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CHANGES IN CONTACT AND SUPPORT WITHIN INTERGENERATIONAL RELATIONSHIPS IN THE NETHERLANDS: A COHORT AND TIME-SEQUENTIAL PERSPECTIVE

Suzan van der Pas, Theo van Tilburg and
Kees Knipscheer

ABSTRACT

This study investigates whether the frequency of contact and support exchanged in relationships between parents and adult children declines over successive cohorts and over individual time in the Netherlands. Respondents included a birth cohort from 1928 to 1937 with data collected in 1992 (N=941) and in 2002 (N=574) and a birth cohort from 1938 to 1947 with data collected in 2002 (N=884). We assessed cohort and time-sequential changes. Parents of the later cohort had more contact and support exchanges with their children than the earlier cohort, revealing that families have not declined in importance. Furthermore, longitudinally, contact and supportive exchanges with adult children

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decreased, suggesting that parents and children devote less time to intergenerational relationships during this “empty nest” phase.

INTRODUCTION

One of the most profound and dramatic demographic changes that Western societies have witnessed during the 20th century has been the aging of the population, resulting in both longer years of linked lives between generations and longer lives as parents and adult children than ever before in human history. At the same time, birth rates have decreased in many Western countries, lowering the number of children available as potential supporters (De Jong Gierveld, 1998; Sutor, Pillemer, Keeton, & Robison, 1995). Moreover, the impact of industrialization and modernization seems to have eroded the families’ traditional functions (Burgess, 1916), shifting responsibility from the family to a public solidarity system. The notion that in the past, parents were supported more by their offspring is based on the assumption that the disintegration of the family is an artifact of modernization (Aboderin, 2004; Hareven, 1995; Shanas, 1979). However, in the past century, research on intergenerational relationships beyond the nuclear household has indicated the continuation of family bonds (Troll, 1971). Parents and children have frequent contact and continue to engage in mutually supportive patterns of exchange (Mancini & Blieszner, 1989). Despite this evidence, the notion of a “breakdown” of family support persists in both popular and professional perceptions (Aboderin, 2004).

Studies on social change and relationships between parents and adult children are scarce and have so far been done primarily on very old parents. One of the few examples of recent research on social change and intergenerational relationships is a cross-national, multisample study conducted by Silverstein, Burholt, Wenger, and Bengtson (1998). They compared parent–child relationships among very old parents (M age = 86) in Wales with those of parents (M age = 85) in Los Angeles and, nationally, in the United States. The data for the Wales, Los Angeles and U.S. National sample were collected between 1990 and 1995. Wales is characterized as being more traditional and generally more rural than the U.S., and the expected differences between Welsh and American parents were interpreted as being attributable to modernization. Contrary to expectations, only a few differences were observed. There were more geographically close relationships among the Welsh parents and the contact frequency was higher, but

1 there were no differences observed in the amount of support exchanged.
2 Silverstein and colleagues explained this by assuming that the situations of
3 both countries are similar and that the social and economical process of
4 modernization in Wales could be compared to that of the United States.
5 However, Aboderin (2004) casts doubt on the underlying assumption
6 of uniform societal development, which predicts the same “breakdown” of
7 family support within different countries and within different periods of
8 time. She also questions whether the process is taking place in the same
9 manner in different countries.

10 A European study by Vollenwyder, Bickel, d’Epinay, and Maystre (2002)
11 compared changes in contact frequency between older people (65–79 years
12 of age) and their families in two surveys carried out in Switzerland in 1979
13 and 1994. Their findings showed an increase in contact across cohorts,
14 which can partly be explained by structural factors, such as a decline in
15 family size, an increase in proximity of children and improvements in means
16 of communication (cars and telephones). The authors suggest that specific
17 family cultures based on religious beliefs and practices may also play a role
18 in family relations.

19 These studies depart from the argument that macrostructural trends
20 within Western societies have changed the structure and therefore reduced
21 the functions of families. Although societal factors are considered, studies
22 supporting this argument only offer broad propositions to explain a decline
23 in contact and support between parents and adult children. These
24 explanations are primarily drawn from major transformations such as
25 industrialization, urbanization, the spread of the market economy and the
26 growing influence of values of individualization. What is lacking, however,
27 is an explicit account of the individual consequences of the macrostructural
28 trends that have taken place. Much of the attention that the relationship
29 between parent and adult child has received has been focused on the
30 influence of demographic changes such as the decrease in birth rate, increase
31 in divorce and decrease in intergenerational coresidence. Less attention has
32 been given to the relationship itself. Social and demographic changes may
33 indeed weaken these relationships, but claims of a decline in intergenera-
34 tional solidarity between parents and children call for careful and rigorous
35 analysis of the evidence for trends in contact and support. Based on the
36 predominantly held assumption of family decline, we derive and test the
37 following hypothesis: *Social and demographic changes reduce the opportu-
38 nities for contact and support exchange between parents and adult children.*
39 This hypothesis requires that a family decline is evident in our data that will
also be the subject of our study.

1 In this study, we focus on societal trends and apply a broader life-course
perspective than has been done in previous studies. We examine changes in
3 relationships between parents (aged about 60 years) and their adult children
(aged about 30 years) using individual-level data on contact and support in
5 the Netherlands in the 1990s. This category of middle-aged parents has been
addressed less in previous research and is characterized by parents still
7 in good health who are entering a period of (pre)retirement and an “empty
nest” transition when children leave home. For adult children, this is a
9 period in the life course characterized by ending schooling, getting married,
having children and becoming a member of the labor force (White &
11 Rogers, 1997). In this period, adult children are more focused on labor
participation and the demands of their new families (Rossi & Rossi, 1990).

13 The main question of this article addresses whether, and if so, to
which extent the individual consequences of macrostructural trends are
15 related to contact and support exchange between parents and adult
children. Specifically, we focus on the three major trends: divorce, labor-
17 force participation and geographical proximity in parent–child residential
location. In addition, we apply a cohort and time-sequential analysis of
19 contact frequency and the exchange of instrumental and emotional support
within relationships between parents and their children. Specifically, we
21 compare two birth cohorts: The relationship characteristics of parents
interviewed in 1992 were compared with those of parents of the same age at
23 the time of the interview conducted in 2002 (reflecting *cohort* and *period*
effects). Has contact and support increased or decreased in the population
25 across time, displaying “period effects”? Do later generations (“cohorts”)
receive more or less contact and exchange more or less support than earlier
27 ones?

Trends, such as improved employment opportunities for women, that
29 were in progress when the earlier cohort reached retirement age in the 1990s,
were more firmly established a decade later at the beginning of the 21st
31 century. Therefore, we assume that social circumstances have different
effects on the two cohorts. Social developments not only affect the young
33 but also those in later life, which is addressed by the longitudinal design of
this study, in which changes were assessed over the 10 years the continued
35 parent–child relationships were studied (*age* and *period effects*). Is more or
less contact and support exchanged as people age? Trends in, for example,
37 female labor-force participation might be related to developments in contact
and support exchange. The pressure of combining employment and care
39 giving responsibilities might lead to less contact and support between older
parents and adult children.

1 By presenting more evidence on age, period and cohort effects, we hope to
2 get a better understanding of changes in intergenerational relationships and
3 provide more definite indications about what such changes might mean for
4 our society. Drawing on prior research, we further develop the rationale for
5 focusing on divorce, labor-force participation and geographical proximity in
6 parent-child residential location.

9 *Consequences of Opportunities*

11 As in many other Western societies, there has been a strong increase in
12 divorce in the Netherlands over the past decades. From the mid-1960s to the
13 mid-1980s, the rate of divorce increased and still remains at a high level,
14 with almost one in four contemporary marriages in the Netherlands
15 eventually ending in divorce (De Jong, 1999). By international comparisons,
16 the divorce rate in the Netherlands is at an intermediate level. Marriage
17 cohort tables show that divorce increased from 2% after five years of
18 marriage for couples married in 1960 to about 13% for couples married in
19 the early 1990s (Kalmijn, De Graaf, & Poortman, 2004). Popenoe (1993)
20 contends that this increase has major consequences, changing the structure
21 and further reducing the functions of families, and divorce has been found
22 to have an adverse effect on parent-child relationships (Aquilino, 1994;
23 Eggebeen, 1992). Specifically, these studies suggest that divorce results in
24 less contact and instrumental and emotional support between the divorced
25 parent and the child.

27 Another important change that has occurred is the increased labor-force
28 participation of women, who are more often involved in maintaining
29 intergenerational relationships than males (Spitze & Logan, 1990). In regard
30 to the 1990s in the Netherlands, the increased labor-force participation of
31 women is of special interest because it occurred relatively late. Female labor-
32 force participation only started to increase in the 1970s, when 29% of the
33 women between 15 and 64 years of age were employed (Social and Cultural
34 Planning Office, 2000). Labor participation was stable at 30% up to 1985
35 and increased after that to 39% in 1990 and 53% in 2001 (Portegijs,
36 Boelens, & Keuzenkamp, 2002). The largest increase is observed within
37 younger cohorts of women (25-54 years of age), compared to older cohorts
38 (55-64 years of age). The current female employment rate in the Nether-
39 lands is now higher than the European Union average; however, most
female employment is part-time, and currently the Netherlands has the
highest proportion of women working part-time, compared to other

1 Western countries (Portegijs et al., 2002). While past research is not clear
2 on the effect that employment has on intergenerational support patterns,
3 it has been found to have a negative effect on the quality of the relation-
4 ship between adult daughters and their parents (Kaufman & Uhlenberg,
5 1998).

6 Furthermore, geographical proximity in parent-child residential location
7 is strongly associated with frequency of contact and exchange of support
8 (Lawton, Silverstein, & Bengtson, 1994). Coresidence of parents with their
9 adult children is associated with higher levels of interaction and more
10 support exchange than living nearby (White & Rogers, 1997). Liefbroer and
11 De Jong Gierveld (1995) calculated for the Netherlands that in 1965, 55% of
12 men and 44% of women at age 60 were coresiding with one or more of their
13 children; in 1990 these percentages were 33% and 22%, respectively. As data
14 from the current study shows, in 2002 a further decline in intergenerational
15 coresidence was observed: 23% and 16%, respectively. Furthermore, when
16 parents and children do not coreside, geographic proximity concerns
17 differences between children living nearby, for example in the same
18 neighborhood, or children living at a large traveling distance. Although
19 there are no data on historical trends in the Netherlands available in the
20 period under study, the current study shows an increase in children's
21 geographical proximity concurrent with a decline in coresidence.

23 *Control Variables*

24 Finally, there are a number of other parent and child characteristics that
25 may have consequences for the contact and support between parents and
26 children. The age of parents and children could be related to contact and
27 support exchange (Morgan, Schuster, & Butler, 1991). The older one is, the
28 more support one receives and the less support one gives to others,
29 irrespective of changes in health (Van Tilburg & Broese van Groenou, 2002).
30 Other characteristics we took into account were the number of children. It is
31 plausible that parents with more children have less contact and support
32 exchange with each of them. Also, educational level and functional capacity
33 were taken into account. Older adults with a higher education have less
34 contact (Greenwell & Bengtson, 1997), receive less instrumental support and
35 give more support than those with a lower education (Broese van Groenou &
36 Van Tilburg, 2003). Functional limitations provide fewer opportunities to
37 give (instrumental) support and are an indicator of more need for
38 (instrumental) support (Van Tilburg & Broese van Groenou, 2002).
39

1 In addition to respondent characteristics, we examined the influence on
2 contact and support exchange of a child's partner status and having children
3 of their own. Previous studies show that children who are divorced or
4 single have poorer relationships with their parents than married children
5 (Kaufman & Uhlenberg, 1998). Past research is not clear what effect having
6 a grandchild has on the contact and support exchange between parents and
7 children, but we expect that the presence of grandchildren might reduce
8 contact frequency and support exchange. We also included the influence of
9 gender on contact and support exchange: In general, females are more
10 involved than males in maintaining intergenerational relationships (Spitze &
11 Logan, 1990). Also, same-sex dyads differ from cross-sex dyads. Children
12 often identify more strongly with the parent of the same sex (Aquilino, 1994;
13 Lee, Dwyer, & Coward, 1993); specifically, the mother-daughter relation-
14 ship is found to be closer than other dyad types.

17 METHODS

19 *Respondents*

21 Data were obtained from two surveys of the aging population in the
22 Netherlands. The first survey was carried out in 1992. Face-to-face
23 interviews were conducted with 4,494 respondents in the research program
24 "Living Arrangements and Social Networks of Older Adults" (Knipscheer,
25 De Jong Gierveld, Van Tilburg, & Dykstra, 1995). The program used a
26 stratified random sample of men and women born between 1903 and 1937.
27 The sample was taken from the population registers of 11 urban and rural
28 municipalities, regions that represent differences in religion and urbaniza-
29 tion in the Netherlands. The oldest individuals in these areas, particularly
30 the oldest men, were over-represented in the sample. Respondents were
31 interviewed in their homes, and personal computer assistance (CAPI) was
32 used in the data collection. Of the 6,107 eligible individuals in the sample,
33 2,302 were unwilling to participate due to a lack of interest or time; another
34 734 were ineligible because they had died or were too ill or cognitively
35 impaired to be interviewed. The cooperation rate was 62%, which is
36 relatively high compared to many surveys in the Netherlands where
37 participation rates are low (Bethlehem & Kersten, 1982). For the second
38 survey, conducted in 2002, the Longitudinal Aging Study Amsterdam
39 (LASA) (Deeg, Knipscheer, & Van Tilburg, 1993) sampled a new cohort
(birth years 1938-1947, $N=1002$) from the same sampling frame as the

1 earlier cohort, with a cooperation rate of 57%. For the study reported here,
2 from the 1992 data collection, the birth cohort 1928–1937 was used
3 ($N=1,137$), resulting in data from two consecutive birth cohorts within
4 the same age range (55–65 years) with an interval of 10 years. We will
5 refer to these cohorts as the *early* (born in 1928–1937) and the *late* cohort
6 (1938–1947).

7 The following respondents were not included: those who had no children
8 ($n=150$ for the early cohort and $n=105$ for the late cohort), those who had
9 children that were all younger than 18 years ($n=12$ and $n=4$, respectively),
10 and those whose interviews had to be shortened or broken off because of
11 frailty ($n=34$ and $n=9$, respectively). This resulted in 941 respondents in the
12 early cohort with a total of 2,816 children ($M=3.0$, $SD=1.5$) and 884
13 respondents in the late cohort with 2,211 children ($M=2.5$, $SD=1.2$) for
14 whom data were available.

15 For the early cohort, follow-ups were conducted in the context of LASA
16 in 1992–1993, 1995–1996, 1998–1999 and 2001–2002. Data on all the
17 children were collected only at the 2001–2002 observation, which is used as
18 T2 in the current study. The T2 interviews were conducted between 9.4 and
19 10.6 years after T1 (9.9 years later, on average), resulting in data for 574
20 respondents with 1,673 children ($M=2.9$, $SD=1.4$). Reasons for attrition
21 (in total 39%) between T1 and T2 were the death of the respondent (12%
22 of the original sample of 941), refusal (14%), severe physical or mental
23 health problems (2%) or the respondent having moved to an unknown
24 destination or abroad (2%). Missing data caused further exclusion: 6%
25 of the respondents had a short interview by phone or by proxy and 3% of
26 the interviews had to be shortened or broken off because of frailty.
27 Furthermore, 12 children had died and two parents had lost their only child
28 by death. The attrition caused by refusal resulted in a sample with a lower
29 contact frequency ($M=167$ days per year for the 1,673 relationships
30 included in the longitudinal study, compared to $M=187$ for the 403
31 relationships of respondents who refused further cooperation, $p<0.01$),
32 emotional support given more often by the parent (76% versus 67%,
33 $p<0.01$), instrumental support given more often (55% versus 47%,
34 $p<0.01$) and instrumental support received more often by the parent
35 (43% versus 34%, $p<0.01$). No significant differences were observed for
36 emotional support received (81% and 78%, respectively) and whether the
37 child was identified as a member of the personal network (90% and 88%,
38 respectively). This selection does not clearly indicate that respondents with
39 poor intergenerational relationships ended their cooperation with the
study.

Measurements

A question was posed about contact frequency in all the parent–child relationships: “How often are you in touch with X?” Contact frequency was classified into eight categories from less than once a year to daily, and was converted to number of days per year. It was assumed that there was daily contact between a child and a parent sharing the household. As Table 1 shows, intergenerational contact is frequent, on average. Questions on supportive exchanges were posed to a selection of the relationships (i.e., those with children included in the personal network). To obtain adequate information on their networks, the older parents were asked to identify their personal network members by name. The main objective of this 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, 1995). This procedure was adopted from Cochran, Larner, Riley, Gunnarson, and Henderson (1990). The following question was posed: “Name the people you have regular contact with and who are important to you.” Only people above the age of 18 could be named. For a subset of the identified network members (i.e., the 10 with the highest frequency of contact) questions were asked about support. The average network size was about 14, and the number of identified network members ranged from 0 to over 70. Restrictions in the data collection forced us to ask questions about support for a limited number of network members. The question about receiving instrumental support was: “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, small repairs, or filling out forms?” The question about receiving emotional support was: “How often in the past year have you told X about your personal experiences and feelings?” With respect to support given, the questions were reversed. The data structure required multilevel analyses (see below) and the logistic approach fitted best with the ordinal measurement level of the support exchanges. The answer categories “never” and “seldom” were contrasted to the categories “sometimes” and “often.” On average, emotional support is exchanged more often than instrumental support, and parents report that they provided instrumental support more often than they received this type of support.

In a secondary study, we investigated whether there were any differences between the reports of both parents and those of some of their children as respondents ($n=218$ relationship pairs). Correlations between the parents’ and child’s reports on supportive exchanges were between 0.34 and 0.40,

Table 1. Means and Percentages of Variables Used in the Analyses for the Early and Late Cohort and Longitudinally for T1 and T2.

Cohort Observation	Early (1928–1937) T1 (1992)	Late (1938–1947) T1 (2002)	Early (1928–1937) T1 (1992)	T2 (2002)
<i>Respondent characteristics</i>	<i>N</i> = 941	<i>N</i> = 884	<i>N</i> = 574 ^a	<i>N</i> = 574
Age	59.4	60.0***	59.2	69.0 ^b
Number of children	3.04	2.52***	2.94	2.91 ^{b,c}
Number of children aged 0–17 years	0.05	0.05	0.03	0.00
Number of children in household	0.45	0.26***	0.45	0.06***
Marital history and status		***		***
Never married, currently no partner	0%	0%	0%	0%
First marriage	80%	73%	82%	71%
Ever divorced, currently married or partnered	5%	10%	5%	5%
Ever divorced, currently no partner	3%	8%	3%	3%
Ever widowed, currently married or partnered	5%	4%	3%	4%
Ever widowed, currently no partner	8%	5%	7%	17%
Educational level (years)	9.3	10.2***	9.6	^d
Employment		***		***
Not employed	69%	60%	65%	91%
Employed part-time	11%	17%	12%	7%
Employed full-time	21%	23%	24%	2%
Functional capacity (6–30)	29.2	28.6***	29.5	28.3***
<i>Child characteristics</i>	<i>N</i> = 2,816	<i>N</i> = 2,211	<i>N</i> = 1,673 ^a	<i>N</i> = 1,673
Age	30.0	31.4***	29.7	39.7 ^b
Partner (no, yes)	70%	75%***	69%	84%***
Children (no, yes)	41%	45%**	41%	72%***
Employment		***		***
Not employed	28%	16%	28%	14%
Employed part-time	11%	19%	11%	23%
Employed full-time	61%	65%	61%	64%
<i>Relationship characteristics</i>	<i>N</i> = 2,816	<i>N</i> = 2,211	<i>N</i> = 1,673 ^a	<i>N</i> = 1,673
Gender				
Father and son	24%	23%	25%	25%
Father and daughter	22%	24%	23%	23%
Mother and son	27%	29%	22%	22%
Mother and daughter	26%	25%	26%	26%
Geographic proximity		***		***
Coresiding	15%	10%	16%	2%
No coresidence; within 15 minutes traveling time	41%	45%	41%	44%
More than 15 minutes traveling time	44%	44%	44%	54%
Contact frequency (days per year)	167.4	166.0 ^c	165.6	122.1 ^c
Emotional support received (no, yes)	78%	83% ^c	73%	67% ^c
Emotional support given (no, yes)	74%	86% ^c	71%	73% ^c
Instrumental support received (no, yes)	41%	48% ^c	41%	38% ^c
Instrumental support given (no, yes)	53%	65% ^c	53%	46% ^c

Note: (Paired) *t*-tests were applied for interval variables; χ^2 -tests for nominal variables.

^aA subsample of the sample described in the first column.

^bDifference not tested.

^cFor T1 including 12 children who died between T1 and T2.

^dNo T2 observation.

^eDifference examined in the multilevel models.

**p* < 0.05;

***p* < 0.01;

****p* < 0.001.

1 indicating the subjective nature of the measurements. Reports on frequency
of contact were more highly correlated ($r=0.71$) and the traveling time
3 reported by the parents was strongly correlated ($r > 0.79$) with the time
reported by the child, as well as the distance in a straight line and traveling
5 distance and time by car, as obtained from public databases.

Only adult children were included in the analysis because non-adult
7 children predominantly live with the parent and, consequently, have daily
contact, so no data are available on support exchange for children under
9 18 years because these children were not included in the network. As a
result, 44 children were excluded from the early cohort at T1, leaving 2,772
11 relationships; 18 were excluded at T2, leaving a total of 1,655 children for
the longitudinal analyses and 41 from the late cohort.

13 Data on support were not available for all relationships. A number of
children were not identified within the network. Of the 2,772 adult children
15 of the early cohort, 90% were identified as network members at T1, and
94% of the 1,673 at T2 were so identified (the difference was significant at
17 $p<0.01$). For the late cohort, who had 2,211 adult children, 94% were
identified as network members (the difference with the early cohort was
19 significant at $p<0.001$). It is interesting to note that not all the children
identified in the network were among the 10 with the highest contact
21 frequency. Data on support were available for 2,239 relationships at T1, for
1,302 relationships at T2, and for 1,804 relationships within the late cohort.
23 Reasons for loss of children were that other network members were
identified among the parents' 10 network members with the highest
25 frequency of contact and, in a number of cases, respondents had more
than 10 children. The reasons for not having support data differed
27 longitudinally ($p<0.001$): For the early cohort at T1, 10% of the children
were not included in the network and 8% were not among the 10 with the
29 highest frequency of contact; for T2, this was 7% and 16%, respectively.
Therefore the analyses were restricted to relationships for which data on
31 support exchange were available for both T1 and T2. The reasons for not
having support data also differed between the cohorts ($p<0.001$): For the
33 early cohort, 11% of the children were not included in the network and 7%
were not among the 10 with the highest frequency of contact; for the late
35 cohort, these numbers were 6% and 10%, respectively. However, the
proportion of children for whom data on support exchange was available
37 did not differ (82% and 84%, respectively, $p > 0.05$).

The following characteristics were included for each respondent: age,
39 number of children and number of children in the household, marital
history and status, employment status, education and functional capacity.

1 Marital status is time-specific and covers previous changes in marital status
2 (divorce or widowhood) that might affect contact and support exchange
3 with children. We distinguished between never married and not having a
4 partner, being in the first marriage (including a small number of respondents
5 who never married and lived with their partner), ever divorced or widowed
6 and remarried or repartnered, and ever divorced or widowed and not having
7 a partner relationship. We present the distribution in Table 1. Between the
8 early and late cohort, a significant increase was observed in those who were
9 ever divorced. Because of death, over time we observed a strong increase in
10 widowed parents without a partner.

11 Educational level was measured in years. The late cohort had more
12 years of education than the early cohort. Since it was expected that only a
13 few respondents attended school after T1, the educational level at T2
14 was not observed. The respondent's employment status was assessed with
15 a single question: "Are you currently employed?" The working respondents
16 were asked the number of hours a week they worked according to their
17 employment contract. In the absence of a contract (e.g., because the
18 respondent was self-employed), an approximation of the actual number of
19 hours was asked (*full-time* was defined as 28 hours or more per week). An
20 increase in both full-time and part-time employment was observed between
21 the early and late cohorts. As would be expected, longitudinally we observed
22 an increase in the number of respondents who were not employed.

23 Functional capacity was measured with six questions about having
24 difficulty performing the activities of daily living, such as, "Can you walk up
25 and down stairs?" The five possible answers were "not at all," "only with
26 help," "with a great deal of difficulty," "with some difficulty" and "without
27 difficulty," ranging from 6 (*poor*) to 30 (*good capacity*). The psychometric
28 properties were satisfactory (Loevinger's coefficient of homogeneity
29 $H \geq 0.46$, reliability $\rho \geq 0.79$). The early cohort had a slightly greater
30 functional capacity than the late cohort. This could be because selection
31 effects played a role (i.e., either selective dropout in our sample or in the
32 population, which could be caused by some people, who might otherwise
33 have died, surviving into the late cohort). Longitudinally, there was a
34 decrease in functional capacity, most likely because the respondents were 10
35 years older.

Information about the children's gender, age, whether they had children
37 of their own, and partner and employment status was collected from the
38 parent. Between the early and late cohorts, there was a small increase in the
39 number of adult children with children of their own. An increase was also
observed between the early and late cohorts and longitudinally in the

1 number of children with a partner. This might be related to the somewhat
higher age of children in the late cohort. Employment of a child was assessed
3 with a single question: "Does X have a job, and if so does s/he work full-
time or part-time?" We found an increase in employment across both
5 cohorts and longitudinally, with children working part-time more often.

To measure relationship characteristics, the gender of the parent and child
7 were combined to distinguish between same-sex and cross-sex relationships.
The distribution on the relationship level presented in Table 1 does not show
9 the gender distribution of the parents. Of the parents, 53% among both
the early and late cohorts were female. Longitudinally, 51% were female.
11 Information was also collected on whether adult children shared a household
with parents, and when they did not live with their parents, information was
13 asked about the traveling time to a child. The geographic proximity was
analyzed as a nominal variable with three categories: a child shared the
15 household with a parent; lived nearby, arbitrarily chosen as a traveling time
of 15 minutes or less; or lived farther away, a traveling time of more than 15
17 minutes. Within the late cohort, a smaller number of children were sharing
the household with a parent. More children lived nearby.

19 The distribution at the parental level was as follows: Within the early
cohort, 30% of the parents coresided with one or more children, 47% did
21 not share the household with a child and had at least one child living nearby,
and 23% had no children living nearby. Within the late cohort, these
23 percentages were 19%, 55%, and 26%, respectively. Longitudinally, almost
all children had left the household. At T1, 244 children shared the household
25 with a parent; 10 years later, most of them ($n=216$) had left the parental
home. There were a few children living independently at T1 who were
27 coresiding with parents again at T2 ($n=7$). In particular there was an
increase in the percentage of children not living nearby. In contrast to the
29 data on the relationship level, the data on the parental level shows an
increase in having a child living nearby. Among the parents at T2, 5%
31 coresided with one or more children (at T1 this was 31%), 64% did not
share the household with a child and had at least one child living nearby
33 (47% at T1), and 31% had no children living nearby (23% at T1).

Procedure

37 To assess differences in contact frequency and support exchange, we
39 applied a hierarchical multilevel regression analysis (MLn) (Rasbash &
Woodhouse, 1995). We assume that relationships of the same respondent

1 will be more alike than relationships of different respondents. Applying
ordinary regression analysis to this kind of data set would violate the
3 assumption of independence of error terms. One consequence would be
that we would overestimate the number of degrees of freedom and,
5 consequently, the significance of effects, leading to a number of spurious
significances. However, the number of degrees of freedom is not the only
7 subject of concern. Using ordinary regression analysis, the effects of
respondents with many relationships would dominate the effects since they
9 have a relatively large number of representations on a lower level. In
multilevel analysis, variables from different levels (e.g., parents and
11 children) are analyzed simultaneously; the statistical model includes the
various dependencies. Analyses were performed with the scores of contact
13 frequency as the dependent variable in a linear model. The unstandardized
regression coefficients are presented. Emotional support received, emo-
15 tional support given, instrumental support received and instrumental
support given were dependent variables in logistic models. Two coefficients
17 are presented for each explanatory variable: the logistic regression
coefficient (the effect on the log-odds) and the effect on the odds. The
19 last coefficient indicates the factor by which a change in an independent
variable changes the odds of support exchanged.

21 To assess sequential changes in cohorts, the early and late birth cohorts
were compared, with children and the relationships with their parents nested
23 within the parents. In Model 1, in order to assess the general association of
the two cohorts with contact frequency and support exchange, the equation
25 included a dichotomous variable indicating membership in the early or late
cohort. To assess whether parent, child and/or relationship characteristics
27 influenced the frequency of contact and support exchange, the equation was
further extended in Model 2 with the specific variables described above.

29 To assess time-sequential changes, the early cohort was compared over a
10-year period. Observations of contact frequency and support exchange at
31 T1 and T2 are nested in the relationships, and the children and their relation-
ships with parents are nested in the parents. The analyses were restricted to
relationships for which data on contact frequency and support exchange were
33 available for both T1 and T2. The two models were equal to the models for the
cohort comparison, with the dummy for the cohort differences in the models
35 replaced by the effect of time (i.e., the interval between T1 and T2).

37 Period and cohort effects are confounded in the cohort-sequential
analysis; period and aging effects are confounded in the time-sequential
39 analysis. It is assumed that the combination of both types of analysis
contributes to the disentanglement of period, cohort and aging effects.

RESULTS

This study investigated whether there was a decline in frequency of contact and support exchanged between older parents and adult children in the Netherlands in the 1990s. First, a comparison was made between two birth cohorts and longitudinally over 10 years, assuming changes in both contact frequency and support exchanged. The results show that there was a decrease in frequency of contact between the early and late cohorts, from 172 days of contact to 169 days ($B = -2.9$; Table 2, Model 1); however, this difference is not significant. In contrast, parents in the late cohort exchanged significantly more support with their children than parents in the early cohort. We found that parents within the late cohort reported giving more support than they received. Specifically, the frequency of giving emotional support was higher than the frequency of giving instrumental support. What differences occur when we control for respondent, child and relationship characteristics in Model 2? With respect to contact frequency, we observed a difference of 11 days of contact per year in favor of the late cohort (Table 2, Model 2), whereas the estimates in Models 1 were not significant. The estimates of cohort effects in support exchanges were not strongly affected by the inclusion of parent, child, and relationship characteristics, except that receiving emotional support was no longer significant.

In comparison to the early cohort, the characteristics of respondents, children and relationships have the following effects on contact frequency (Table 2, Model 2) for the late cohort: In general, parents who have fewer children have on average more contact with their adult children; in other words, to a certain extent contact is spread among the children. Parents who were ever divorced, regardless of whether they are remarried or repartnered, and widowed parents who are remarried or repartnered have less contact with their adult children. Those who are widowed with no new partner have more contact with their children. Parents with a higher educational level have less contact with their children. The employment status of the parents has no significant effect. Furthermore, parents with younger or single children or children who have children of their own have more contact with their children. The employment status of the children has no significant effect. Mothers and daughters and parents with children who are coresiding or living within 15 minutes traveling time of parents have more contact.

There were some differences observed between exchanges of support and frequency of contact. Parents who have fewer children receive on average more emotional support but give more instrumental support. Ever-divorced

Table 2. Linear and Logistic Multilevel Model Results Predicting Intergenerational Contact and Support Exchange across Cohorts Using Full Maximum Likelihood Estimation ($N \leq 4,938$ Relationships from 1,825 Parents).

Variable	Contact Frequency (Days per Year)			
	Model 1		Model 2	
	<i>B</i>	SE	<i>B</i>	SE
Intercept	172.0***	3.4		312.8***
Cohort (0 = 1928–1937, 1 = 1938–1947)	–2.9	5.0	10.9**	4.2
Parent’s age			–0.9	0.8
Parent’s number of children			–11.0***	1.4
Parent’s number of children aged 0–17 years			0.8	7.3
<i>Parent’s marital history and status (first marriage omitted)</i>				
Ever divorced, currently married or partnered			–51.8***	7.7
Ever divorced, currently no partner			–20.7*	8.5
Ever widowed, currently married or partnered			–35.5**	11.2
Ever widowed, currently no partner			19.9*	8.0
Parent’s educational level (years)			–2.8***	0.7
<i>Parent’s employment (not employed omitted)</i>				
Employed part-time			–3.6	6.0
Employed full-time			2.3	5.7
Parent’s functional capacity (6–30)			–0.7	0.7
Child’s age			–2.1***	0.4
Child having partner (no, yes)			–19.1***	3.7
Child having children (no, yes)			20.3***	3.6
<i>Child’s employment (not employed omitted)</i>				
Employed part-time			5.2	4.7
Employed full-time			–7.3	3.8
Gender				

Father and daughter	4.1
Mother and son	5.2
Mother and daughter	5.4
<i>Geographic proximity (> 15 minutes omitted)</i>	
Coresiding	5.4
No coresidence; within 15 minutes traveling time	3.1
Estimated parameters	
Deviance	

Variable	Emotional Support (no, yes)											
	Received					Given						
	Model 1		Model 2			Model 1		Model 2				
	B	SE	e ^B	B	SE	e ^B	B	SE	e ^B	B	SE	e ^B
Intercept	1.29***	0.07	3.61	-2.32	1.45	0.10	1.04***	0.07	2.82	-1.79	1.43	0.17
Cohort (0 = 1928-1937, 1 = 1938-1947)	0.31***	0.11	1.37	0.23	0.12	1.26	0.82***	0.11	2.27	0.86***	0.12	2.36
Parent's age				0.03	0.02	1.03				0.02	0.02	1.02
Parent's number of children				-0.12**	0.04	0.89				-0.05	0.04	0.95
Parent's number of children aged 0-17 years				-0.02	0.20	0.98				0.17	0.21	1.18
<i>Parent's marital history and status (first marriage omitted)</i>												
Ever divorced, currently married or partnered				-0.15	0.24	0.86				-0.16	0.25	0.85
Ever divorced, currently no partner				-0.34	0.25	0.71				-0.71**	0.24	0.49
Ever widowed, currently married or partnered				-0.08	0.34	0.92				-0.34	0.33	0.72
Ever widowed, currently no partner				-0.50*	0.22	0.60				-0.16	0.22	0.85
Parent's educational level (years)				0.09***	0.02	1.10				0.09***	0.02	1.09
<i>Parent's employment (not employed omitted)</i>												
Employed part-time				0.19	0.18	1.21				0.15	0.18	1.17
Employed full-time				0.13	0.16	1.14				-0.11	0.16	0.89
Parent's functional capacity (6-30)				0.04*	0.02	1.05				0.05*	0.02	1.05
Child's age				-0.02	0.01	0.98				-0.03*	0.01	0.97
Child having partner (no, yes)				0.01	0.13	1.01				-0.10	0.13	0.91
Child having children (no, yes)				0.12	0.12	1.12				-0.03	0.12	0.97

Table 2. (Continued)

Variable	Emotional Support (no, yes)									
	Received					Given				
	Model 1		Model 2			Model 1		Model 2		
	B	SE	e ^B	B	SE	e ^B	B	SE	e ^B	B
<i>Child's employment (not employed omitted)</i>										
Employed part-time				0.27	0.17	1.31				0.37*
Employed full-time				0.18	0.13	1.19				0.17
<i>Gender</i>										
Father and daughter				0.34*	0.14	1.41				0.21
Mother and son				0.58***	0.15	1.79				0.31*
Mother and daughter				1.45***	0.18	4.25				1.10***
<i>Geographic proximity (> 15 minutes omitted)</i>										
Coresiding				0.49**	0.18	1.62				0.02
No coresidence; within 15 minutes traveling time				0.08	0.11	1.08				-0.11
Estimated parameters	1			22			1			22
Deviance	3,410.0			2,910.7			3,372.1			2,890.9
Variable	Instrumental Support (no, yes)									
	Received					Given				
	Model 1		Model 2			Model 1		Model 2		
	B	SE	e ^B	B	SE	e ^B	B	SE	e ^B	B
Intercept	-0.35***	0.06	0.70	5.25***	1.18	189.81	0.13*	0.06	1.14	-0.19
Cohort (0 = 1928–1937, 1 = 1938–1947)	0.30***	0.09	1.35	0.40***	0.10	1.49	0.54***	0.09	1.72	0.73***
Parent's age				-0.04*	0.02	0.96				-0.02
Parent's number of children				-0.05	0.03	0.95				-0.16***
Parent's number of children aged 0–17 years				-0.45*	0.21	0.64				-0.30

1 parents without a partner report giving less emotional support and widowed
2 parents with no new partner receive more instrumental support but less
3 emotional support. Educational level was only significant for emotional
4 support. Although, employment status of parents has no significant effect
5 on emotional support, parents who are employed give less instrumental
6 support to their children. Parents with a higher functional capacity exchange
7 more emotional support, give more instrumental support, and receive less
8 instrumental support. Parents with younger children give less emotional
9 and instrumental support. The partner status of the child has no significant
10 effect on the exchange of emotional support; however, parents give more
11 instrumental support to a child with no partner. Although having grand-
12 children plays a role in contact frequency, it does not affect the exchange of
13 emotional or instrumental support. Respondents give more emotional and
14 instrumental support when children are employed part-time. Both mothers
15 and fathers exchange emotional support more often with their children;
16 however, mothers receive less instrumental support from sons. Finally,
17 parents exchange more instrumental support when children are coresiding or
18 living within 15 minutes' traveling time. More emotional support is received
19 from children coresiding with parents.

20 Longitudinally, we observed a decline in contact frequency of 44 days per
21 year (Table 3, Model 1), indicating that as parent's age, they have less
22 contact with their adult children. For instrumental support given and
23 received and emotional support received, there were also negative effects
24 longitudinally, indicating that between 1992 and 2002, there was a decrease
25 in support exchanged. However, we did find an increase in the emotional
26 support given to children as parents aged. With the introduction of
27 respondent, child and relationship characteristics, there is still a decline in
28 contact frequency of 20 days per year (Table 3, Model 2). In general, the
29 estimates of longitudinal effects in support exchanges were either not
30 affected or not strongly affected by the inclusion of parent, child and
31 relationship characteristics, except that instrumental support given was no
32 longer significant.

33 Overall, the characteristics of respondents, children and relationships had
34 the same effects longitudinally on contact frequency (Table 3, Model 2) as
35 was found between the two successive cohorts. We no longer found an effect
36 of ever-divorced parents with no partner on contact frequency. Also, the
37 longitudinal analysis showed more contact between fathers and daughters.

38 There were some differences observed between exchanges of support and
39 frequency of contact, which are divergent to those found between the two
successive cohorts and which we mention briefly here. Older parents

Table 3. Linear and Logistic Multilevel Model Results Predicting Intergenerational Contact and Support Exchange over Ten Years Using Full Maximum Likelihood Estimation ($N \leq 3,310$ Observations of 1,655 Relationships from 574 Parents).

Variable	Contact Frequency (Days per Year)			
	Model 1		Model 2	
	B	SE	B	SE
Intercept	169.9***	3.9	272.3***	65.0
Interval (years divided by 10)	-44.2***	3.2	-20.2***	3.7
Parent's age			-0.7	1.0
Parent's number of children			-11.6***	1.8
Parent's number of children aged 0–17 years			-7.9	14.3
Parent's marital history and status (first marriage omitted)				
Ever divorced, currently married or partnered			-43.4***	11.9
Ever divorced, currently no partner			-17.4	13.9
Ever widowed, currently married or partnered			-26.1*	12.7
Ever widowed, currently no partner			34.8***	6.5
Parent's educational level (years)			-2.0*	0.9
Parent's employment (not employed omitted)				
Employed part-time			-1.6	6.6
Employed full-time			2.1	5.9
Parent's functional capacity (6–30)			0.3	0.8
Child's age			-2.5***	0.5
Child having partner (no, yes)			-17.5***	4.7
Child having children (no, yes)			12.7**	4.4
Child's employment (not employed omitted)				
Employed part-time			5.6	5.4
Employed full-time			-4.8	4.6
Gender				
Father and daughter			14.0*	5.5

Table 3. (Continued)

Variable	Contact Frequency (Days per Year)					
	Model 1			Model 2		
	B	SE		B	SE	
Mother and son				-7.8		6.8
Mother and daughter				25.1***		7.1
<i>Geographic proximity (>15 minutes omitted)</i>						
Coresiding				239.9***		7.1
No coresidence; within 15 minutes traveling time				59.6***		3.7
Estimated parameters	1			22		
Deviance	40,759.4			39,294.6		

Variable	Emotional Support (no, yes)											
	Received			Given								
	Model 1		Model 2	Model 1		Model 2						
	B	SE	e ^B	B	SE	e ^B						
Intercept	1.56***	0.08	4.75	-3.16*	1.56	0.04	1.28***	0.08	3.60	-3.39*	1.60	0.03
Interval (years divided by 10)	-0.33***	0.11	0.72	-0.31*	0.14	0.73	0.33***	0.11	1.39	0.32*	0.14	1.38
Parent's age				0.06**	0.02	1.07				0.06*	0.03	1.06
Parent's number of children				-0.07	0.04	0.93				-0.05	0.04	0.95
Parent's number of children aged 0-17 years				-0.04	0.44	0.96				-0.71	0.42	0.49
<i>Parent's marital history and status (first marriage omitted)</i>												
Ever divorced, currently married or partnered				-0.65*	0.32	0.52				-0.61	0.33	0.54
Ever divorced, currently no partner				-0.28	0.40	0.76				-0.55	0.38	0.58
Ever widowed, currently married or partnered				-0.80*	0.35	0.45				-1.15***	0.35	0.32
Ever widowed, currently no partner				0.26	0.20	1.29				0.09	0.20	1.09

Parent's educational level (years)	0.07***	0.02	1.07	0.07***	0.02	1.07	0.07***	0.02	1.07
Employed part-time	0.08	0.21	1.08	0.08	0.21	1.08	0.01	0.21	1.01
Employed full-time	0.22	0.20	1.24	0.22	0.20	1.24	-0.41*	0.19	0.66
Parent's functional capacity (6-30)	0.03	0.02	1.03	0.03	0.02	1.03	0.05*	0.02	1.05
Child's age	-0.04*	0.02	0.96	-0.04*	0.02	0.96	-0.04**	0.02	0.96
Child having partner (no, yes)	0.31	0.17	1.36	0.31	0.17	1.36	-0.04	0.17	0.96
Child having children (no, yes)	0.12	0.16	1.13	0.12	0.16	1.13	0.05	0.16	1.05
Child's employment (not employed omitted)									
Employed part-time	0.27	0.20	1.31	0.27	0.20	1.31	0.27	0.21	1.30
Employed full-time	0.15	0.17	1.16	0.15	0.17	1.16	0.10	0.17	1.10
Gender									
Father and daughter	0.22	0.17	1.24	0.22	0.17	1.24	0.22	0.18	1.24
Mother and son	0.64***	0.18	1.90	0.64***	0.18	1.90	0.33	0.18	1.40
Mother and daughter	1.19***	0.20	3.28	1.19***	0.20	3.28	1.13***	0.21	3.09
Geographic proximity (>15 minutes omitted)									
Coresiding	0.40	0.25	1.49	0.40	0.25	1.49	0.33	0.25	1.39
No coresidence; within 15 minutes traveling time	-0.18	0.13	0.83	-0.18	0.13	0.83	0.01	0.13	1.01
Estimated parameters	1			22			22		
Deviance	2,185.1			1,954.9			2,112.6		
							1,840.0		
Variable	Instrumental Support (no, yes)								
	Received			Given					
	Model 1			Model 1			Model 2		
	B	SE	e ^B	B	SE	e ^B	B	SE	e ^B
Intercept	-0.21***	0.06	0.81	1.38	1.27	3.98	0.31***	0.06	1.36
Interval (years divided by 10)	-0.14	0.09	0.87	-0.07	0.11	0.93	-0.24**	0.09	0.79
Parent's age				0.00	0.02	1.00			
Parent's number of children				-0.02	0.03	0.98	-0.04	0.02	0.96
Parent's number of children aged 0-17 years				-1.09*	0.48	0.34	-0.05	0.03	0.96
Parent's marital history and status (first marriage omitted)							-0.35	0.39	0.71
Ever divorced, currently married or partnered				-0.15	0.30	0.86	-1.13***	0.31	0.32
Ever divorced, currently no partner				0.09	0.33	1.09	-0.29	0.32	0.75

Table 3. (Continued)

Variable	Instrumental Support (no, yes)									
	Received					Given				
	Model 1		Model 2			Model 1		Model 2		
	B	SE	e ^B	B	SE	e ^B	B	SE	e ^B	B
Ever widowed, currently married or partnered										
Ever widowed, currently no partner										
Parent's educational level (years)										
Parent's employment (not employed omitted)										
Employed part-time										
Employed full-time										
Parent's functional capacity (6-30)										
Child's age										
Child having partner (no, yes)										
Child having children (no, yes)										
Child's employment (not employed omitted)										
Employed part-time										
Employed full-time										
Gender										
Father and daughter										
Mother and son										
Mother and daughter										
Geographic proximity (>15 minutes omitted)										
Coresiding										
No coresidence; within 15 minutes traveling time										
Estimated parameters										
Deviance										

Note: e^B Exponentiated B.
*p < 0.05;
***p < 0.01;
****p < 0.001.

1 exchange more emotional support than younger parents. Although the
2 number of children has an effect on contact frequency, no effect was found
3 for support exchange. Ever-divorced parents with a new partner receive less
4 emotional support from children and give less instrumental support.
5 Widowed parents with no partner receive more, but give less, instrumental
6 support, and those who are widowed with a new partner exchange less
7 emotional support. Parents who work full-time give less emotional support
8 to their children. Functional capacity had no effect on emotional support
9 received. Parents with children receive less emotional support. Having
10 grandchildren increases the instrumental support given to children.
11 Children's employment has no effect on the support given by parents, nor
12 was any effect found on support exchange between fathers and daughters.
13 Mothers receive more emotional support from children and give less
14 instrumental support to sons; however, no effect was found on emotional
15 support given and instrumental support received. Also, no effect was found
16 for parents coresiding with a child and emotional support received.

17 It can be concluded that within the late cohort, when the characteristics of
18 parents, children and relationships are taken into account, there is more
19 frequent contact between parents and their children. Supportive exchanges
20 within the late cohort are equal to or more intense than those in the early
21 cohort, particularly the support given by parents. Furthermore, the results
22 of the longitudinal analysis show that over time, parents have less frequency
23 of contact and receive less support from their children.

DISCUSSION

27 Over the past few decades, sociologists and demographers have reinforced
28 the idea that the macrostructural trends that have taken place in Western
29 societies have been destructive to traditional family functions, family
30 support, in particular. Previous studies have considered the effects of
31 macrostructural trends on intergenerational relationships, focusing pre-
32 dominantly on demographic changes. This article has taken a different
33 approach and focuses on the extent to which individual consequences of
34 macrostructural trends are related to contact and support exchange between
35 parents and adult children. We tested the hypothesis that because of social
36 changes in the Netherlands (which have influenced the life experiences of
37 individuals and their families), parents and children would have had fewer
38 opportunities for contact and support exchange in 2002 than they did in the
39 beginning of the 1990s.

Our analyses first showed that contact and support exchange could only be partially explained by these opportunities. Parents who have divorced have less contact with their children. Those who have no new partner give less emotional support. Given that fathers who have divorced often become marginal in the lives of their children, this suggests that they may have less contact and receive less support when they age. The timing of the divorce, or re-partnering after widowhood, most probably also plays an important role in this process. Also, the quality of the early relationship between parents and children influences later contact and exchanges of support (Aquilino, 1999). Family structures have become more heterogeneous, with many divorced parents remarrying, thereby allowing a stable, child-supportive family context to develop (Bengtson, 2001). Hence, the full effect on parent-child relations of marital instability and new relationships after widowhood will not be seen until the cohorts in our study become dependent.

The effects of labor-force participation differed in the various analyses. Whereas no effect of employment of parents and the adult child was found on contact, we did find a negative effect from the parent's employment on instrumental support given and a positive effect from the adult child's part-time employment on support given. Therefore, in general, contrary to what might be expected, employment does not negatively influence the contact and emotional support exchanged between parents and children. Part-time work enables women to combine the tasks of work and support; however, this may change in the future if the full-time employment of women increases further in the Netherlands. Tension may then be placed on the equilibrium between work and family, which, in turn, may result in a decreasing capacity to provide support to aged parents. Considering that our study pertains to parents who have few functional problems, we might have found different results for the employment of children if we had included parents who were older and had more functional limitations.

The results of our study also show that family support goes beyond the nuclear household. Consistent with earlier findings (Cooney & Uhlenberg, 1992), the results confirm that the process of children leaving the parental home is a major transition in the life of the parents. In particular, parents with children coresiding have more contact, exchange more instrumental support and receive more emotional support than those who do not coreside with children. According to Aquilino (1997), leaving home reduces the intensity of the parents' relationships with adult children. Both the parent and adult child are entering a new stage of the life course, and roles and

1 expectations are reevaluated. However, although parents and children
2 coreside less (both between cohorts as well as longitudinally), they more
3 often live nearby. We find that parents who have adult children living
4 nearby have more contact and exchange more instrumental support with
5 their children than those who live farther away.

6 There are also other effects of the characteristics of the respondent, child
7 and relationship on contact and support exchange: Parents with fewer
8 children have on average more contact (which will be discussed below).
9 Consistent with previous research, parents with a higher education have less
10 contact but exchange more emotional support with their children. Although
11 functional capacity had no effect on contact frequency, consistent with
12 prior research, parents with a higher functional capacity give more support
13 than those with less functional capacity. Parents with younger or single
14 children have more contact with their children. These children are still in
15 the launching phase of their life course and often have not yet committed
16 themselves to labor participation and a new family, so their attention
17 is probably still directed towards the family of origin. In contrast to our
18 expectations, having grandchildren has a positive effect on contact. The
19 increased participation of women in the labor force may require grand-
20 parents to help to care for their grandchildren. Finally, confirming the well-
21 known role of women as kin keepers, mothers and daughters have more
22 contact with each other and exchange more emotional support.

23 This study shows that, when respondent, child and relationship character-
24 istics are controlled, the contact was more frequent and more support was
25 exchanged between parents and children in 2002 than in 1992. These results
26 reflect both cohort and period effects, controlled for age effects. It may be
27 argued that our results show, on the one hand, that contact and support
28 exchange increase per child and, on the other hand, that parent-child
29 relationships actually become less important over historical time because
30 there are fewer of them. On the basis of our results, it is indeed not possible to
31 conclude whether there is an increase of contact and support at the family
32 level. Calculations at the family level cannot be made because we do not
33 know whether the children all visit at the same time or separately, and our
34 measurements of support exchange are not exact.

35 Given that the pattern for increased contact and exchange of support
36 over historical time can only be partially explained by opportunity, how can
37 this increase be explained? We believe that the changes that have taken
38 place in attitudes towards the family have had a more profound effect on
39 parent-child relationships than social developments such as the increase of
female participation in the labor market or an increase in divorce and

1 remarriage. Hence, the hypothesis that contact and exchanges of support
2 between parents and children have decreased because of social change
3 cannot be confirmed. Part of the late cohort can be characterized as
4 the protest generation (compare the Vietnam-generation in the U.S.), who
5 were in their so-called formative years during the cultural revolution of
6 the 1960s and 1970s (Sanders & Becker, 1994). In this respect Inglehart
7 (1977) has argued that socialization during the formative years leads to
8 value orientations that remain relatively stable during the life course.
9 In comparison to the early cohort, the attitudes and behavior of the late
10 cohort are guided more by principles of equality and autonomy (Stacy,
11 1993). Consequently, the greater autonomy in these relationships allows
12 for relationships based on individual "commitments" rather than "fixed
13 obligations" (Finch, 1989). We can assume that this has an effect on
14 the parenting of this cohort, accentuating freedom, companionship and
15 negotiation. An important characteristic of negotiation is intensive
16 communication about differing opinions among parents and children (Du
17 Bois-Reymond, 1998), which ultimately results in more contact. Still, there
18 might also be other explanations for the increased contact between parents
19 and adult children, such as the technological advances that allow new
20 forms of communication. Frequency of contact is no longer confined to
21 face-to-face contact but also includes other forms of contact such as
22 telephoning or emailing.

23 Longitudinally, we find that as parents age (from about 60 until they are
24 around 70), there is less contact with their adult children and less support is
25 exchanged. This agrees with earlier research confirming that both parents
26 and children tend to devote less time and energy to intergenerational
27 relationships during this "empty nest" phase, which is confirmed by our
28 results. Moreover, this finding provides an explanation for the persistence of
29 the notion of a "breakdown" of family support. The idea that contact and
30 support decline over time is genuine; however, it may only hold for certain
31 periods in one's life, such as when children go through the transition from
32 young adulthood to mature adulthood and become more independent.
33 When comparing our two cohorts, we find no evidence for the myth of
34 family decline, confirming, the reasoning that the "good old days" are not
35 earlier periods in our social history, but a period in the history of each
36 individual and family (Brody, 1985). The combination of a cohort and
37 longitudinal analysis in this study has allowed us to study intergenerational
38 relationships from different perspectives. However, we were not able to fully
39 address the different effects because we could not apply a cohort-sequential
40 design. From the cohort analysis, it is therefore difficult to disentangle

1 whether the effects were primarily related to cohort or period; within the
longitudinal analysis, we cannot be conclusive about the age and period
3 effects. We believe that the reverse results – an increase between cohorts and
a decrease longitudinally – suggests that the longitudinal results show an
5 effect of aging and not of period.

A number of limitations of the study should be noted. We had no
7 information on the attitudes towards the family, such as norms on filial
obligation and which qualities the family environment should encourage in
9 children. Consequently, we have no empirical evidence about how family
attitudes have changed or what possible connections there might be between
11 attitudes towards family and intergenerational relationships. We also did
not assess any changes that might have taken place in the attitudes people
13 have towards divorce, labor-force employment or geographical proximity,
in relation to contact and support within family relationships. On the
15 individual level, for example, women may choose to either participate in the
labor force or to commit themselves to family care. On the societal level,
17 changes may take place concerning norms about the combination of work
and care giving to kin. Another limitation is that the information on contact
19 frequency and support exchanged was obtained from the parents. As
outlined in the descriptions of the measurements, there is low veridicality
21 of the reports of parents and those of their children on relationship
characteristics, in particular on the instrumental support exchanged and,
23 even more, on the emotional support exchanged. There are always different
perspectives in a personal relationship, especially if it concerns the parent–
25 child relationship. However, the results of a previous study by Klein Ikkink,
Van Tilburg, and Knipscheer (1999) show numerous congruencies across
27 the parents' and children's reports with respect to the factors that influence
the support parents receive.

29 In sum, our results show that the functions of families have not been
reduced. They support the existence of a family in which parents and adult
31 children maintain frequent contact and exchange support while residing in
separate households. Moreover, we find that across cohorts, parents have
33 more contact and exchange more support with their adult children when we
take into account the decline in coresidence. Macrostructural changes
35 have had a less destructive influence on parent–child relationships than we
initially thought. Our results show only a small snapshot of a larger picture
37 of family change within a post-modern era. Whether smaller families are
characterized by improved relationships will be even more evident within
39 future cohorts and requires further research. We therefore encourage future
research over longer periods and with later cohorts.

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REFERENCES

- Aboderin, I. (2004). Modernisation and ageing theory revisited: Current explanations of recent developing world and historical Western shifts in material family support for older people. *Ageing and Society*, 24, 29–50.
- Aquilino, W. S. (1994). Later life parental divorce and widowhood: Impact on young adults’ assessment of parent–child relations. *Journal of Marriage and the Family*, 56, 908–922.
- Aquilino, W. S. (1997). From adolescent to young adult: A prospective study of parent–child relations during the transition to adulthood. *Journal of Marriage and the Family*, 59, 670–686.
- Aquilino, W. S. (1999). Two views of one relationship: Comparing parents’ and young adult children’s reports of the quality of intergenerational relations. *Journal of Marriage and the Family*, 61, 858–870.
- Bengtson, V. L. (2001). Beyond the nuclear family: The increasing importance of multi-generational bonds. *Journal of Marriage and Family*, 63, 1–16.
- Bethlehem, J. G., & Kersten, H. M. P. (1982). Nonresponse in Dutch sample surveys. *Statistical Journal of the United Nations*, 1, 253–268.
- Brody, E. M. (1985). Parent care as a normative stress. *The Gerontologist*, 25, 19–29.
- Broese van Groenou, M. I., & Van Tilburg, T. G. (2003). Network size and support in old age: Differentials by socio-economic status in childhood and adulthood. *Ageing and Society*, 23, 625–645.
- Burgess, E. W. (1916). *The function of socialization in social evolution*. Chicago: University of Chicago Press.
- Cochran, M., Larner, M., Riley, D., Gunnarson, L., & Henderson, C. R. (1990). *Extending families: The social networks of parents and their children*. Cambridge, UK: Cambridge University Press.
- Cooney, T. M., & Uhlenberg, P. (1992). Support from parents over the life course: The adult child’s perspective. *Social Forces*, 71, 63–84.
- De Jong A. (1999). Trouwen en scheiden: Lichte restauratie op komst. *Maandstatistiek van de Bevolking*. [Marriage and divorce: Recovery in sigh.], 47, 8–16.
- De Jong Gierveld, J. (1998). Intergenerational relationships and solidarity within the family. In: K. Matthijs (Ed.), *The family: Contemporary perspectives and challenges* (pp. 31–49). Leuven: Leuven University Press.

- 1 Deeg, D. J. H., Knipscheer, C. P. M., & Van Tilburg, W. (1993). *Autonomy and well-being in the*
3 *aging population: Concepts and design of the longitudinal aging study Amsterdam*. Bunnik,
The Netherlands: Netherlands Institute of Gerontology.
- 5 Du Bois-Reymond, M. (1998). Negotiation strategies in modern families: What does it mean for
global citizenship? In: K. Matthijs (Ed.), *The family: Contemporary perspectives and*
7 *challenges* (pp. 57–71). Leuven, Belgium: Leuven University Press.
- 9 Eggebeen, D. (1992). Family structure and intergenerational exchanges. *Research on Aging*, 14,
427–447.
- 11 Finch, J. (1989). *Kinship obligations and family change*. Cambridge: Polity Press.
- 13 Greenwell, L., & Bengtson, V. L. (1997). Geographic distance and contact between middle-aged
children and their parents: The effects of social class over 20 years. *Journal of*
15 *Gerontology*, 52B, S13–S26.
- 17 Hareven, T. K. (1995). Historical perspectives on the family and aging. In: R. Blieszner &
V. Hildebrand Bedford (Eds), *Handbook of aging and the family* (pp. 13–31). London:
19 Greenwood.
- 21 Inglehart, R. (1977). *The silent revolution: Changing values and political styles among Western*
publics. Princeton, NJ: Princeton University Press.
- 23 Kalmijn, M., De Graaf, P. M., & Poortman, A. (2004). Interactions between cultural and
economic determinants of divorce in The Netherlands. *Journal of Marriage and the*
25 *Family*, 66, 75–89.
- 27 Kaufman, G., & Uhlenberg, P. (1998). Effects of life course transitions on the quality of
relationships between adult children and their parents. *Journal of Marriage and the*
29 *Family*, 60, 924–938.
- 31 Klein Ikkink, K., Van Tilburg, T. G., & Knipscheer, C. P. M. (1999). Perceived instrumental
support exchanges in relationships between elderly parents and their adult children:
Normative and structural explanations. *Journal of Marriage and the Family*, 61, 831–844.
- 33 Knipscheer, C. P. M., De Jong Gierveld, J., Van Tilburg, T. G., & Dykstra, P. A. (Eds). (1995).
Living arrangements and social networks of older adults. Amsterdam: VU University
Press.
- 35 Lawton, L., Silverstein, M., & Bengtson, V. L. (1994). Affection, social contact, and geographic
distance between adult children and their parents. *Journal of Marriage and the Family*,
37 56, 57–68.
- 39 Lee, G. R., Dwyer, J. W., & Coward, R. T. (1993). Gender differences in parent care:
Demographic factors and same-gender preferences. *Journal of Marriage and the Family*,
56, 57–68.
- Liefbroer, A. C., & De Jong Gierveld, J. (1995). Living arrangements, socio-economic
resources, and health. In: C. P. M. Knipscheer, J. De Jong Gierveld, T. G. van Tilburg &
P. A. Dykstra (Eds), *Living arrangements and social networks of older adults* (pp. 15–36).
Amsterdam: VU University Press.
- Mancini, J. A., & Blieszner, R. (1989). Aging parents and adult children: Research themes in
intergenerational relations. *Journal of Marriage and the Family*, 51, 275–290.
- Morgan, D. L., Schuster, T. L., & Butler, E. W. (1991). Role reversals in the exchange of social
support. *Journal of Gerontology*, 46, S278–S287.
- Popenoe, D. (1993). American family decline, 1960–1990: A review and appraisal. *Journal of*
Marriage and the Family, 55, 527–555.
- Portegijs, W., Boelens, A., & Keuzenkamp, S. (2002). *Emancipation monitor 2002*. Den Haag,
The Netherlands: SCP/CBS.

- 1 Rasbash, J., & Woodhouse, G. (1995). *MLn command reference*, version 1.0. University of
London, Institute of Education, Multilevels project.
- 3 Rossi, A. S., & Rossi, P. H. (1990). *Of human bonding: Parent-child relations across the life
course*. New York: Aldine de Gruyter.
- 5 Sanders, K., & Becker, H. A. (1994). The transition from education to work and social
independence: A comparison between the United States, the Netherlands, West
Germany, and the United Kingdom. *European Sociological Review*, 10, 135–154.
- 7 Shanas, E. (1979). The family as a social support system in old age. *Gerontologist*, 19, 169–174.
- 9 Silverstein, M., Burholt, V., Wenger, G. C., & Bengtson, V. L. (1998). Parent-child relations
among very old parents in Wales and the United States: A test of modernization theory.
Journal of Aging Studies, 12, 387–409.
- 11 Social and Cultural Planning Office. (2000). *Social and cultural Report 2000: The Netherlands in
a European perspective*. Rijswijk/Den Haag, The Netherlands: SCP/VUGA.
- 13 Spitze, G., & Logan, J. (1990). More evidence on women (and men) in the middle. *Research on
Aging*, 12, 182–198.
- 15 Stacy, J. (1993). Is the sky falling? *Journal of Marriage and the Family*, 55, 555–559.
- 17 Sutor, J. J., Pillemer, K., Keeton, S., & Robison, J. (1995). Aged parents and aging children:
Determinants of relationship quality. In: R. Blieszner & V. Hilkevitch Bedford (Eds),
Handbook of aging and the family (pp. 223–242). London: Greenwood.
- 19 Troll, L. E. (1971). The family of later life: A decade review. *Journal of Marriage and the Family*,
33, 263–290.
- 21 Van Tilburg, T. G. (1995). Delineation of the social network and differences in network size.
In: C. P. M. Knipscheer, J. De Jong Gierveld, T. G. van Tilburg & P. A. Dykstra (Eds),
Living arrangements and social networks of older adults (pp. 83–96). Amsterdam: VU
University Press.
- 23 Van Tilburg, T. G., & Broese van Groenou, M. I. (2002). Network and health changes among
older Dutch adults. *Journal of Social Issues*, 58, 697–713.
- 25 Vollenwyder, N., Bickel, J., d'Epinay, L., & Maystre, C. (2002). The elderly and their families,
1979–94: Changing networks and relationships. *Current Sociology*, 50, 263–280.
- 27 White, L., & Rogers, S. J. (1997). Strong support but uneasy relationships: Coresidence and
adult children's relationships with their parents. *Journal of Marriage and the Family*, 59,
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