CHAPTER 3

Sibling Similarities and Sharing the Care of Older Parents²

²The paper on which this chapter is based is currently under review at an international peer-reviewed journal as: N. Tolkacheva, M. Broese van Groenou, & T. Van Tilburg: Sibling similarities and sharing the care of older parents.
Introduction

Prolonged elderly morbidity and a growing proportion of elderly in the population raise demands for long-term formal and informal assistance for older persons (Silverstein, 2008). While the family continues to be the most important source of support in meeting the need for care, children’s responsibilities to care for older parents are stressed for two reasons. Professional care is much more expensive compared to informal care, encouraging the family to provide some or all care themselves to avoid incurring extra expenses. Furthermore, because of an increased average life expectancy and a decrease in birth rates, informal care must be delivered to the elderly for a longer period of time and by fewer children, increasing the pressure on an individual child. Recent research demonstrated that children can benefit from sharing the care with others: a child who shares caregiving tasks within a broader caregiving network experiences a lower caregiving burden (Tolkacheva, Broese van Groenou, De Boer, & Van Tilburg, 2011). It is therefore important that more than one child is involved in caregiving in multiple-child families, and that the efforts are shared among children.

This study examines the sharing of care among non-residential multiple adult children in families with older adults requiring care. Dilworth-Anderson, Williams and Cooper (1999) demonstrated that often more than one child participates in the caregiving process; in 74% of the families, two or more children assisted in parental caregiving. However, the literature from previous decades has systematically overlooked the contribution of all available children to the family caregiving process. A widespread statement about filial caregiving is that one member of a caregiving family is likely to provide all or most of the care (Keith, 1995). This generalization is used primarily in studies focused on the dyadic relationship between the primary caregiver (an adult child) and a care recipient (a parent) to describe characteristics of primary caregivers (see e.g. Dwyer & Coward, 1992; Parrot & Bengtson, 1999; Pyke & Bengtson, 1996).

A growing amount of research has begun to acknowledge the importance of studying caregiving provided by multiple siblings. Wolf, Freedman, and Soldo (1997) reported a small negative association between the hours of parental care given by a child and the hours of parental care given by the child’s siblings. Keith (1995) identified three types of caregiving systems in her qualitative study: the primary caregiver system, in which one child is responsible for most or all of the caregiving; the partnership system, in which two children equally deliver the
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caregiving work; and the team system, in which children are organized in planned
caregiving according to the division of roles. The author investigated different
patterns of caregiving based on equity criteria and raised the question about how
children organize themselves if families do not adhere to the primary caregiving
model. In addition, recent caregiving research accentuate the idea that a child’s
decision to provide care is made while considering the decisions of other siblings,
which moves the research focus from the dyadic to family perspective (Davey &
Szinovacz, 2008; Silverstein, Conroy, & Gans, 2008; Tolkacheva, Broese van
Groenou, & Van Tilburg, 2010). However, there is a limited systematic research
that takes into account caregiving by all living siblings and investigates which
families are most likely to share the care among siblings.

Studying filial caregiving from a family perspective acknowledges the fact
that each child within a family is a potential candidate to provide informal care to
the parent. Firstly we should demonstrate whether and to what degree the care is
actually shared in multiple-child families. Our first research question states: What
is the proportion of children participating in caregiving? Furthermore, even if all
children participate in caregiving, one of the children may still do the work more
intensely. Dilworth-Anderson et al. (1999) identified primary, secondary, and
tertiary caregivers on the basis of their roles and responsibilities. Silverstein et al.
(2008) found differences among siblings support to their mothers dependent on
their competing responsibilities. Hence, there is another element in shared
caregiving that captures the degree of sharing: How equally is the caregiving
intensity distributed among children (caregiving equality). This forms our second
research question.

There is evidence that a child’s informal care provision is affected by his or
her personal situation and characteristics. The amount of help children provide to
their parents is affected by the characteristics of being a daughter, being
geographically proximate and without competing responsibilities, and being
emotionally close to one’s parents (Cicirelli, 1983; Conidis, Rosenthal, &
Mcmullin, 1996; Dwyer & Coward, 1992; Klein Ikkin, Van Tilburg, & Knipscheer,
1999; Parrott & Bengtson, 1999; Lawton, Silverstein, & Bengtson, 1994; Stoller,
Forster, & Duniho 1992). At the same time we know by now that the relativity of
sibling characteristics is also important. Silverstein et al. (2008) demonstrated that
unmarried children provided more support to their mothers than their married
siblings, suggesting that variations in sibling characteristics can partly explain the
variation in siblings’ share of caregiving. We assume that when all siblings are
similar in their characteristics, some of them cannot use these characteristics as a reason to provide less care or none at all. For example, if all siblings in the family are employed, the employment status of one of the siblings cannot be used as the rationale to expect that other siblings would take over care responsibilities. Also, in families with daughters or sons only, the gendered nature of caregiving should not be an issue. Keith (1995) has shown that the partnership model, when care is equally distributed between two children, requires at least two offspring of the same gender in families.

Furthermore, the psychological rationale of being similar may contribute to the understanding of sharing the care within families. Some studies investigating sibling similarities used an approach derived from social psychology that argues that people who share their values and statuses have rewarding interactions and result in being attracted to each other (Homans, 1974). When connecting mutual attraction to mutual support, it has been shown that, within sibling pairs, an increase in the sibling exchange of support occurs more frequently if both siblings are sisters and are childless (Voorpostel, Van der Lippe, Dykstra, & Flap, 2007). In addition, sibling emotional closeness and mutual proximity facilitated different types of help among siblings (Eriksen & Gerstel, 2002). Although the discovered effect of homogeneity on the support of siblings was limited and related to exchanges among siblings, this effect could be applied to the concept of shared parental care among siblings. Siblings with similar experiences, characteristics and opportunities may be more supportive to each other and more eager to share the care of their parent more equally. Therefore, it is possible that the sharing of care occurs most in families with homogeneous siblings. This fact likely holds true for both aspects of sharing, caregiving participation and caregiving equality. Our third research question states: To what extent do more similarities in siblings’ characteristics result in a higher degree of sibling participation in caregiving and a higher degree of equality in caregiving intensity among children?

To answer our research questions, we identified sibling caregiving efforts and characteristics based on the intergenerational solidarity framework (Bengtson & Roberts, 1991), which represents dimensions along which family integration between generations occurs. We used three dimensions: functional (exchanged help), structural (structures providing or constricting opportunities for interaction between generations), and affectual (positive emotions between family members). A number of studies using the intergenerational solidarity framework determined that affectual and structural dimensions were predictors of the functional
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dimension by studying parent-child dyads. Feelings of closeness and the provision of emotional support (affectual dimension) or geographical proximity (structural dimension) are known to increase the involvement of a child in caregiving (Cicirelli, 1983; Parrott & Bengtson, 1999; Silverstein, Parrott, & Bengtson, 1995). In this study, the dimensions of the intergenerational solidarity framework will be applied using the family approach to investigate the influence of sibling similarities on sharing parental care among siblings.

At the individual level, functional dimension refers to an individual child’s participation in caregiving and the intensity of caregiving. At the family level, this dimension expresses the caregiving behavior of all siblings, and in our study it represents the percentage of children participating in caregiving and the equality of caregiving behavior among all siblings. Similar to functional dimension, individual emotional support exchanges between the parent and each of the siblings (affectual dimension) will be aggregated into the family level to demonstrate the siblings’ similarities in their emotional support exchanges with their parent. The same will apply to the structural dimension, which includes individual key predictors of the amount of help provided to parents, such as the child’s geographical proximity, gender, employment, partner status, and whether or not he or she has young children (Coward & Dwyer, 1990; Lawton et al., 1994; Matthews, 1995). We will aggregate these characteristics into the family level to determine the degree of similarity among the siblings’ structural characteristics. We will further investigate whether and how the within-family similarities in affectual and structural characteristics influence sharing the family caregiving.

Method

Respondents

Data were collected in the context of the study ‘Family caregivers of older adults,’ a side-study of the Longitudinal Aging Study Amsterdam (LASA). LASA is an ongoing study on the physical, social, cognitive and psychological functioning of Dutch older adults. The main data collection of LASA consists of three-yearly interviews with a representative sample of 3107 Dutch older adults, aged 55-85 (baseline 1992). The data collection for the side study on family caregivers was conducted in the year 2000, in between two observations of the main data collection for LASA (1998/1999 and 2001/2002). The sample for the side study
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was selected from the respondents of the 1998/1999 observation (N = 2545). They were older parents (n = 316) who lived independently and were cognitively capable of answering the questions (Mini-Mental State Examination [MMSE score] ≥ 24). They had physical limitations and chronic diseases, and used informal and/or formal care. Of the 354 respondents approached, 289 participated in the side study. Respondents who did not live independently at the time of approach were excluded (n = 20). Nonresponse (n = 45) was due to refusal, mental or physical frailty, and death (Knipscheer & Broese van Groenou, 2004).

To compile a group of respondents suitable for the current research we excluded parents who had only one child (n = 65) or did not provide any information about their children (n = 3). We also excluded respondents with a partner living outside the household (n = 8) or with a child living in the household (n = 27). Because these family situations have specific caregiving circumstances they should be analyzed as separate groups, which are too small in number for a proper analysis. The final sample of parents (N = 186) consisted of 66 male and 120 female care recipients between the ages of 63 and 91 who had at least two non-residential children. The parents reported on their own characteristics as well as the characteristics and care activities of all of their children (N children = 703, range = 2–15, on average 3.8 per parent).

Measurements

Caregiving. Each parent provided information concerning the assistance needed for ten tasks: cooking, shopping for groceries, cleaning, transportation, seeing to financial matters, washing, taking bath or shower, getting dressed, going to the toilet, and getting up or sitting down. For each of these items the parents were asked to estimate how often their children helped with the task (coded as 0 = never, 1 = seldom, 2 = sometimes, and 3 = often). The child was considered as participating in caregiving if his or her intensity of caregiving was at least sometimes for at least one of the ten tasks. The intensity of caregiving per child was counted as a total sum of ranks for ten tasks (theoretical range from 0 to 30). Because different aspects of care are important in different situations and are often provided by different children, we were interested in the total intensity of care a child provided regardless of the type of activity. We therefore accepted a low reliability (Cronbach’s alpha is 0.63). Intensity of caregiving equal to zero was
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interpreted as no care being provided by the child; the highest score meant that
the child helped the parent often with all activities.

*Parent’s characteristics.* In the analyses, we controlled for a number of
parent characteristics: gender (0 = man, 1 = woman), age (in years), functional
capacity to perform activities in daily life (ADL), self-perceived health, number of
chronic diseases from a list of seven major diseases (see below), presence of a
partner in the household, acceptance of help from a partner, and use of
professional care. The functional capacity scale (theoretical range from 6 to 30)
was calculated on the basis of six activities of daily living: the ability to walk up and
down stairs, to dress, to sit and to rise from a chair, to cut one’s own toenails, to
walk five minutes outside the house and the ability to use one’s own or public
transport. The response categories were: 1 = no, I cannot do it; 2 = only with help;
3 = yes, with a great deal of difficulty; 4 = yes, with some difficulty; and 5 = yes,
without help. Cronbach’s alpha for these items was 0.78. The presence of major
chronic diseases consisting of chronic nonspecific pulmonary disease, cardiac
disease, peripheral atherosclerosis, cerebrovascular accident, diabetes mellitus,
joint disease, and malignant neoplasm was also counted (ranged from 0 to 7).
Parents with a partner were asked to estimate the frequency of help received from
the partner for the same ten tasks used to measure the children’s assistance
(theoretical range from 0 to 30). Missing values (in the case of no partner) were
replaced by the overall average amount of help provided by a partner. The
presence of a partner (0 = no, 1 = yes) was determined using a separate variable.
A parent was considered to be using professional help when care came from a
district nurse, professional home help, or an institution (0 = no, 1 = yes).

*Individual child’s characteristics.* The elements of gender, travel time,
employment status, partner status and whether or not the child had young children
comprised the structural dimension. The parent provided information about the
children’s gender (1 = man, 2 = woman), employment status (0 = not employed, 1
= employed), partner status (0 = no partner, 1 = having a partner), and the age of
the youngest child (0 = no young child, 1 = at least one child is aged 18 years or
less). Information about travel time was provided by answering the question: “How
long does it take (in minutes) to travel to (name of the child) with the type of
transportation you are used to?” The answer was recoded into hours ranging from
0 to 24. The affectual dimension was expressed by the exchange of emotional
support between a child and a parent and was measured as the average
frequency of talking about personal experiences and feelings. Answer categories
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ranged from 1 to 4 (1 = never, 2 = rarely, 3 = sometimes, and 4 = often). The
information about emotional support received was taken from the 1998/1999
observation.

Procedure

We aggregated caregiving variables and children’s characteristics from the child
level to the family level. Depending on the type of variable, different aggregation
procedures were applied.

Dependent variables. Participation in caregiving within families was
calculated as the percentage of children participating in caregiving (at least
sometimes with at least one task) from the total number of children in each family.
Equality in caregiving intensity among children was calculated as the standard
deviation of caregiving intensity across children within each family. For a better
interpretation, the scores were reversed, meaning that a higher value on the scale
was interpreted as a higher level of equally-distributed care among siblings.

Independent variables. Similarities in children’s travel time and emotional
support were indicated by the aggregated standard deviation at the family level.
The scores were reversed in such way that a higher value stood for greater
similarities in travel time and emotional support among siblings.

To calculate similarities in gender, employment and in the presence of a
partner and young children, the information was aggregated to the family level in
two steps. In the first step, the percentages of daughters, employed children,
children with a partner and children with a young child were calculated for each
family. At the family level, the value of 50% indicated the maximum dissimilarity,
such as when a family of four children contained two daughters and two sons. In
the second step, the calculated percentage was subtracted from 50% and the
absolute value was taken, which ranged from 0% to 50%. As a result, the higher
values represented greater sibling similarities in each of the four characteristics.
Collinearity statistics were calculated for all independent characteristics, and were
within an acceptable range (VIF < 1.25).

To answer the first and second research questions, we calculated the
percentage of children participating in care and the reversed standard deviation of
sibling caregiving intensity and performed descriptive analyses. To answer the
third research question we regressed caregiving participation and equality in
caregiving intensity on parental characteristics and the sibling similarities in
structural and affectual characteristics. We also controlled for the number of siblings and the total amount of help provided by all children to account for the total intensity of caregiving.

Results

Across all families, an average of 44% of children participated in caregiving. Children did not participate in caregiving in 59 families. Compared to those receiving informal care from their children, parents who did not receive informal help were, on average, five years younger, had fewer functional limitations, were more likely to have a partner (81% versus 38%), and were more likely to not use professional care (17% versus 36%). These results (not detailed in Table 3.1) suggest that children did not provide help to their parents because their parents did not require a great degree of care. If looking at families where at least one

Table 3.1. Parental and Family Characteristics: Descriptive Statistics (N = 186)

<table>
<thead>
<tr>
<th></th>
<th>%</th>
<th>M</th>
<th>SD</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Siblings providing care</td>
<td>43.88</td>
<td>37.69</td>
<td>0 to 100</td>
<td></td>
</tr>
<tr>
<td>Caregiving equality¹</td>
<td>6.79</td>
<td>1.72</td>
<td>0 to 8.49</td>
<td></td>
</tr>
<tr>
<td>Parental gender (female)</td>
<td>65</td>
<td></td>
<td>0 or 1</td>
<td></td>
</tr>
<tr>
<td>Parental age</td>
<td>78.47</td>
<td>7.48</td>
<td>63 to 91</td>
<td></td>
</tr>
<tr>
<td>Parental functional capacity: higher score - higher capacity</td>
<td>23.49</td>
<td>5.10</td>
<td>10 to 91</td>
<td></td>
</tr>
<tr>
<td>Parental self-perceived health: higher score – better health</td>
<td>3.17</td>
<td>.91</td>
<td>1 to 5</td>
<td></td>
</tr>
<tr>
<td>Parental number of chronic diseases</td>
<td>1.81</td>
<td>1.22</td>
<td>0 to 7</td>
<td></td>
</tr>
<tr>
<td>Parental partner status (having a partner)</td>
<td>52</td>
<td></td>
<td>0 or 1</td>
<td></td>
</tr>
<tr>
<td>Caregiving intensity provided by a partner</td>
<td>10.28</td>
<td>3.08</td>
<td>0 to 25</td>
<td></td>
</tr>
<tr>
<td>Professional help provided to a parent (receiving help)</td>
<td>30</td>
<td></td>
<td>0 or 1</td>
<td></td>
</tr>
<tr>
<td>Number of siblings in the family</td>
<td>3.78</td>
<td>1.97</td>
<td>2 to 15</td>
<td></td>
</tr>
<tr>
<td>Caregiving intensity given by all siblings</td>
<td>7.71</td>
<td>8.25</td>
<td>0 to 44</td>
<td></td>
</tr>
<tr>
<td>Sibling similarity in gender structure²</td>
<td>21.94</td>
<td>18.30</td>
<td>0 or 50</td>
<td></td>
</tr>
<tr>
<td>Sibling similarity in travel distance²</td>
<td>15.90</td>
<td>14.67</td>
<td>0 or 50</td>
<td></td>
</tr>
<tr>
<td>Sibling similarity in employment status²</td>
<td>33.38</td>
<td>18.68</td>
<td>0 or 50</td>
<td></td>
</tr>
<tr>
<td>Sibling similarity in partner status²</td>
<td>39.82</td>
<td>16.29</td>
<td>0 or 50</td>
<td></td>
</tr>
<tr>
<td>Sibling similarity in having a young child²</td>
<td>29.36</td>
<td>19.67</td>
<td>0 or 50</td>
<td></td>
</tr>
<tr>
<td>Sibling similarity in emotional support¹</td>
<td>1.11</td>
<td>0.36</td>
<td>0 to 1.53</td>
<td></td>
</tr>
</tbody>
</table>

¹Reversed score of SD: higher score = more equality, similarity.
²Higher scale score = higher similarity.
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Child sometimes provided care (127 out of total 186 families), in the majority of these families (almost 70%) care was shared by at least two siblings. Moreover, in 38 families, all children participated in caregiving. In 40 families, caregiving was not shared and was provided by a sole caregiver. Despite the fact that the caregiving was shared in most families, it was not always shared equally. For all families, the average equality of the intensity of caregiving was 6.80 on a range from 0.0 to 8.5, which seems relatively high. However, there were only ten families in which all children provided caregiving with the same intensity above zero. The results reveal a relatively large variation in caregiving intensity among children.

Table 3.2. Regression Analysis on Caregiving Participation and Caregiving Equality (N = 186)

<table>
<thead>
<tr>
<th></th>
<th>Caregiving participation</th>
<th>Caregiving equality</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>SE</td>
</tr>
<tr>
<td>Parental characteristics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constant</td>
<td>-24.72</td>
<td>41.97</td>
</tr>
<tr>
<td>Gender</td>
<td>2.27</td>
<td>4.86</td>
</tr>
<tr>
<td>Age</td>
<td>0.44</td>
<td>0.32</td>
</tr>
<tr>
<td>Functional capacity</td>
<td>-0.14</td>
<td>0.49</td>
</tr>
<tr>
<td>Perceived health</td>
<td>-0.49</td>
<td>2.48</td>
</tr>
<tr>
<td>Chronic diseases</td>
<td>-0.51</td>
<td>1.84</td>
</tr>
<tr>
<td>Having a partner</td>
<td>-7.61</td>
<td>4.86</td>
</tr>
<tr>
<td>Help from available partner</td>
<td>0.21</td>
<td>0.70</td>
</tr>
<tr>
<td>Use of professional help</td>
<td>5.20</td>
<td>4.67</td>
</tr>
<tr>
<td>Sibling characteristics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of siblings</td>
<td>-6.49***</td>
<td>1.23</td>
</tr>
<tr>
<td>Caregiving intensity given by all siblings</td>
<td>3.33***</td>
<td>0.31</td>
</tr>
<tr>
<td>Similarity in gender structure</td>
<td>-0.01</td>
<td>0.12</td>
</tr>
<tr>
<td>Similarity in travel distance</td>
<td>0.97</td>
<td>0.82</td>
</tr>
<tr>
<td>Similarity in employment status</td>
<td>0.07</td>
<td>0.11</td>
</tr>
<tr>
<td>Similarity in partner status</td>
<td>0.27*</td>
<td>0.12</td>
</tr>
<tr>
<td>Similarity in having a young child</td>
<td>0.10</td>
<td>0.11</td>
</tr>
<tr>
<td>Similarity in emotional support</td>
<td>4.70</td>
<td>5.74</td>
</tr>
</tbody>
</table>

R² 0.50 0.47

*p < .05, **p < .01, ***p < .001.
The third research question pertained to the associations between similarities in sibling characteristics, caregiving participation, and equality in caregiving intensity. Table 3.2 reports the results of the regression analyses, which show that similarities in partner status are associated with higher caregiving participation \( (B = 0.27) \). The results reveal that in families where siblings have similar time-consuming competing responsibilities such as having a family, caregiving is shared by more siblings. Additionally, the care was shared more among siblings in smaller families and when the total amount of care provided to a parent was greater. The intensity of care was shared more equally among siblings when siblings were more similar in their partner or employment status. The results also revealed a positive association between similarities in emotional support exchanges and the equality of caregiving intensity. Siblings shared the intensity of care more equally when the parent was more physically capable, in larger families and when caregiving intensity given to a parent total was lower. Both models explain about 50 percent of variance in caregiving participation and equality of caregiving intensity.

Discussion

The aim of this study was to gain insight into the sharing of care among all children in families with parents in need of care. Consistent with the results of Dilworth-Anderson et al. (1999) we found that in most caregiving families, care is shared among siblings. However, care intensity differed among siblings. When caregiving was provided, caregiving efforts were distributed equally among all children in only a very small number of caregiving families. The low level of equality in caregiving reflects the fact that children vary in how often they perform each of the caregiving tasks. Siblings with similar partner status had a higher degree of caregiving participation and a higher degree of equality in caregiving intensity among children. Furthermore, siblings with similar employment status and similar emotional support exchanges with their parent shared care more equally. The results demonstrated that sharing the care is partly associated with homogeneity among siblings.

To study the family factors influencing the sharing of parental care, we have adopted the intergenerational solidarity framework (Bengtson & Roberts, 1991). The original framework is based on the dyadic relationship between parent and child, which explains solidarity between generations. Use of the model at a family
level so far has only involved the aggregation of children’s characteristics (e.g., the number of sisters or the number of children living close to the parent) (Lawton et al., 1994). By applying the model to the current study we have aggregated similarities in sibling characteristics and revealed that care is more shared in homogeneous families. It is well known that when analyzing parent-child dyads, characteristics such as gender, travel time, employment status, family status, contact frequency and emotional support are important determinants of filial caregiving. Based on these findings, we expected that, in families with a high degree of similarity in siblings’ characteristics, the care would be shared across more siblings and there would be greater similarities in levels of caregiving. From our results, we may conclude that this expectation does indeed hold for some sibling characteristics. In particular, similarities in the structural aspect of having a partner were observed to be relevant to caregiving participation and equality in caregiving intensity. This result suggests that, in particular, ‘opportunity constraints’ affect how siblings negotiate the care of a parent. Similarities in employment are only relevant to equality in caregiving intensity. The latter result may indicate that, compared to employment status, having differing amounts of family responsibility is a more legitimate reason for some siblings to differ in the degree of their involvement with care. Differences in employment status only affect differences in the levels of care, but not in caregiving participation itself. Similarities in emotional bonding with the parent (affectual aspect of solidarity) also were relevant only for equality in the level of care intensity. This result reveals that difference in the level of emotional bonding with a parent is not likely to be the reason of refraining from participation in parental care. However, siblings who are equally bonded with the parent are equal in the degree of their involvement with the care.

There are two ways to interpret the equality of caregiving intensity. Equality could imply that a high degree of care is equally-distributed among siblings. In contrast, siblings could provide equal but low levels of caregiving, or equally no caregiving. In both cases the results reflect the advantage of being a sibling from a homogeneous family: either all siblings have competing responsibilities such as a job or a family, and consequently provide low intensities of caregiving, or all siblings have a lot of time to care for their parent, and all provide an equal amount of care. Using the principle of equity described by Walster, Walster, and Berscheid (1978), Ingersoll-Dayton, Neal, Ha, and Hammer (2003) demonstrated that adult siblings were distressed by an unequal distribution of care, and used the variety of
behavioral strategies to restore equity. Unsuccessful efforts led to even more distress. It is possible, however, that some constraints to care are difficult to overcome. The results from this study suggest that in families where children have a similar number of opportunities and a similar degree of bonding with the parent, small or great caregiving efforts are more likely to be equally distributed, and siblings are less likely to experience stress. These results do not imply, however, that homogeneous families are always advantageous to parents. For example, a parent’s need for care may increase, but his or her children may all be unable to provide care.

Although travel time to the care recipient has been shown to be an important predictor for providing care on the individual level (Lawton et al., 1994; Silverstein et al., 2008), our study shows that within families the level of similarity in travel time is unimportant for sharing care. This may be due to the fact that the Netherlands is a small country, and differences in travel time among children are not very large. In such a situation, siblings may not perceive the difference in travel time as a limiting factor, but one that can be discussed in terms of required efforts. In contrast, similarities in partner status influenced sharing the care. Apparently, having a partner is a legitimate reason for not participating in caregiving, or participating less. The differences in the importance of structural constraints among children may depend on their ways of spending time and whether the constraints are unavoidable or not.

In addition to similarities in sibling characteristics, some parent and family characteristics seem to be important in determining the sharing of parental care. The proportion of siblings providing care is higher when the parent does not have a partner, uses professional help, or is older, indicating a certain elevated need for help. Equality in caregiving intensity is higher when the parent has better functional capacities. In addition, a greater total intensity of caregiving by all siblings increases children’s participation, but at the same time it increases inequalities in care. These results imply that, when parental health deteriorates and a partner is not available, more care is needed. Because of the resulting pressure on children if professional help is not available, more children participate in caregiving. However, one or several of the siblings seem to take more responsibility for the care than the others, resulting in more inequalities in care intensity among siblings. This outcome reflects findings from previous research suggesting that a single child becomes the primary caregiver of a frail parent and is assisted by his or her brothers and sisters (Dilworth-Anderson et al., 1999). Our
study suggests that this is the case particularly when the parent’s need for help is great.

Our results reveal an inverse relationship between the number of siblings participating in care and the equality of caregiving intensity. Having a family with few siblings results in greater sibling participation in caregiving. The latter corroborates with the idea of ‘free-riding,’ which suggests that in larger groups there is a greater chance to remain unnoticed and opportunities to allow others to participate while avoiding one’s own participation. However, it is possible that this situation is especially relevant in very large families, where more effort may be expended to coordinate caregiving among all the siblings, as compared with a smaller sibling group. At the same time our results demonstrate that in larger families the inequalities in caregiving intensity are smaller. This finding could be explained by the fact that when the care is shared in larger families, caregiving intensity can be distributed among more siblings. This result also demonstrates the importance of controlling for the size of the family when investigating the equality of caregiving intensity. In families of different sizes where the number of caregivers is equal, the measure of equality differs.

Several limitations exist within this study. Firstly, norms and the perception of filial obligations among children could not be included due to a lack of data, and therefore we were unable to examine the impact of the normative dimension of the intergenerational solidarity framework. We expect that similarities in normative expectations about caregiving among children also predict participation and equality in caregiving. The importance of filial expectations in the caregiving literature (Campbell & Martin-Matthews, 2003) suggests that similarities in norms may even exceed the importance of similarities in the structural, affectual and associational dimensions. Secondly, information concerning the caregiving activities of each child was obtained from the parents’ reports. Parents tend to be egalitarian concerning their children, which might lead to an overestimation of the care provided by some children. Therefore similarities between siblings in caregiving could also be overestimated. At the same time, measurement errors within each family are minimized. Receiving information from each child would doubtless lead to non-response from some of the children and make it impossible to take the whole sibling group into account.

These results require an elaboration of our knowledge on caregiving from a family perspective. The study shows that siblings of families with many similarities will be in a better position than siblings in families with few sibling similarities.
Because sibling equality is greater in large families, parents with small families are at risk of becoming dependent on one sole caregiver instead of receiving care from multiple children. In addition, sibling similarities may be fewer in families of parents with complex marital histories. Parents who remarried after divorce or widowhood may have stepchildren as well as biological children. Having both biological children and stepchildren may cause dissimilarity among these children, resulting in less shared caregiving within the family. Increasing divorce rates and incidences of remarriage will lead to smaller and/or more complex families in the next generation of the elderly. The lack of sibling similarities in these families may result in less shared caregiving.

To conclude, the study showed that in most families children share the care of the older parent, reinforcing the belief that filial caregiving should be studied from a family perspective. The homogeneity in structural and affectual characteristics is one of important predictors of caregiving participation and equality of caregiving intensity. This knowledge is of interest to policymakers and professionals and will aid in facilitating long term informal care. Knowing that there is more informal help needed in the future, more children should become motivated to provide care. Many children within a family participate in care; however, the differences in their efforts are quite large, and this may become a burden for the child that gives the most care. Differences and similarities in structural characteristics of children should be discussed in the early stage of caregiving to prevent these difficulties. Professionals could use this knowledge to encourage families to reach their full potential.