Chapter 6

Conclusions and Discussion
6.1 Introduction and main research question

Nowadays, governments in western societies put more pressure on family networks to support the needs of their older kin. Yet, it should be borne in mind that geographic proximity is an important predictor of support exchange within families. The aim of the research described in this thesis was to investigate the contribution of intergenerational geographic proximity to well-being and to the moving behaviour of older people. The main research question hereby was: *What is the role of geographic proximity of children in older people’s well-being and residential relocation behaviour?*. This central question was elaborated into six sub questions that were addressed in four chapters.

All analyses in this study are performed on Dutch data. Even though geographic distances in the Netherlands are not very long it should be noted that also in this context travel distance affects relationship maintenance significantly (Bloem et al. 2008). Regarding support exchange, in the Netherlands a distance of over five, rather than under five kilometres makes a great difference for support exchange, whereas distances over 20 kilometres are associated with even less support (Knijn and Liefbroer 2006).

Answers to the research questions

In chapter two we addressed the regional dimension of intergenerational proximity in the Netherlands. The exploratory analyses in the chapter were performed to answer the first research question: *What does intergenerational proximity between parents and their adult children look like in the Netherlands?*. We found that, in the Netherlands, about three-quarters of the parents aged 65 years and above have a child within a distance of twenty kilometres from their children and about half have one within five kilometres. These findings show that a substantial part of the older population has an adult child living within daily reach. However, the mean distance between parents and children increases with age and also varies by region. Further away from the economic core of the Netherlands the distances between the generations are larger. Interestingly, with increasing age of the parents, in four relatively rural areas in the south distances are the shortest, whereas older parents living in the northern and southwest rural regions live furthest away from their children.

This regional variation was further examined by incorporating indicators of urbanisation and regional culture in an analysis of the likelihood that adult children live within daily reach of their older parents. In this way, chapter two also addressed the second research question: *To what extent can regional characteristics explain the regional variation in intergenerational proximity in the Netherlands?*. We found contrasting effects concerning the degree of urbanisation of the residential municipality of the two generations: a positive association for the degree of urbanisation of the parents’ municipality, and a negative association for the children’s. Concerning regional culture, older parents living in areas in which more conservative and collectivist attitudes prevail are more likely to have their adult children living close to them than
those living in other areas. However, substantial spatial variation in intergenerational proximity remains unexplained after controlling for the regional characteristics.

Chapter three contributes to the discussion of how adult children affect the well-being of their older parents and addressed the third research question: “To what extent does the well-being of older residents of the Netherlands benefit from having adult children and living in close proximity to them?” We found that having children contributes to the well-being of older men living with a partner, but not so much to that of other categories of men and women. The findings also provide evidence for a positive association between proximity of children and parental well-being, in particular for widowed and separated mothers and for separated fathers. The findings thereby suggest that close intergenerational proximity may be a condition under which adult children can significantly add to the well-being of widowed and separated mothers and separated fathers.

The fourth research question “To what extent does intergenerational proximity influence the propensity of older people to move to care institutions and elsewhere?” is addressed in chapter four. The findings indicate that, in the Netherlands, intergenerational proximity is associated with residential relocations at older age; older people are less likely to change residence when they have co-residing children or children living in the same neighbourhood, and more likely to relocate elsewhere when children live at greater distance. These effects were found to be stronger and more often significant for relocations elsewhere than for moves to a care institution. We also showed that the negative effect of close proximity only holds for partnered older persons. The findings also indicate that in the absence of a partner a relocation to a residential care facility is more likely when an adult child is co-residing.

Chapters four and five provide answer to the fifth research question: “To what extent does health influence the propensity of older people to move to care institutions and elsewhere?” In line with the expectations we found that people who were close to death1 were more likely to change residence than others, with a stronger effect on moving to a care institution than on moving elsewhere (chapter 4). With a similar approach more elaborate measures of health2 were explored (chapter 5). These measures also confirm that health is an important predictor of older people changing residence: the three health measures significantly improve the predictive power of the model. The results show that with more health problems older people are more likely to change residence, with stronger effects for relocations to a care institution.

By investigating the extent to which three commonly used health measures in relocation research predict both types of residential relocations, chapter five also addressed the sixth and last research question: “Which commonly used health measure

1 Those who died within two years after baseline.
2 ‘Limitations in activities of daily living’, ‘self-rated health’, and ‘the prevalence of (limiting) chronic conditions’.
predicts older people’s moves to care institutions and elsewhere best?”. The results show that among the investigated health measures ‘limitations in activities of daily living’, ‘self-rated health’, and ‘the prevalence of chronic conditions’, the measure ‘limitations in activities of daily living’ is the strongest predictor, and the only one for which the difference in effect between relocations to care institutions and relocations elsewhere was statistically significant.

**Overarching themes that arise from the results**
Throughout the four chapters there are particular findings that supplement each other and which relate to three overarching themes. These themes allow the results to be placed in a perspective that is different from the perspective of each separate chapter.

**Partner and children as main resources for well-being and support at older age**
According to the theory of social production functions (SPF theory; Lindenberg 1996, 2013), overall well-being results from having basic physical and social needs fulfilled. Social relations, such as those with a partner and with adult children, are important resources for both physical and social needs fulfilment. In particular for the presence of a partner the results of this study provide support for this notion. First of all, life satisfaction was estimated to be greatest for persons living with a partner and smallest for widowed persons. In the presence of a partner older people are less likely to relocate, with a stronger negative effect for relocating to a care institution (chapters 4 and 5) which confirmed existing insights that partnership status is an important predictor of older people’s moves. Furthermore, having children contributed to the well-being of older partnered persons but not of those without a partner. And the finding that older widowed and separated parents were not more satisfied with life than their childless counterparts (chapter 3), indicates that the detrimental emotional consequences of widowhood and divorce cannot be compensated for just by having children (see also Hansen et al. 2009). Apparently, the partner is a more important resource for needs fulfilment than the mere presence of children is.

**Proximate children as a partial substitute for an absent partner**
Although this study showed that having children does not seem to compensate for the absence of a partner in terms of life satisfaction, findings in this study indicate that in certain situations adult children living close by may have a meaningful role in the lives of widowed and separated partners (chapter 3). Earlier studies have indicated that adult children are a more important resource for emotional support for widowed and divorced people than for married older people (Dykstra 1995, Kaufman and Uhlenberg 1998) and that widowed parents tend to receive more instrumental support from their children than partnered parents (Eggebeen 1992, Rossi and Rossi 1990). Given the knowledge that geographic proximity enhances various types of personal interaction, these insights
suggest that widowed and separated older people may particularly benefit from having children living close by.

Various findings in this research indicate that widowed mothers tend to be more satisfied with life when they have a child living very close by (chapter 3). Recently widowed women are also more likely to relocate elsewhere when children live at greater distance than partnered women (chapter 4) and more likely than partnered women to have a child living close (chapter 2). These findings suggest that it is likely that part of the (recently) widowed women move in the direction of their children. Previous research for the Netherlands by Smits (2010) and Smits et al. (2010) has indeed shown a positive effect of widowhood on women moving (very) close to an adult child.

Our findings also indicate that separated fathers are more satisfied with life when they have multiple children living close by. On the one hand, this confirms the postulation that separated older men may have a greater need for having children living close by, particularly because they are generally more vulnerable than older separated women (Dykstra and De Jong Gierveld 2004, Rossi and Rossi 1990, Spitze and Logan 1990, Van Gaalen and Dykstra 2006). One the other hand this finding is surprising considering the literature on parent-child relations that often shows that the quality of the parent-child relation is poorest for separated fathers (Dykstra 1998, Kalmijn 2013, Silverstein and Bengtson 1997). In line with this notion we show that separated older fathers are the least likely to have a child living close by (chapter 2).

The influence of children on older people changing residence to a care institution
In welfare states, older people often make use of a combination of informal and formal care that do not substitute but complement each other (Suanet et al. 2012, Geerts and Van den Bosch 2011, Brandt et al. 2009, Bonsang 2009). In some countries, such as the Netherlands, assessors are required to consider the availability of a partner and proximate children in one’s social network in the decision whether an older person is eligible to receive formal (residential) care (CIZ 2014). In this approach, informal care is used as a means to decrease the use of subsidized institutional care facilities. Suanet et al. (2012) have shown that in societies where children are legally obliged to provide support to their parents the transition to formal care is partly predicted by a lack of informal care providers or the inability of these providers to (continue to) offer adequate support. In line with this notion our findings show a positive effect of childlessness on the likelihood of moving to a care institution for (recently) widowed women (chapters 4 and 5), confirming the mediating role of partners and children. We also found a weak negative association of having children living very close (i.e. co-resident children and children living in the same neighbourhood) with the likelihood of moving to a care institution for partnered older people (chapter 4). Yet, in contrast with the overall idea that close intergenerational proximity would reduce the use of formal care, the results of this study indicate that very close proximity to children does not necessarily reduce the use of subsidized residential care facilities. Actually, we found that having co-
residence children increases the likelihood to move to a care institution among recently widowed women (chapter 4), indicating that co-resident children may not be able to meet the increased need for assistance of a specific category of women who recently became widowed. A similar association is found for unmarried women who live without a partner but co-reside with an adult child. Unfortunately the data did not allow us to investigate whether these findings differ by health status of these women.

The latter findings are in line with existing knowledge that access to informal care influences the probability of moving to a care institution as children may act as advocates for their parents and may play an important role in the decision making process on moving to a care institution (Pearlman and Crown 1992, Larsson and Thorslund 2002). The (increased) burden of care that is experienced by co-resident children may also enhance a decision to move to a residential care facility (Brown et al. 1990). The positive associations of co-residence with moving to an institution for women, and negative associations for men who were widowed or who had lost their partner recently may be explained by the fact that women are more likely to suffer from multiple chronic disabilities than men (Verbrugge 1985, Verbrugge 1990, Macintyre et al. 1996, Aber and Cooper 1999, Leveille et al. 2000) and that children are more likely to provide support to their older mothers than to their older fathers (Kaufman and Uhlenberg 1998, Spitze and Logan 1990). Adult children co-residing with their older mother may therefore experience a greater burden than adult children co-residing with fathers. This interpretation is also in line with existing insights concerning informal care to be an effective substitute for formal care as long as support needs are low and require unskilled types of care (Bonsang 2009, Geerlings 2005, Suanet et al. 2012, Brandt et al. 2009). Because the findings pertain to moves to public residential care institutions, it is unclear whether these findings will also hold for moves to private care institutes.

6.2 Contributions of this research

This research contributes to the literature in various ways. First of all, it contributes to the knowledge of how adult children add to the well-being of their older parents (chapter 3). Previous studies show mixed evidence as to whether having children is associated with greater well-being at older ages (Hansen et al. 2009, Margolis and Myrskylä 2011, Koropeckyj-Cox 1998, McLanahan and Adams 1987, Zhang and Hayward 2001). This study broadens the understanding of this association by incorporating geographic proximity and by revealing some of the complex differences between older men and women living with and without a partner.

The study also provides new insights into the extent to which the proximity of adult children and health status affect the propensity of older people to change residence (chapters 4 and 5). The opportunity to use administrative data that contained inhabitants as registered in subsidized care facilities allowed us to distinguish between relocations to care institutions and relocations elsewhere, which is a major contribution to existing knowledge. By treating these two destinations as multiple risks in one
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analysis, in combination with the ability to enrich survey data with administrative data, this study also extends existing knowledge about health as a predictor of residential relocations at older age. The study provides insights into how three commonly used health measures predict residential relocations of older persons differently and whether these measures differ in the extent to which they predict older people’s moves to care institutions or elsewhere.

Finally, the research contributes to existing knowledge of predictors of intergenerational proximity. Previous research particularly provided insights into the individual characteristics to intergenerational proximity but has largely ignored the regional dimension of such proximity. In this study, two indices of regional culture, namely protestant conservatism and individualism (Brons 2006), were introduced to investigate the regional variability in older parents and their adult children living close to each other (chapter 2). These dimensions approximate the regional characteristics of attitudes, beliefs, values and practices which provide a cultural background that determines whether family solidarity and physical proximity to family are regarded as less or more important. In addition, the variable degree of urbanization addressed the regional variation in opportunities for fulfilling needs in the education, work, housing and household careers.

6.3 Reflection on the data and methods

All analyses in this study were performed with the use of administrative data. These data were particularly suitable for investigating intergenerational proximity and residential relocations at older age because they allowed us to reconstruct family networks, intergenerational proximity and migration histories of all registered inhabitants of the Netherlands that were of interest. This large sample size was a great benefit in order to capture a reasonable number of residential moves among the older age groups, thereby including the very old and institutionalized population, categories that are often excluded in survey data (chapters 4 and 5). The spatial detail of the data enabled us to create a spatial overview of intergenerational proximity at the municipality level (chapter 2).

A frequently mentioned limitation of register data is the absence of specific individual background characteristics such as health and education. Surveys often contain these data but usually lack a longitudinal perspective and the geographic details that are required for studying residential moves. A great strength of the data used in this study was the ability to link individual records of survey data to individual records of administrative data through which the data could be enriched substantially. The relation between intergenerational proximity and well-being (chapter 3) could not have been investigated without this data linkage. The record linkage also added longitudinal characteristics to cross-sectional survey data which enabled us to approach the impact of health (and other individual characteristics) on residential relocations prospectively (chapters 4 and 5). By merging multiple survey rounds we were able to obtain a
reasonable number of older people and residential relocations to perform reliable analyses. This approach is cost-effective and reduces selectivity bias due to attrition problems that occur when similar data would have been collected in panel surveys.

Of course the data also had their limitations which first of all concerns the lack of information about contact and support exchange between parents and children. To clarify, our data did not contain any information about whether proximate children indeed have more contact with, and provide more support to, their older parents than more distant children. Incorporating information about the frequency of contact and exchange of actual support would allow for a clearer distinction between the direct and indirect effects of intergenerational geographic proximity on parental well-being and residential relocations at older age. It should be noted that the survey data did contain a measure of contact frequency with family members outside the household. However, we considered this measure as inappropriate for this study because it did not distinguish children from other family members, neither did it concern contact frequency with each specific child.

A second set of limitations concerns the fact that the number of relocations to care institutions is somewhat underestimated in this study because the System of Social and Statistical Datasets (SSD) does not cover private residential care facilities. We however argued that in the context of the Netherlands this does not lead to a problematic bias because the vast majority of the residential care facilities are subsidized by the state (Mestheneos and Triantafillou 2005, Ribbe et al. 1997, RIVM 2013).

Finally, it can be assumed that the found effects of health on well-being and residential relocations (chapters 3 and 5) are underestimated for the reason that the survey data served as basis for constructing the study population. People with (very) severe health problems usually do not participate in data collection through surveys, as the very old and institutionalized are often already excluded during the sampling procedure. Changes in health have been found to have an (additional) effect on older people’s moves (Bloem et al. 2008, Thomése and Broese van Groenou 2006). Older people without health problems may also have moved because of health problems of their partner. Unfortunately, information about changes in health status and health problems of the partner were not available in the survey data.

### 6.4 Suggestions for further research

**Suggestions for future research using the System of Social and Statistical Datasets**

With this research, we have not used all the possibilities the data in the System of Social and Statistical Datasets (SSD) offer. For future research, it is we recommended to extend the research by considering the following suggestions while using the SSD.

First of all, as characteristics of adult children are known to affect the level of commitment, contact frequency and provision of support (Rossi and Rossi 1990, Silverstein et al. 2006, Spitze and Logan 1990, Stein et al. 1998), the incorporation of the gender, age and partnership status of the proximate child(ren) could generate more
insight into the extent to which individual characteristics of these children affect older people’s moves. In a similar manner, accounting for multiple children living close by (as was done in our analyses on well-being in chapter 3) could provide additional insight into the contribution of intergenerational proximity to relocation behaviour of older people. For further research, we recommend to investigate whether multiple children living close by and individual characteristics of these children would extent the findings addressed in chapters 4 and 5.

Second, we found that for the Netherlands regional characteristics such as the degree of urbanization and elements of regional culture contribute explaining the regional variation in intergenerational proximity (chapter 2). Yet, substantial spatial variation in intergenerational proximity remains unexplained. It would be worthwhile to investigate the extent to which other regional characteristics, such as aspects of the housing market and the availability and quality of support facilities, contribute to explain this spatial variation. For the Dutch case, extending the understanding of regional characteristics of intergenerational proximity is relevant since lower local governments become more responsible for the provision of support to the older people.

**Suggestions for future research using other data sources**

Future studies can provide more insight into the extent to which health, intergenerational proximity, and residential relocations at older ages are associated through the incorporation of an interaction between health and intergenerational proximity. In this study, such an interaction has not been investigated because the proxy for health (closeness to death) did not reflect actual support needs in an adequate manner (chapter 4), whereas such an interaction with the three health measures was not possible due to the small sample size (chapter 5).

We also recommend future studies to investigate the contribution of (sudden) health problems at older age on older people to move (very) close to their children (see also Choi et al. 2014). This suggestion is based on the findings of this study that indicate that (some) older parents who have children living at greater distance are more likely to relocate elsewhere than parents who have a child living close by (chapter 4). In addition, we found that in the presence of health problems older people are more likely to change residence elsewhere than in the absence of health problems (chapter 5). These findings raise the question whether these relocations elsewhere concern moves in the direction of children and whether it is specifically older people with health problems who move for this reason. We have started to explore the characteristics of parents who moved to within a one kilometre distance from the neighbourhood of their children but had to abandon this topic because of the lack of statistical power using POLS data (N=23,147 parent-child dyads, 216 moves to within one kilometre from a child). In the exploration, we followed the approach of Smits (2010) but with more detailed information on parental health. The findings of this exploration indicated that, among older couples, health problems of the woman seem to make the couple more likely to move very close
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to their children, whereas in the situation where the man has health problems a move very close to children seemed to be less likely. This finding may indicate that older men are less able to deal with the limitations that their wife encounters than older women (Spitze and Ward 2000, Wister and Dykstra 2000) are able to deal with the health problems of their husbands. It also confirms the notion that women have a better relationship quality with their children (Rossi and Rossi 1990, Silverstein and Bengtson 1997, Spitze and Logan 1990, Van Gaalen and Dykstra 2006) and are also more likely to receive support from their children than men (Spitze and Logan 1990, Kaufman and Uhlenberg 1998). Because the number of cases of older people living without a partner was too small, we recommend others to use a dataset that contains a greater sample of this population group.

The SSD data did not allow to distinguish between moves to regular and adapted housing and between moves to public and private care institutions. Because the implications of having children living close by could be different for older people moving to private care institutions or to adapted housing, we recommend future studies to investigate older people’s moves to such residential destinations.

This study found that, for the Dutch context, older parents living in areas in which more conservative and collectivist attitudes prevail are more likely to have their adult children living close to them (chapter 2). For this reason, we suggest to investigate the extent to which such dimensions of regional culture affect the actual exchange of support. The central question hereby is whether older people living in areas in which more conservative and collectivist attitudes are predominant are more likely to receive support from their children. For instance, for the Netherlands, De Boer (2005) have shown that support exchange is greater in Noord-Brabant, Zeeland and Limburg, where parents and children frequently live very close to each other (chapter 2). However, in their analyses, multiple providers and receivers of support were considered and the analyses were restricted to people below the age of 80. A better understanding of the regional variation in support exchange would be beneficial for local governments to plan the provision of support adequately.

Finally, the findings of this study may be specific to the context of the Netherlands, where a substantial part of instrumental support is provided through subsidized services: the provision of formal care at home and in residential institutions are subsidized by the state, and access to such care institutions is limited to people with physical and mental limitations. The results may therefore be applicable to similar welfare states but possibly less so for societies in which formal services are more difficult and costly to access. As norms and values on family obligations additionally determine how support for older people is arranged, access to and use of formal and informal support varies between countries. Also, geographic distances between family members and to care institutions differ between countries. A cross-national study that accounts for these contextual variations would provide a deeper understanding of the overall meaning of intergenerational proximity for residential relocations and well-being at
older ages. Such an approach would provide insight into the extent to which the findings of this study are valid for the Dutch context or are generalizable. We also recommend another cross-national study to investigate the extent to which the found effects of regional culture (individualism and Protestantism) hold for a much larger geographic area as the variation will be larger.

6.5 Notes for policymakers

Nowadays, governments put more responsibilities on social networks to provide support to older people. The Dutch government also considers adult children as important resources for informal support (CIZ 2014). Given the negative relation between geographic distance and support exchange, policymakers should keep in mind that not every older person in need for support will be likely to receive support from his or her child(ren).

The insights obtained in this study may help researchers and policymakers to design policies that may modify the conditions for adult children to support parents who are in need of support. Useful input from this study for local governments to allocate resources adequately can be obtained from the insights concerning the regional variation in the likelihood to have an adult child living within daily reach. Furthermore, this study confirms that among older people it is separated men who are most vulnerable. This study provides some indications that they may benefit from proximate children whereas they are also least as likely to have a child living close by. Because the proportion of separated older men will increase in the near future, policymakers should be aware of the specific needs and problems of this population group.

The insights obtained may also be used in the design and planning of future housing to satisfy the support needs of older people. For instance, this study has shown that older people living with a partner are more likely to move elsewhere when their children live at a greater distance. Policies could stimulate the future planning of housing and communities that enable multiple generations to live close to each other in order to provide a basis for the exchange of intergenerational support. However, this study also shows that at older age health is a very strong predictor of the use of residential care facilities. Considering the fact that in the Netherlands regulations about nursing care admission are rather strict, it is not likely that (increased) support flows of proximate children towards their parents will be sufficient to lead to the prevention and postponement of the use of residential care facilities in such manner that it will significantly reduce health care costs. In addition, it should be borne in mind that intensive intergenerational support exchange puts a burden on the providers of informal care. When policymakers assign more responsibility to informal caregivers with the aim to postpone and reduce the number of persons entering residential care facilities, they should be aware that this will probably have a rather small impact. The findings in this study indicate that particularly older people living with a partner whose children live very close by may be affected by such regulation.
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This research shows that intergenerational proximity contributes to residential relocations and well-being in particular situations. It however should be borne in mind that the extent to which residential relocations and well-being at older age can be influenced by policy is limited. This is because they are particularly determined by demographic and socioeconomic factors such as age, health, partnership status and economic position.

Finally, the findings of this study should be interpreted with caution. Policymakers have to be aware of the fact that the hypotheses concerning proximity, well-being and residential relocations were based on the assumption that geographic proximity facilitates the “use” of proximate children as resources for support. This study does not concern actual support exchange of children towards parents and findings should not interpreted as such, because beyond proximity there are more factors that predict the actual provision of support between generations.

References


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