity in order to understand if, controlling for availability, non-parents are more or less likely to being supported.

Network composition in SHARE is measured using the following network generator: “Most people discuss with others the good or bad things that happen to them, problems they are having, or important concerns they may have. Looking back over the last 12 months, who are the people with whom you most often discussed important things? These people may include your family members, friends, neighbors, or other acquaintances”. This question is asked up to seven times and therefore up to seven network members can be named. Additional information about these members that is available includes: gender, geographical distance from the respondent (ranging from 1 = in the same household to 8 = more than 500 km), frequency of contact (ranging from 1 = daily to 7 = never) and the closeness to the respondent (as perceived by this latter, i.e. “not very close, somewhat close, very close, extremely close”). We plan to use the answers on relationship, gender, geographical distance, contact and closeness to describe what kind of friends or family members are more likely to be considered as support network. We also add information on whether the parents are alive, their geographical distance to the respondent as well as information about geographical distance to (adult) children to measure the potential support network if not named as persons with whom the respondent discusses most often important things.

When it comes to actual support, we consider support in its functional dimension², as identified by Bengtson and colleagues (e.g., Bengtson, 2001), based on the information in SHARE on personal care or practical household help received from up to three persons living outside the household (“Thinking about the last twelve months has any family member from outside the household, any friend or neighbour given you personal care or practical household help?”). Additional information is available about the relationship of the supporter to the respondent and the frequency of support receipt (“almost daily, almost every week, almost every month, less often”).

Our analytical strategy is the following: we will start with a descriptive analysis comparing the size and composition of networks of the two groups of parents and of non-parents. In a next step, we will conduct a multivariate regression analysis on the number of potential supporters, controlling for both socio-economic composition (i.e. gender, age, country, income, education, health, employment, birth cohort) and composition of personal networks (cf. Schnettler & Wöhler, 2013). The latter step will include indicators of geographical proximity of network members to tune the measure of network composition according to availability. In a subsequent step, we will present an additional multivariate regression model, in which we examine if differences between parents and non-parents exist in support receipt, controlling for both availability of potential supporters and their geographical proximity and for support need.

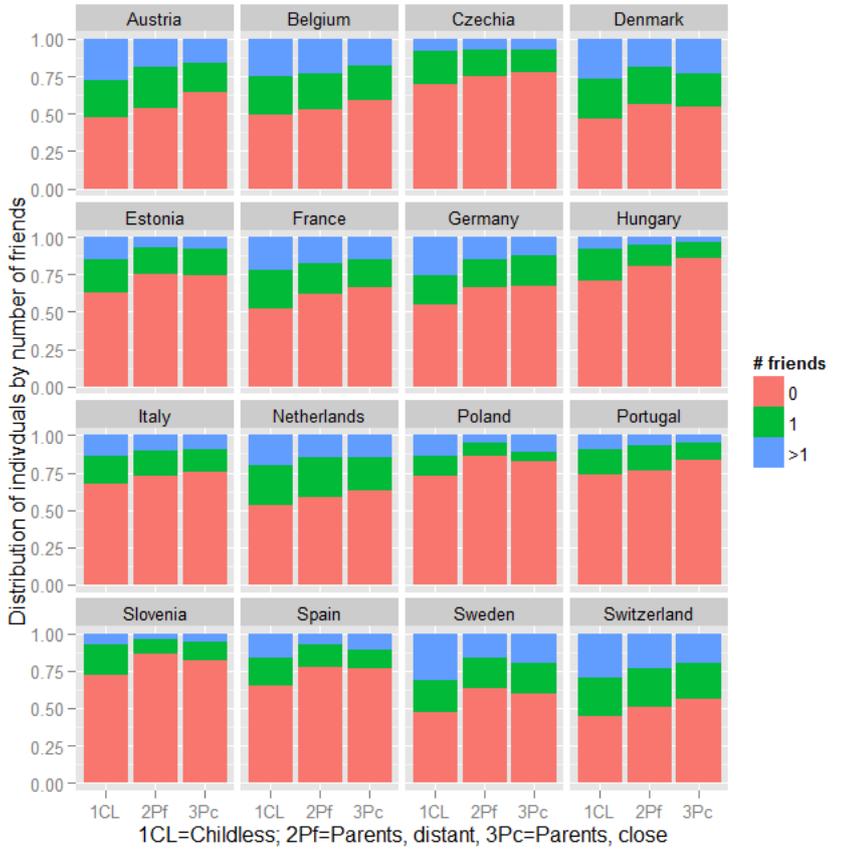
² We plan to extend our analysis to include other dimensions of solidarity in future research.

Preliminary findings:

The quantitative and qualitative importance of friends in reducing feelings of isolation

Figure 1 shows that in all countries included in our sample, childless have the lowest share of respondents reporting to have no friends. Depending on the country, the share of respondents without friends is about the same for both groups of parents or the share of those without friends is slightly lower for parents with all children living away. This roughly confirms the finding of Schnettler & Wöhler (2014) for Germany. This descriptive result thus indicates a small degree of substitution of parent-child ties through friendship ties. However, it should be noted that in all groups, including the childless, a considerable share of individuals exists that reports to have no friends. In most countries this share exceeds 50%.

Figure 1: Share of persons with no friends, one friend, or more than one friend (by parental status, country)

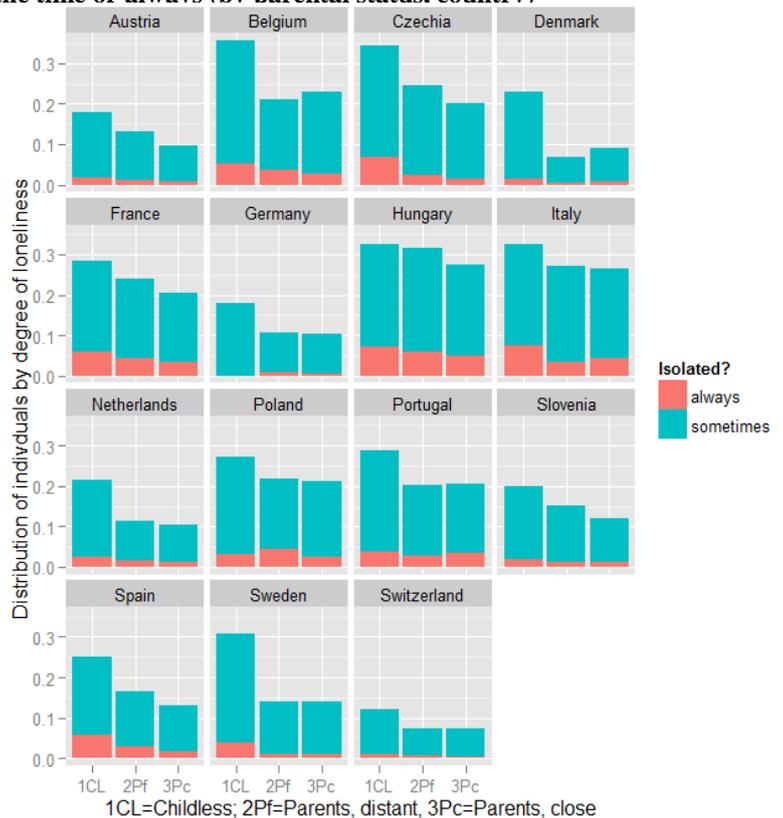


Next, we examined how many respondents reported feelings of isolation. To this purpose, we created a mean index over four indicators of isolation (Cronbach's alpha ~ .84):

- How much of time: feel you lack companionship?
- How much of time: feel left out?
- How much of time: feel isolated from others?
- How much of time: feel lonely?

Mean values over these four indicators were rounded to the next full digit, as each of the indicators and index has three answer categories: never, some of the time, always. Figure 2 shows that a higher share of individuals among the childless reports feelings of isolation as

Figure 2: Share of respondents feeling isolated some of the time or always (by parental status, country)



compared to parents. Relatively more childless respondents report feeling of isolation some of the time and always.

In a next step we examined the association between existing friendship ties and feelings of isolation. To this purpose we conducted a regression analysis on isolation (1=feeling isolated some of the time or always) and extreme isolation (1=feeling isolated always vs. 0 = feeling isolated some of the time or never). In the current version of the presented models we controlled for age, education, self-rated health, and country. Further controls will be considered for the final model on the poster.

Figure 3: Panel A

Average partial effects of having a friend on isolation, by parental group

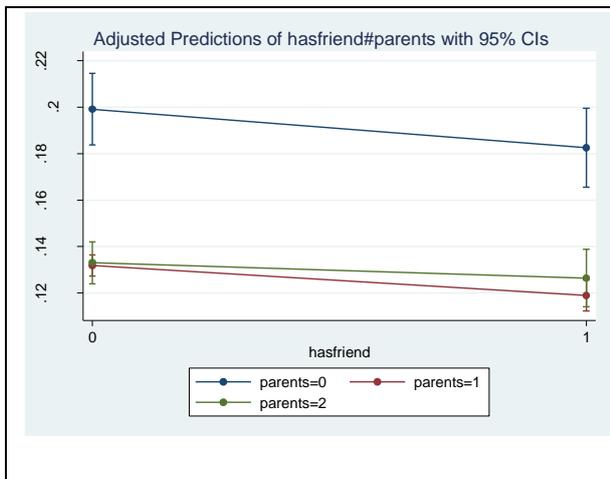
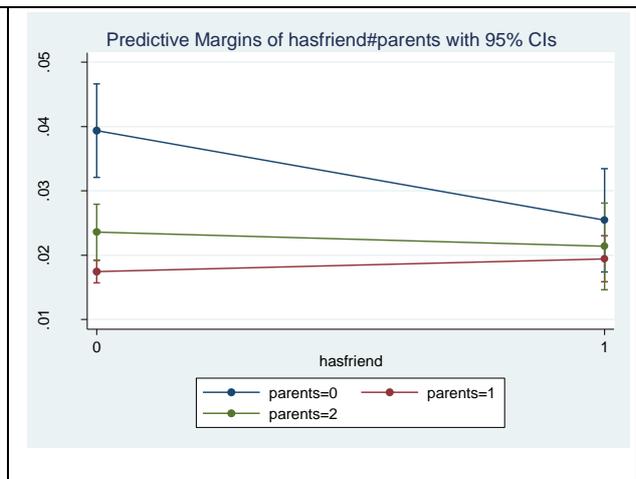


Figure 3: Panel B

Average partial effects of having a friend on extreme isolation, by parental group



For illustrative purpose, we present average partial effects from the logistic regression on feeling isolated at least sometimes (vs. never) or feeling always isolated (vs. sometimes or never). The full regression tables are not presented here. The average marginal effects show that the childless are more likely to feel isolated at least sometimes, independent of having a friend or not (Figure 3, Panel A). But having a friend reduces the difference in the probability for extreme isolation, but more so for the childless (interaction effect): Whereas the childless have a higher probability of feeling always isolated than both groups parents, this difference vanishes if respondents do have a friend. For parents, there is hardly any effect of having a friend.

Overall, thus, we find evidence for two types of compensation for the childless: compensation through a larger number of friends and compensation through a relatively higher effect of friendship among the childless. Specifically, the childless have slightly more friends on average than parents and having a friend has more of an effect on reducing permanent feelings of isolation among the childless than among parents. Friendship does not have a stronger effect for the childless in reducing occasional feelings of isolation than for parents. Whether the stronger reduction of permanent feelings of isolation in the case of availability of a friend is due to a higher efficiency of friendship or saturation of isolation-reducing effects in case of availability of other close and distant kin ties cannot be concluded from the current analysis. Therefore, for the poster we will extend our analysis by including quantity of personal network ties, beyond just the number of friends.

We will further extend our analysis for other types of support or lack of support to examine if a similar direction of compensation can be found in those cases as well.

References

- Adloff, F. (2009). What encourages charitable giving and philanthropy? *Ageing and Society*, 29(8), 1185–1205. doi:10.1017/S0144686X08008295
- Albertini, M., & Mencarini, L. (2012). Childlessness and support networks in later life: New pressures on familistic welfare states? *Journal of Family Issues*, (online before print), 1–27. doi:10.1177/0192513X12462537
- Bengtson, V. L. (2001). Beyond the nuclear family: The increasing importance of multigenerational bonds. *Journal of Marriage and Family*, 63(1), 1–16. doi:10.1111/j.1741-3737.2001.00001.x
- Bordone, V. (2009). Contact and proximity of older people to their adult children: A comparison between Italy and Sweden. *Population, Space and Place*, 15(4), 359–380.
- Connidis, I. A., & Davies, L. (1990). Confidants and companions in later life: The place of family and friends. *Journal of Gerontology*, 45(4), S141–S149. doi:10.1093/geronj/45.4.S141
- Dykstra, P. A. (1995). Network composition. In C. P. M. Knipscheer, J. de Jong Gierveld, T. G. van Tilburg, & P. A. Dykstra (Eds.), *Living arrangements and social networks of older adults* (pp. 97–114). Amsterdam: VU University Press.
- Dykstra, P. A. (2006). Off the beaten track: Childlessness and social integration in late life. *Research on Aging*, 28(6), 749–767. doi:10.1177/0164027506291745
- Dykstra, P. A. (2009). Childless old age. In P. Uhlenberg (Ed.), *International Handbook of Population Aging* (pp. 671–690). Springer.
- Hank, K. (2007). Proximity and contacts between older parents and their children: A European comparison. *Journal of Marriage and Family*, 69(1), 157–173.
- Kohli, M., & Albertini, M. (2009). Childlessness and intergenerational transfers: what is at stake? *Ageing and Society*, 29(08), 1171. doi:10.1017/S0144686X09990341
- Koropecj-Cox, T., & Call, V. R. A. (2007). Characteristics of older childless persons and parents: cross-national comparisons. *Journal of Family Issues*, 28(10), 1362–1414. doi:10.1177/0192513X07303837
- Künemund, H., & Hollstein, B. (2000). Soziale Beziehungen und Unterstützungsnetzwerke. In *Die zweite Lebenshälfte. Gesellschaftliche Lage und Partizipation im Spiegel des Alters-Survey*. (pp. 212–276). Opladen: Leske + Budrich.
- Lang, F. R. (2004). The availability and supportive functions of extended kinship ties in later life: Evidence from the Berlin Ageing Study. In S. Harper (Ed.), *Families in ageing societies: A multi-disciplinary approach*. (pp. 64–81). Oxford: Oxford University Press.
- Larsson, K., & Silverstein, M. (2004). The effects of marital and parental status on informal support and service utilization: A study of older Swedes living alone. *Journal of Aging Studies*, 18(2), 231–244. doi:10.1016/j.jaging.2004.01.001
- Lye, D. N. (1996). Adult child-parent relationships. *Annual Review of Sociology*, 22(1), 79. doi:10.1146/annurev.soc.22.1.79
- Malter, F., & Börsch-Supan, A. (2013). *SHARE Wave 4: Innovations & Methodology*. Munich: MEA, Max Planck Institute for Social Law and Social Policy.
- Morgan, S. P. (1991). Late nineteenth-and early twentieth-century childlessness. *The American Journal of Sociology*, 97(3), 779–807. doi:10.1086/229820
- Rossi, A. S., & Rossi, P. H. (1990). *Of human bonding: Parent/child relations across the life course*. New York, NY: Aldine De Gruyter.
- Rowland, D. T. (2007). Historical trends in childlessness. *Journal of Family Issues*, 28(10), 1311–1337.
- Schnettler, S. (2008). *Ohne Kinder alt werden*. Saarbrücken: VDM.
- Schnettler, S., & Wöhler, T. (2013). On the compensating role of extended family and non-family ties among the childless elderly in Germany. Presented at the British Society for Population Studies 2013 Conference, Swansea, Wales.

- Schnettler, S., & Wöhler, T. (2014). On the compensating role of friendship for parents and non-parents in later life. In M. Löw (Ed.), *Vielfalt und Zusammenhalt. Verhandlungen des 36. Kongresses der Deutschen Gesellschaft für Soziologie in Bochum 2012*.
- Silverstein, M., Bengtson, V. L., & Lawton, L. (1997). Intergenerational solidarity and the structure of adult child-parent relationships in American families. *American Journal of Sociology, 103*(2), 429–460. doi:10.1086/231213
- Szydlik, M. (1995). Die Enge der Beziehung zwischen erwachsenen Kindern und ihren Eltern - und umgekehrt. *Zeitschrift für Soziologie, 24*(2), 75–94.
- Wenger, G. C., Dykstra, P. A., Melkas, T., & Knipscheer, K. C. P. M. (2007). Social embeddedness and late-life parenthood: Community activity, close ties, and support networks. *Journal of Family Issues, 28*(11), 1419–1456. doi:10.1177/0192513X07303895
- Wenger, G. C., Scott, A., & Patterson, N. (2000). How important is parenthood? Childlessness and support in old age in England. *Ageing & Society, 20*(02), 161–182.
- White, L. (2001). Sibling relationships over the life course: A panel analysis. *Journal of Marriage and Family, 63*(2), 555–568. doi:10.1111/j.1741-3737.2001.00555.x