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CHAPTER THREE

Generational Contact and Support among Late Adult Siblings within a Verticalized Family

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Since discussion of the isolated nuclear family and the modified extended family began in the 1960s, most empirical intergenerational family studies have focused on the structural and functional changes in the parent-child relationship. The verticalization of the family structure added an extra push to this direction in the discipline. The focus of the studies on sibling relationships has been quite different, however. These studies, very limited in number, are mainly on psychological and functional characteristics and only recently question the consequences of demographic changes in the structure of the multigenerational family. Focusing on the availability of siblings and on frequency of contact and exchange of support among older adults, we aim in this study to strengthen our understanding of the structural characteristics of the sibling relationship in late life by the end of the twentieth century.

In 1992, White and Riedmann made the point that they were not aware of any existing population studies on sibling relationships. Another publication by White (2001) appears to be the only publication on sibling relationships in the United States since 1992. This demonstrates that representative information about the sibling relationships on a national level is very limited. In the Netherlands, Voorpostel et al. (2007) published an article based on data from

the Netherlands Kinship Panel Study. However, this article does not present much descriptive data on the composition and availability of siblings within the Dutch multigenerational family. This chapter, primarily focusing on availability, frequency of contact, and exchange of support among late adult and older siblings, will be based on data from a Dutch panel study that started in 1992.

In a review of the sibling literature, van Volkom (2006) opens by saying that the number of studies on siblings in general and siblings in late adulthood more specifically is very limited compared to the number of studies on romantic and parent-child relationships. She notes that this fact is not in harmony with her finding that "The majority of the work summarized here characterizes the sibling relationship as one of strong emotional ties, helping and importance for the adult's well-being" (van Volkom, 2006, p. 165). However, 44 of her 85 references were published between 1985 and 1995 and only 10 after the year 1999. This indicates no consistent tradition of sibling research and a recent decline in scientific interest in this type of relationship.

Scholars who have studied the role of siblings among older adults stress the importance of these relationships in late adulthood and old age because of their specific combination of characteristics. Siblings share the same biological parents (apart from half siblings and adopted siblings). This implies that the sibling relationship is in principle a given, not chosen, lifelong relationship and that siblings share a common educational history and may generally be considered age peers (van Volkom, 2006). Bedford (1996) describes the sibling relationship as an "elusive, emotionally charged, memory-laden tie" (p. 134). Adults feel close to their siblings because of their shared experiences, trust, concern for each other, and common enjoyment despite rivalries in a limited number of cases (Bedford, 1996). Cultural priority is placed on obligations to other family members (spouse, parents, and children), and the sibling relationship has been qualified as voluntary compared to the parent-child relationship, more expressive than instrumental, and based on equality (Avioli, 1989; van Volkom, 2006).

Important sources of variability within sibling relationships are evident. For example, differences in gender composition of the sibling relationship show up in most studies. The greatest levels of closeness are apparently between sisters, leaving cross-sex siblings somewhat behind (Cicirelli, 1985; White & Riedmann, 1992). Akiyama, Elliott, and Antonucci (1996) demonstrated that brothers' relationships appear to be the least close. Bedford (1996) and White (2001) demonstrated that sisters are more supportive than broth-

ers. However, Bedford showed earlier that there can be a great deal of tension between sisters (Bedford, 1989). Sisters provide a great deal of emotional support and help to widows, although unmarried sisters do so more than married sisters (O'Bryant, 1988; White & Riedmann, 1992). In a later panel study over approximately five years among about 9,000 individuals aged 16–85, White (2001) confirms this increasing contact and exchange of support in case of marital dissolution.

Age effects appear to be stronger than family life course events. "Proximity and contact decrease modestly in early adulthood and then show long-term stability through old age. Giving and receiving help decline from age 16 until old age, however a substantial resurgence in sibling exchange is demonstrated after age 70 among those with nearby siblings" (White, 2001, p. 565). This demonstrates the importance of events related to family life course and fits with the original approach by Parsons (1943) arguing that siblings share in our "inner circle" of family of orientation but drop into the "outer circle" after marriage. This is supported by a convoy study by Antonucci and Akiyama (1987) showing that adult siblings are generally in the "second tier" (White & Riedmann, 1992). However, as White (2001) demonstrated and van Volkom (2006) stresses, family life course events, "such as widowhood and parental death, often lead to a sibling returning to the inner circle as a replacement for the person who was lost" (van Volkom, 2006, p. 153).

Just a few publications have examined the role of social class in sibling relationships. Avioli (1989) refers to some studies which show that working-class siblings exchange more instrumental support. These findings are supported by White and Riedmann (1992). Among middle-class siblings, expressive support was expected to be higher (Avioli, 1989). More specific findings became available in White's panel study (2001). Higher educated siblings move farther away, and their frequency of contact with siblings appears to be lower; however, exchange of support in both directions is higher among better-educated siblings. These somewhat paradoxical findings show that variability in sibling relationships according to social class is inconsistent.

The importance of sibling relationships is related to gender and age and is also linked to family life course events, including changes in partner status, having children, and parental loss as well as disruptive family life course events that became more common during the second half of the twentieth century, such as divorce and serial partner relationships. Riley (1983) referred to this "new family structure" as a matrix of latent relationships: a network potential that can be activated when appropriate. Van Tilburg and Thomése

(2010) stressed that these changed family structures did not provoke a decline in the importance of the family. In 2005, Connidis suggested considering siblings as part of a web of relationships that individuals have spun over time. This metaphor may be appropriate for conceptualizing the role of siblings in later life.

The limited number of sibling studies matches with the paucity of theoretical conceptualizations of this relationship. Among the earliest theoretical approaches are attachment theory (Cicirelli, 1996) and equity theory (George, 1986; Ingersoll-Dayton, Neal, Ha, & Hammer, 2003). Cicirelli argues that according to adult attachment theory (Bank & Kahn, 1982a,b), attachment is not restricted to the mother but can also develop to other individuals, including siblings who are responsive and supportive to their brothers or sisters. However, such an affective bond needs to fill several criteria to be considered as attachment. This chapter does not explore further the sibling relationship as an affectionate bond. Equity theory in sibling research originates from the distress experienced by siblings who assume the majority of caregiving responsibilities (Connidis, 2007; George, 1986; Ingersoll-Dayton, Neal, Ha, & Hammer, 2003). Several studies demonstrate the specific sensitivity of siblings to issues of inequity in caregiving, which extends both to those who deliver most care and to those who deliver less. Both attachment theory and equity theory focus on the individual relationships between siblings. Connidis (2005) argued in favor of a life course approach in combination with a consistent social structural perspective. "The compatibility of the life course perspective with feminist approaches . . . and the concept of ambivalence suggests a working perspective on sibling ties in which socially structured relations based on gender, class, race, age and sexual orientation shape the interdependent life course trajectories of siblings who engage in relationships characterized by ambivalence" (Connidis, 2005, p. 430). Her plea to use the life course perspective to conceptualize the sibling relationship seems to be in line with the importance of family life course events in shaping sibling relationships.

Still another structural factor supports the use of a life course perspective to study the sibling relationship. Most recent studies on sibling relationships stress the significance of demographic changes regarding both the increasing proportion of childless couples and the changing composition of the multigenerational family. A decreasing number of children per generation and the increase of life expectancy do not only cause a verticalization of the multigenerational family. They also increase the probability of sibling survival and in this way the availability of siblings in later life. As Connidis (2005) stresses,

"Living longer also increases the number of overlapping years and the number of significant transitions in their parents' and their own lives that siblings will share" (p. 431). These structural changes in the composition of the consecutive families of orientation may lead to an upswing of the role of siblings in later life, as White (2001) already demonstrated in her five-year panel study by showing a slight rise in exchange among siblings after the age of 70.

This chapter focuses on the availability of siblings to older adults and on the frequency of contact and exchange of support among them. We place siblings in the context of the social network of older adults. This offers two opportunities for insight into the role of siblings. First, we compare sibling relationships with two other relationship types within the social network, children and age peers, in terms of contact frequency and social support exchange. Second, we explore the main determinants of variability in sibling relationships and their place in social networks. The main questions we intend to answer are (1) To what extent are sibling relationships represented within the social network? Are there differences across generations, and what are main determinants of representation? and (2) What is the contact frequency and intensity of support exchanges among late adult siblings, and what can we learn from a comparison with older people's contact frequency and intensity of support exchanges with children and age peers?

Method

Respondents

Data were available for older people who participated in the Living Arrangements and Social Networks of Older Adults research program (Knipscheer, de Jong Gierveld, van Tilburg, & Dykstra, 1995). The program used a stratified random sample of men and women born between 1903 and 1937. The sample was taken from the population registers of eleven urban and rural municipalities in three regions that represent differences in religion and urbanization in the Netherlands. The oldest individuals in these areas, particularly the oldest men, were over-represented in the sample. In 1992, 4,494 respondents were interviewed in their homes. The cooperation rate was 62%. The interviews were carried out by interviewers who had received training for four days and who were intensively supervised, and the interviews were tape recorded to monitor and enhance the quality of data. Follow-ups were conducted in the context of the Longitudinal Aging Study Amsterdam, or LASA (Huisman et al., 2011). In 2002, LASA sampled a new cohort (birth years 1938–1947,

n = 1,002) from the same sampling frame as the earlier cohort, with a cooperation rate of 62%. There were various reasons not to have complete information for all respondents. Most frequently, respondents were too physically or cognitively frail to be interviewed with the full questionnaire, and an abridged version of the face-to-face interview was used (n = 361). Furthermore, data on the social network were not available for 61 respondents due to premature termination of the interview or refusal for privacy reasons.

Measurements

Identification of Children and Siblings

At baseline, the identification of children followed a two-step procedure. First, the number of children was assessed by means of the following question: "How many children have you had? You should consider not only the children whose natural mother (father) you are but also stepchildren and adoptive children. Please do not forget to also count children who may have already passed away." In the second step, each child was identified by name. A similar procedure was followed for siblings of the respondent.

Child and Sibling Characteristics

After respondents identified their children, they were asked to give the children's gender; describe them as biological children, stepchildren, or adoptive children; and state whether they were deceased. The frequency of contact was assessed by the question, "How often are you in touch with X?" The choice of answers and their numeric values were (1) never, (2) once a year or less, (3) few times a year, (4) once a month, (5) once a fortnight, (6) once a week, (7) few times a week, and (8) each day. Travel time to reach the child was asked in hours and minutes and scored in minutes. Data obtained within a side study showed that the traveling time reported by the older adults correlated strongly (r > .80) with the time reported by the network members and with the figures given by public databases for traveling the distance by car. Among respondents born between 1903 and 1937, a similar procedure was followed for siblings; for later cohorts, these detailed data are not available for siblings.

Identification of Social Network Members

The main objective was to identify a network that reflected the socially active relationships of the older adult in the core as well as the outer layers of the larger network (van Tilburg, 1998). To ensure that all types of relationships

had the same chance of being recorded, respondents' networks were identified with a domain-specific approach, using seven formal types of relationships: household members (including the spouse, if there was one), (other) children (including stepchildren) and their partners, other relatives, neighbors, colleagues (including from voluntary work or school), fellow members of organizations, and others (e.g., friends and acquaintances). To ensure that the socially active relationships were identified, but not individuals who were contacted frequently for non-personal reasons, such as shopkeepers, the importance of the relationship was added as a criterion in the stimulus question. After this inventory, we identified the top-12 network for all those respondents who listed thirteen or more relationships in the first step of the identification. In this case, the selection was based on frequency of contact. Support questions were limited to the relationships with members of the top-12 network.

In the domain of children, the following question was asked: "Earlier in the interview you provided the names of all your living children. You also told us whether they have a husband, wife or partner. We would like to know with which children and partners you have frequent contact and who are also important to you. Could you name them one at a time, by their first name and the initial letter of their surname?" These specific questions were repeated for other relatives, including siblings. Respondents were restricted to identifying only people above the age of 18 and a maximum of 80 people. No respondent reached this limit. Network members were identified by name. Contact frequency was assessed by means of the same question as above. The question was skipped for network members for whom the question had already been asked in the demographic section.

Supportive Exchanges

For the 12 relationships with the highest contact frequency, questions were asked about support. One question for each selected network member asked respondents about receiving instrumental support: "How often in the past year did X help you with daily chores in and around the house, such as preparing meals, cleaning the house, transportation, minor repairs, filling out forms?" One question asked respondents about receiving emotional support: "How often in the past year did you talk to X about your personal experiences and feelings?" For support given, the questions were reversed. The answer categories and their numeric values were never (0), seldom (1), sometimes (2), and often (3). To obtain an indicator of the intensity of support exchange, the four scores were summed.

Age Peers

Ninety percent of the respondents had siblings who were between 10 years younger and 15 years older. For respondents aged 55–64 years, nonkin network members in the age range of 10 years younger to 15 years older were considered to be age peers. For older respondents, we adopted a wider age range. For respondents aged 65–74 years, this age range was 15 years younger to 20 years older. For respondents aged 75 or older, the lower limit was 15 years younger and there was no upper limit. We differentiated the age ranges because we supposed that the older people are, the more broadly they understand their own age-peer groups.

Procedure

In answering the first research question, we made use of the complete inventory of children and siblings. We computed the average number of children and siblings born, the number still alive, and the number identified in the social network. We presented these data according to five-year birth cohorts characterized by 55–89-year-olds in 1992 and 55–64-year-olds in 2002. Next, we conducted by means of regression analysis a search for background variables to explain the variation in the number of siblings included in the network. Three dependent variables were distinguished. First, the absolute number of siblings identified as network members, ranging between none and 13. Second, the proportion of the network consisting of siblings. Third, the proportion of siblings represented in the network. Explanatory variables included in the regression equations were the number of siblings alive, the average traveling time to siblings, network size, having of children, average traveling time to children, partner availability, whether there is a parent alive, gender, level of urbanization, church membership, level of education, and geographical region. In a second step, we considered the importance of differentiation by cohort membership. Categorical variables were included as dummy variables.

In answering the second research question, frequency of contact and intensity of supportive exchanges within late-adult sibling relationships were assessed. To compare sibling relationships with child relationships, we selected respondents with living siblings and children. We decided further to select only one relationship with a sibling and one with a child for each respondent. We selected the one with whom there was the highest frequency of contact. Paired *t*-tests were conducted to evaluate whether the sample averages of both

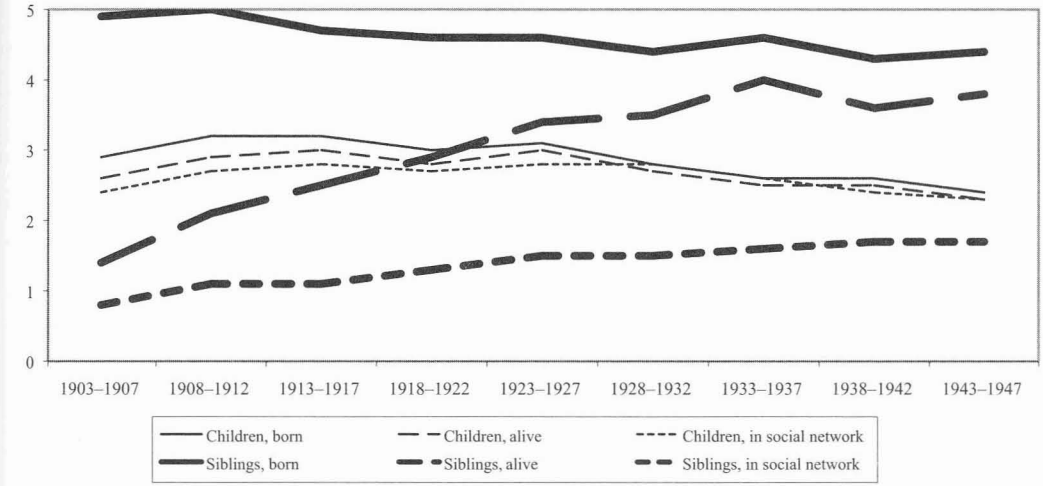

Figure 3.1. Average number of children and siblings born, alive, and in the social network. *Note:* Observations for cohorts 1903–1937 in 1992, for cohorts 1938–1947 in 2002. N = 5,199 and 5,135 for average number of children and siblings, respectively, born and alive. N = 4,365 and 4,345 for average number of children and siblings, respectively, in social network; respondents without children and siblings, respectively, are excluded.

categories differed. For the comparison with age peers, a similar procedure was adopted.

Results

Of the 5,135 respondents, 210 never had siblings and 519 no longer had living siblings. Figure 3.1 presents descriptive data about availability of children and siblings across 11 five-year cohorts born between 1903 and 1947. All cohorts consistently had about two more siblings than children. For siblings and children still alive, the figure shows that the youngest cohort had already lost on average almost one sibling; among the oldest cohort only about one sibling on average is left. This finding must be partly an outcome of early child death in the first half of the twentieth century and of the higher mortality rates over the age of 50 among these cohorts.

Respondents identified those children and siblings who were important to them and with whom they had frequent contact and as such who were members of their social networks. Figure 3.1 also displays the average number of liv-

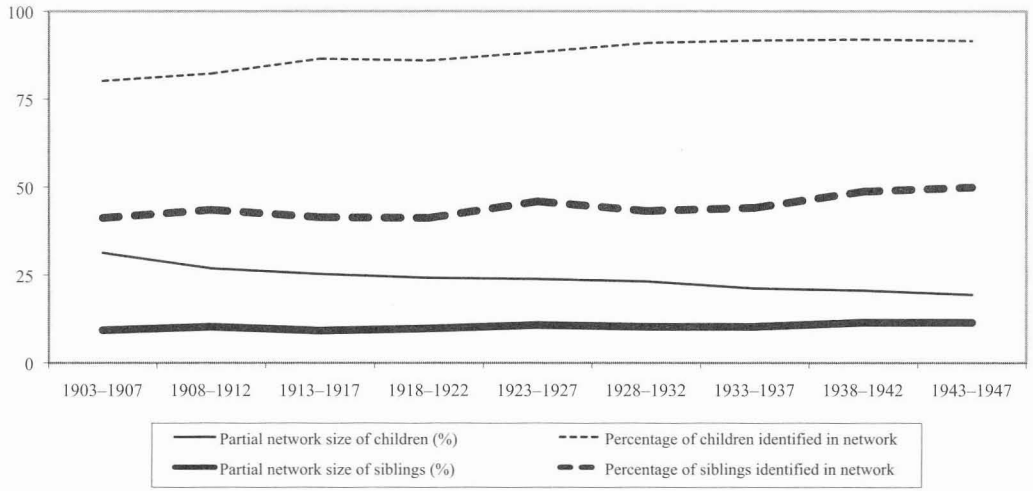

Figure 3.2. Partial network size of children and siblings (as percentage of total network size) and the percentage of children and siblings identified as social network members. *Note:* Observations for cohorts 1903–1937 in 1992, for cohorts 1938–1947 in 2002. N = 5,199.

ing children and siblings in the social network across birth cohorts. As is shown in figure 3.2, between 80% and 90% of living adult children were identified as social network members for all cohorts (i.e., the children are important to their parents and in relatively frequent contact with them). Between 40% and 50% of living siblings were in the respondents' social networks. Younger cohorts were more likely to identify children or siblings as network members.

The networks delineated in our study were large compared to those in other network studies (Broese van Groenou & van Tilburg, 2007). For the oldest cohort on average about eight network members are identified, and for recent cohorts the average size is about 14. On average, two-thirds of the network members are relatives (including in-laws), and children are proportionally a major part in the network. The proportion of children in the social network decreases over time (figure 3.2). For the oldest cohort, 31% of network members are children. This proportion decreases to 19% for the youngest cohort. The proportion of siblings within the social network is about 10% within all cohorts.

Table 3.1 presents the results of the regression of the number of siblings in the social network, the partial network of siblings as proportion of the social network, and the proportion of the siblings represented in the social network. Across the three regression equations the effects are remarkably similar, with

Table 3.1. Regression of the number of siblings in the social network, the partial network of siblings in the social network, and the proportion of siblings represented in the social network (n = 3,415)

	Number in social network	Partial network of siblings	Proportion of siblings in network
	Beta	Beta	Beta
Number of siblings alive	0.42 ***	0.30 ***	-0.14 ***
Average traveling time to siblings	-0.07 ***	-0.08 ***	-0.12 ***
Network size (siblings excluded)	0.29 ***	-0.15 ***	0.33 ***
Having children	-0.10 ***	-0.24 ***	-0.13 ***
Average traveling time to children	0.00	-0.01	-0.03
Having partner	-0.05 **	-0.07 ***	-0.03
Parents alive (versus both deceased)	0.01	0.00	-0.01
Female	0.07 ***	0.07 ***	0.09 ***
Level of urbanization	0.04 *	0.05 **	0.05 **
Religious denomination (*ref* = *none*)			
Roman Catholic	0.01	0.00	-0.01
Protestant	0.02	0.02	0.03
Educational level attained	-0.01	0.00	0.01
Region in the Netherlands (*ref* = *South*)			
Northeast	-0.01	-0.02	-0.02
West	-0.03	-0.03	-0.03

* $p < .05$, ** $p < .01$, *** $p < .001$

some exceptions. Respondents with more living siblings have more siblings in their network and their networks are more characterized by large numbers of siblings, but fewer of their siblings are identified as social network members. This suggests that siblings are an important category for older adults to have available in their network but that those with many siblings do not have frequent contact with all their siblings or do consider all of them important contacts. This is more true when siblings do not live nearby. For respondents with long traveling times from sibling to sibling, the network consists of fewer siblings. The positive effects for network size on the number of siblings and the likelihood of identifying a sibling as network member indicates that sociable older adults with many other relatives and nonkin contacts are more likely to include siblings in their networks than older adults with smaller networks. However, compared with childless older people, those with children have fewer siblings in their network. Similar effects are observed for respondents who have a partner available. Among those without a partner, siblings might compensate for relationship functions available within spousal and parent-child relationships.

A parent alive might be centrally positioned in a family and facilitate contact among siblings. However, whether a parent is alive does not matter for network membership of siblings. Female respondents have more siblings in their network, have a network composition characterized by a large partial network of siblings, and identify more of the siblings as social network members. Older people living in more urbanized areas, such as cities or large villages, have more siblings in their networks. Church membership, level of education, and geographic region do not help to explain variation in the respective sibling variables. The R^2 of these models were .28, .20, and .16, respectively. In a second model (results not shown), birth cohort membership was added to the equations. A significant increase in explanatory power was not observed in any model. Since birth cohort pertains to cohort differences as well as to age differences, an unambiguous conclusion cannot be drawn. It might indicate very little change over time among five-year cohorts born in the first half of the twentieth century. It also might indicate that the position of siblings in the personal network of older adult respondents does not change when they proceed from late adulthood to old age.

In answering the second research question, we assessed the contact frequency and the intensity of supportive exchanges within relationships with siblings. If there were numerous siblings, we selected the sibling most often contacted. By focusing on one sibling, we emphasize the specific meaning that a sibling relationship might characterize. To put the contact frequency and supportive exchanges in perspective, we compare the averages with those for a child and an age peer selected in a similar procedure. A comparison can only be conducted when a respondent has both categories available. On the scale for contact frequency, with a range from 1 to 8, the average for the selected sibling is 4.7 (SD = 1.8), which is close to once every two weeks. For the selected child this average is 7.0 (SD = 1.2), or several times a week, significantly more often than for selected siblings ($t(2976) = 63.5$, $p < .001$). We observe that the average contact frequency with the selected child is much higher than with the sibling, showing the relative prominence of children in comparison to siblings. For the comparison with age peers, we have data available only from the top 12 of the network. There is more often contact with age peers: the average for the selected sibling is 5.3 (SD = 1.6), and for the age peer the average is 6.4 (SD = 1.5; $t(1672) = 21.3$, $p < .001$). The intensity of support exchange was assessed on a scale from 0 to 12. The average for the selected sibling is 4.2 (SD = 2.7) and for the selected child 6.7 (SD = 2.9; $t(1171) = 29.6$, $p < .001$). The average level of exchange of support with the child is consider-

ably higher than with the sibling, showing again the prominence of children in comparison to siblings. For the comparison with an age peer, the average for the selected sibling is 4.5 (SD = 2.8) and for the selected age peer 4.2 (SD = 2.9; $t(1167) = 3.7$, $p < .001$). Here we observe that support exchange is more intense among siblings than among nonkin age peers.

Discussion

We focused our analysis on the availability of siblings among older adults and on frequency of contact and exchange of support among them. Using the context of the social network of older adults for a comparative approach, we assessed how many siblings were identified as social network members with whom respondents had frequent and important contact. Sibling relationships were compared to those with children and nonkin age peers with respect to contact frequency and the intensity of social support exchanges.

Eighty-six percent of the older adults in our sample, aged 55 to 89 years, had at least one living sibling, a remarkable outcome of the increased life expectancy during the second half of the twentieth century. Additionally, about half of our respondents had at least one sibling in their social network.

The data presented in figure 3.1 show an interesting picture of family development in the Netherlands in the twentieth century. In contrast to discussions about the loss of the extended family, intergenerational conflicts, high divorce rates, and women's increased labor force participation, these figures demonstrate a remarkable stability in a number of family characteristics for those born in the first half of the twentieth century. Eleven five-year cohorts demonstrate hardly any change in the average number of siblings born for older adults among five-year cohorts from 1903 to 1947; due to mortality, the average number of siblings alive is much lower among the oldest cohort than the youngest one. During the same period, the average number of children among these cohorts is again quite stable; however, the average number of children is considerably lower than the average number of siblings. Both figures reflect the national birth rate during the twentieth century, which means that the average number of siblings will decrease among later cohorts after 1947. Given the fact that in the Netherlands the baby boom lasted up to 20 years after the Second World War, the average number of children among the cohorts of older adults born between 1947 and 1965 will be at about the same level as each other.

Having a complete inventory of children and siblings but also asking sepa-

rately about those children and siblings who are considered members of the social network offers insight into the composition of the social network compared to the availability of children and siblings. For the oldest cohorts, the average numbers of children and siblings in the network are lower compared to the younger cohorts (see figure 3.1); however, these numbers are lower for quite different reasons. The smaller number of siblings in the social network among the older cohorts is mainly related to the death of siblings, whereas the smaller number of children seems to be related to deterioration of relationships with some children, as the lower proportion of children in the social network of the oldest cohorts indicates (figure 3.2). The decreasing average number of children in the social network for younger cohorts (figure 3.1) is related to the decreasing birth rate since 1965; however, it may also be related to a decreasing involvement of children in parents' social networks (figure 3.2), which may indicate a gradual shift in the significance of children in the social networks of older people. Apart from change in the availability of siblings, the partial network of siblings in the social network and the siblings as a proportion of the social network appear to remain remarkably stable among birth cohorts from the first half of the twentieth century. Undoubtedly, the role of the children is more prominent, but the role of siblings in the social network is also significant.

In addition to gender and age, family life course events have been identified as important determinants of the role of siblings in the lives of older adults. We explored these determinants by introducing several explanatory variables in the regression of the representation of siblings in the network. Women studied have more siblings in their social networks than men, a larger partial network of siblings, and a higher proportion of siblings in their social networks. Family life course events like childlessness and having no partner available result in an increased importance of sibling relationships. Number of living siblings relates significantly to two of the sibling variables of older adults social networks, but respondents with a high number of living siblings have a lower proportion of siblings in their social networks. However, the power of this regression needs a caveat: It is unreasonable to argue that number of siblings alive is conceptually completely independent of the three sibling variables. Network size appears to be positively related to the number of siblings alive and to the proportion of siblings in the social network but inversely related to the size of the partial network of siblings. This may be in some way related to our procedure for the network inventory, which tended to generate

large networks (Broese van Groenou & van Tilburg, 2007). Within large social networks, a large proportion of siblings will be represented in the social network; however, the partial network of siblings will be relatively small. Travel distance seems to play an important role in interaction with siblings. Short distance offers easier access and may help maintain relationships. Living in the city also appears to promote contact with siblings.

Church membership, level of education, geographical region, and whether parents are alive did not contribute to the variables being studied. The fact that level of education had no effect was not surprising, and previous findings about variability in sibling relationships according to social class have been inconsistent. More surprising is that the death of both parents had no effects. White (2001) and van Volkom (2006) have suggested that siblings move back into the inner circle of a family of orientation after the death of the parents.

We observed cross-sectionally a great stability in the role of siblings among older adults over five-year birth cohorts between 1903 and 1947, as was clear from the descriptive results as well as from the regression analyses. The data show no evidence of historical variation of the three sibling variables in older adults' social networks. Important changes in family life during the second half of the twentieth century have not endangered the sibling constellation for generations from the first half of the twentieth century. Neither the verticalization of the multigenerational family nor the development of the family of orientation into a hazardous event shows a strong impact on sibling relationships in late life. Whether this will differ for future cohorts of older people is an open question.

The data demonstrated that siblings still play a significant role in terms of contact frequency and exchange of support, although children have a higher priority. Taking those respondents having both children and siblings and selecting the child and the sibling with the highest frequency of contact shows that the difference between the average frequency of contact with the child and the sibling is considerable, a few times a week for children and nearly once a fortnight for siblings. Nevertheless, that level of sibling contact is quite high. Relative to the level of contact, the role support exchange in sibling interactions is greater than in interactions with children. Those respondents with at least one sibling and one child in their top-12 social networks reported levels of support exchange with their siblings as being only slightly lower than levels of support exchange with their children. This again indicates that siblings are important in older adults' lives.

Comparing the roles of siblings and age peers in a similar way confirms the prominent role of siblings. Frequency of contact between respondents and their siblings and age peers (in networks including both siblings and age peers but not children) is higher than among siblings in networks that include children. This might be understood as siblings compensating for the lack of children. Nevertheless, age peers have a higher frequency of contact in these networks than siblings: siblings somewhat more than once in a fortnight and age peers more than once a week. Two observations can be made about networks with siblings and age peers: the contribution of siblings is on average higher than that of age peers, and it is also higher than siblings' contributions in networks that include both siblings and children.

In conclusion, our data illustrate the significant role of siblings in the social networks of many people in late adulthood and in old age. In coming decades it is expected that this picture of the late life family will change due to decreased birth rates, higher proportions of childless couples, and higher rates of divorce. More attention to the role of siblings in future studies on the family seems therefore to be required.

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