Parents' socioeconomic status and support to adult children across the life course

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Abstract

Objective: This paper examines how parents' socioeconomic status (SES) affects the support parents give to children and how parents' SES moderates changes in support across children's life courses.

Background: Many studies have documented effects of parents' SES on support to adult children, as well as effects of children's life course stages on received support, but few studies have examined how these two factors interact. A dynamic perspective on the social stratification of support can provide new clues about how parents transmit advantages across generations.

Method: Using prospective panel data on 10,822 parent-child dyads in the Netherlands and random- and fixed-effects models, this paper examines life course changes in the financial, practical, and informational support adult children (aged 18-60) receive from parents. **Results:** Positive effects of parents' SES were found on informational and financial support, but there were no main effects on practical support. Informational support declined with age but later in higher-SES families. Support declined after union formation and similarly for higher- and lower-SES families. The increase in practical support when children became parents and single parents was stronger in higher-SES families than in lower-SES families. Stratification of financial support was stronger in early adulthood and increased again later in children's lives.

Conclusion: There was evidence for a prolonged support pattern among higher-SES families, combined with stronger effects of children's parenthood transitions in such families. Parents' SES affects support streams to adult children but effects depend on the type of support and on children's stage in the life course.

INTRODUCTION

In contemporary society, children often receive various forms of support from parents after they leave home and set up their household (Albertini & Kohli, 2013; Silverstein, Conroy, Wang, Giarrusso, & Bengtson, 2002). Examples are financial assistance to pay for college, practical support after buying or renting a new house, advice when deciding about labor market prospects, and support in caring for own (preschool) children. An important question is to what extent adult children's reliance on parents is socially stratified. Studies in social stratification and mobility have long pointed to the advantages of having parents with a higher socioeconomic status. Effects of parents' socioeconomic status have been observed on a range of child outcomes, including children's success in school, occupational status, employment, marriage, and partner choice (Breen, 2004; Grusky, 2001; Mooyaart, Liefbroer, & Billari, 2021). While the effects of parents' socioeconomic status are important, they do not necessarily inform us about what parents do for their children. Social capital studies have focused more directly on parental investments in the transmission process, particularly by paying attention to parental support for school work when children grow up (Parcel, Dufur, & Zito, 2010). Similarly, cultural capital studies have focused on specific resources parents pass on to their children, providing more direct evidence of parental investments (De Graaf, De Graaf, & Kraaykamp, 2000; Jaeger & Holm, 2007).

The study of downward intergenerational support – support from parents to adult children – provides another way to understand how parents transmit advantages across generations. Inequality can be reinforced if the support that parents provide to their adult children is more common and more efficient in higher-socioeconomic-status (SES) families than in lower-socioeconomic-status (SES) families (i.e., indicated by level of education, occupational status, and income). In her review of the literature on intergenerational support, Swartz (2009) argues that "intergenerational relationships are sources of material, practical,

and emotional support that are both unequally distributed and largely hidden, and as such [they are] mechanisms by which privilege or disadvantage is transferred through families from generation to generation" (2009, p. 192). Evidence that financial support to children depends on parents' socioeconomic status is abundant (Albertini, Kohli, & Vogel, 2007; Albertini & Radl, 2012; Fritzell & Lennartsson, 2005; Henretta, Van Voorhis, & Soldo, 2018; Hochguertel & Ohlsson, 2009; Künemund et al., 2005; Steelman & Powell, 1991), but evidence for non-financial forms of support to children is less clear about this.

A few recent studies have systematically analyzed the effects of parents' socioeconomic status on non-financial support to children and found mixed evidence for an SES gradient. In an analysis of parents in Philadelphia, Fingerman and colleagues (2015) found no significant effects of parental income and education on practical, emotional, and informational support to children (Fingerman et al., 2015, p. 853, Supplementary Table 1). In an analysis of national samples of British and American older parents, Henretta and colleagues (2002) found positive effects of parents' education on practical support, but only for married children, not for single children (Henretta, Grundy, & Harris, 2002, p. 451, 453). Studies of pooled European data that include SES measures as control variables have found positive effects of parents' education on the likelihood of providing help but no effect on the number of hours helped (Brandt & Deindl, 2013). Also interesting in this context is that analyses of contact frequency have consistently documented an opposite pattern: higher-SES parents have less frequent face-to-face contact with their adult children than lower-SES parents (Grundy & Shelton, 2001; Kalmijn, 2006; Tomassini et al., 2004). Contact is not the same as support but is an important and necessary condition for support exchange (Silverstein, Gans, Lowenstein, Giarrusso, & Bengtson, 2010).

In the present paper, we reexamine the role of parents' socioeconomic status for the degree to which adult children rely on parents for support. We consider the effects of parents'

socioeconomic status in combination with the role of children's life courses. Several studies in the past have shown that parental support for children changes across the life course (Brandt, Deindl, Haberkern, & Szydlik, 2008; Bucx, van Wel, & Knijn, 2012; Kalmijn, 2019; Min et al., 2023; Nazio & Saraceno, 2013; Rossi & Rossi, 1990; Silverstein et al., 2002). Support tends to decline as children age, but on top of aging effects, there are significant effects of marriage, parenthood, and divorce. After a temporary increase in support after getting married (Leopold & Schneider, 2011), support from parents tends to decline when children marry, primarily because children begin to rely on their partner for support (Bucx, van Wel, Knijn, & Hagendoorn, 2008; Min et al., 2023; Nazio & Saraceno, 2013; Sarkisian & Gerstel, 2008). Support from parents increases again when children become parents, mainly because the need for support in caring for (grand)children increases (Di Gessa, Glaser, Price, Ribe, & Tinker, 2016; Silverstein & Marenco, 2001; Zamberletti, Cavrini, & Tomassini, 2018). If children divorce, support from parents increases further because children are single again and lack the support of a partner (Kalmijn, 2016; Min et al., 2023) and because a divorce creates new needs, such as help with housing and other practical matters (Seltzer, Lau, & Bianchi, 2012).

We not only study the overall effects of parents' socioeconomic status on the support parents give to children but also how parents' socioeconomic status moderates children's life course changes in support. Are changes in support during the life course similar or different for children of higher- and lower-SES backgrounds? Are life course transitions equally influential for children of different SES backgrounds? We use theories of intergenerational solidarity (Bengtson et al., 2000; Szydlik, 2016) and notions from the life course perspective (Kaufman & Uhlenberg, 1998; Mayer, 2009) to develop hypotheses. We test the hypotheses using representative longitudinal data over 12 years for more than 10,000 parent-child dyads. Three types of support were analyzed: financial transfers, time transfers (e.g., practical

support), and information transfers (e.g., receiving advice). The age range of the children we considered is broad (18 to 59).

The context of the study is the Netherlands. Intergenerational relationships in the Netherlands are similar to the European average in terms of contact frequency (Hank, 2007) and support exchange (Albertini et al., 2007). On the continuum from familialistic to individualistic, the Netherlands is leaning toward the individualistic side, with fewer people endorsing obligations to support aging parents than in Southern or Eastern Europe (Reher, 1998). A strong positive educational gradient exists in female labor force participation, although a relatively large share of mothers works part-time (Merens & van den Brakel, 2014; OECD, 2017). While household income inequality in the Netherlands is modest (OECD, 2011), educational inequality is substantial, and the link between parents' socioeconomic status and children's school achievement appears to have been rising in the last decades (Onderwijsinspectie, 2018). College expenses are relatively low, however, since tuition is low and equal across universities. In the cohorts we are studying, there were universal state subsidies for college students' living expenses (van den Berg, 2020).

BACKGROUND AND HYPOTHESES

Theories of intergenerational solidarity argue that transfers from parents to adult children can be understood in terms of (a) the resources on the part of the support giver, (b) the need for support on the part of the support receiver, and (c) the possible alternative sources of support that the support receiver has (Fingerman et al., 2015; Kalmijn, 2014; Silverstein, Parrott, & Bengtson, 1995; Szydlik, 2016). Resources are often defined broadly and include time and money, as well as information and skills. Needs depend on various conditions, but health, age, and life course stage are key determinants of changes in people's needs (Bucx et al., 2012). Finally, different people can provide support, so people's alternatives are also

relevant. These alternatives depend on the receiver's partner status and family network (Hogerbrugge & Dykstra, 2009; Kalmijn, 2012) as well as on the geographical layout of the family network (Mulder & van der Meer, 2009).

The mechanisms described above operate in a context where cultural norms and institutional arrangements modify the degree to which parents and children support each other (Connidis & Barnett, 2019; Reher, 1998; Silverstein, Gans, & Yang, 2006). There are normative support obligations toward parents and adult children, although these are weaker in the Netherlands than in more family-oriented societies in Southern Europe (Reher, 1998). Normative obligations to support aging parents are more common in lower-SES families than higher-SES families, but obligations to support adult children are strong in all SES groups (De Vries, Kalmijn, & Liefbroer, 2009). The institutional context is most relevant for support from children to aging parents (Connidis & Barnett, 2019; Kohli, 1999) but also plays a role in the reverse stream of support. Examples are fiscal rules about financial transfers, institutional arrangements of child care, the government's role in the housing market, and state support for college students.

The current paper is concerned with the main and moderator effects of parents' socioeconomic status on the support parents provide to their adult children. Following research on social stratification and mobility, we conceptualize parents' socioeconomic status in terms of parents' educational attainment and occupational status (Breen & Jonsson, 2005; Ganzeboom, De Graaf, & Treiman, 1992). Occupational status partly captures the economic aspects of status, whereas education captures cultural and economic status dimensions (De Graaf & Kalmijn, 2001; Kraaykamp & van Eijck, 2010). Income was not measured in our design but is correlated with education and especially occupational status and plays a theoretical role as well. Some relevant resources, particularly available time, are not

measured directly but are related to parents' socioeconomic status because of couples' employment patterns (see below).

Our first hypothesis is about the overall effect of parents' socioeconomic status. Due to their higher level of education, occupational status, and income, higher-SES parents have more financial resources to offer, but also more cognitive and informational resources (Kraaykamp & van Eijck, 2010). At the same time, higher-SES parents may have less time because in contemporary societies, mothers with a higher level of education are more often involved in paid labor (OECD, 2017). The provision of time-intensive forms of support may further be limited because the geographical distance is larger between parents and children when parents and children have a university education (Chan & Ermisch, 2015; Mulder & Kalmijn, 2006). Some authors have suggested that different forms of support could counteract each other. Henretta and colleagues (2022) expected theoretically that lower-SES parents would provide more practical support than higher-SES parents "both as a form of 'compensation' for providing less money help, and because of the evidence of these groups' particularly close intergenerational ties" (p. 455). Given these differences in resources, one would expect that higher-SES parents more often give financial and informational support to children, whereas lower-SES parents give more time-intensive forms of support to children (H₁).

How could parents' socioeconomic status moderate the age pattern of support to children? In general, a decline in support with age has been found (Kalmijn, 2019; Szydlik, 2016), but it is not well known if the age pattern is similar or different for children of different SES backgrounds. Children of higher-SES parents generally make important life course transitions, such as union and family formation at later ages, partly because they are more likely to have a longer educational trajectory and a later start of their occupational career (Liefbroer & Zoutewelle-Terovan, 2021). In a sense, the transition to adulthood is

prolonged among children of higher-SES backgrounds, which may lead to an extended need for support (Henretta et al., 2002). This age-SES interaction could be amplified by the tendency of higher-SES parents to be concerned about the risk of downward educational mobility among their children (Breen, Luijkx, Muller, & Pollak, 2009; Van de Werfhorst & Hofstede, 2007), something that could suggest more involvement in children's lives in the 'launching' stages of the adult life course. For children of higher-SES backgrounds, and given differences in need, we expect that support continues to be high when children are in their twenties and thirties and to decline after that; for children of lower-SES backgrounds, we expect support from parents to decline earlier with age (H₂).

How the transitions to marriage, parenthood, and divorce affect support exchange may also depend on the parents' socioeconomic status. Marriage generally leads to a decline in support exchange with parents because children acquire an alternative source of support (Bucx et al., 2012; Hogerbrugge & Dykstra, 2009; Kalmijn, 2012; Nazio & Saraceno, 2013). This effect may be stronger for higher-SES families because children of higher-SES backgrounds tend to move further away from their parents after entering a union than children in lower-SES families (Michielin & Mulder, 2007). As a result, parents will have fewer opportunities to support married or cohabiting children in higher-SES families. One reason for this is that the job opportunities of couples are geographically more dispersed when they have high-status jobs (van Ham, Mulder, & Hooimeijer, 2001). Moreover, when women are employed, which is more common among children of higher-SES backgrounds (van Putten, Dykstra, & Schippers, 2008), people will often have to move further away from at least one set of parents (Chan & Ermisch, 2015). In sum, based on differences in opportunities, one would expect that the decline in support after union formation - the negative effect of union formation - will be stronger for children of higher-SES backgrounds than for children of lower-SES backgrounds (H₃).

Parents' socioeconomic status may also moderate the parenthood effect. Having children is generally believed to increase support from parents again because grandparents often take care of grandchildren (Geurts, Van Tilburg, & Poortman, 2014; Igel & Szydlik, 2011; Silverstein & Marenco, 2001). In addition, other support needs – financial, informational, and practical – may also increase during the parenthood stage (Bucx et al., 2008). These needs could be higher for children of higher-SES backgrounds because highereducated children are more likely to be dual earners, at least in contemporary times (Merens & van den Brakel, 2014; OECD, 2002). In the Netherlands, where the public childcare system was underdeveloped in the study period, informal care by grandparents was increasing and considerably more common among tertiary-educated parents than among parents with a lower level of education (De Vries, 2012; Geurts et al., 2014; Portegijs, Cloïn, Ooms, & Eggink, 2006). On the other hand, children of lower-SES backgrounds could receive more support from parents after the transition to parenthood because the grandparents, and especially the grandmothers, in these families have more available time and live closer (Di Gessa, Glaser, & Zaninotto, 2022; Henretta et al., 2002; Silverstein & Marenco, 2001). As a result, there are conflicting hypotheses. Based on the role of (children's) needs, the parenthood effect is expected to be stronger for higher-SES families (H_{4a}). Based on differences in (parents' time) resources, the parenthood effect is expected to be stronger for lower-SES families, particularly on practical support (H_{4b}).

Some children who are parents divorce or separate and become single parents. Many studies have shown that parents are concerned and emotionally affected if their children divorce (Tosi & Albertini, 2019) and this will especially be the case when there are grandchildren involved (Jappens & Van Bavel, 2019). The needs of parents, especially mothers, for practical and financial support increase when they separate and grandparents are believed to be responsive to such needs. In some settings, such as the US, where welfare

provisions are more limited, children may return home to cover financial needs and to save on housing costs (Seltzer et al., 2012), but this is rarer in societies with a stronger welfare state (Hogendoorn, 2022). Because higher-SES parents have more financial and cultural resources to offer, whereas lower-SES parents have more time resources, we have different hypotheses depending on the type of support. Given the Dutch SES gradient in female labor force participation, we expect a stronger positive effect of the single-parenthood transition in higher-SES families because there is a greater need for support (H_{5a}). Given differentials in available time and proximity (opportunities), we expect stronger effects in lower-SES families, particularly on practical support (H_{5b}).

The effects of parents' socioeconomic status on support can be direct or indirect. Indirect effects occur via the transmission of socioeconomic status from parents to children in combination with the effects of children's socioeconomic status on support. For example, children of higher-SES parents are more likely to go to college, creating a demand for financial support from parents during those years. For another part, there are also direct effects of parents' socioeconomic status on the life course transitions of children, independent of children's status (Liefbroer & Zoutewelle-Terovan, 2021). In these cases, the nature of children's life courses and the resulting need for support directly depend on parents' socioeconomic status. The current paper is concerned with the overall effects of parents' socioeconomic status and will not disentangle the direct and indirect effects, although, in auxiliary analyses, we address the role of college attendance for a subset of the data.

DATA AND METHOD

Data

We used data from the Netherlands Kinship Panel Study (Dykstra et al., 2007; Dykstra, Kalmijn, Komter, Liefbroer, & Mulder, 2005; Hogerbrugge et al., 2015; Merz et al., 2012).

This survey was based on a nationally representative sample of individuals aged 18-79 in the Netherlands. Data were collected in four waves (2002 - 2004, 2006 - 2007, 2010 - 2011, and 2014 - 2015). The number of respondents was 8,161 in the first wave, and wave-to-wave panel retention rates were 75%, 72%, and 65%, respectively. Detailed questions were asked about relationships with parents and relationships with adult children.

A sample of respondents was selected who participated in the first two waves or more often (n = 6,091) and who had at least one (living) parent or child (n = 5,642). Respondents reported about (at most) two randomly chosen children (if they had children) and about both biological parents (or one if one had passed away). The analysis was based on parent-child dyads in which the respondent was either the parent or the child. If respondents had adult children and living parents, they were included in both roles. Dyads were selected in which the child was 18-59. For the regression models, a further selection was made of dyads in which the child lived independently (7.2%). This yielded a final sample of n = 10,822 dyads belonging to n = 5,547 families. The data were reorganized into a dyad-wave file (N = 29,970).

Two limitations of the method need to be explained. First, the analyses focus on children who were living independently. Theoretically, it is clear that by living together in a household, parents and children can support each other (Albertini & Kohli, 2013; Fingerman et al., 2015). In the Netherlands, and for the cohorts considered in this analysis, women's average age at leaving home was approximately 20 years (Billari & Liefbroer, 2010). Because the forms of support analyzed are not defined when children live at home, coresidence cannot be analyzed as a parallel outcome variable. Second, support for taking care of grandchildren was not included. The main reason for doing so is that this form of support is defined for one stage in the life course only, namely the years in which adult

children have young children at home. Adding this to the support items would artificially increase the life course effects we are studying.

Measures

When respondents had the role of children, we used items on the support received from parents. When respondents had the role of parents, we used items on the support given to children. A control variable was included to account for whether a child or parent reported. Four types of support were measured in each dyad: (a) help from a parent to a child with household tasks, (b) help from a parent to a child with other practical matters, (c) council or advice from a parent to a child, (d) parent-child transfers of money or valuables. The answering categories for the non-financial support items were: (1) never, (2) once or twice, and (3) more frequently, all referring to the past three months. Financial support was also assessed on a three-point scale: (1) no transfer, (2) less than \in 500, and (3) more than \notin 500), referring to the past 12 months. The frequency distributions of the original support items are presented in Table 1.

We dichotomized the support items, following some previous studies on support to adult children (Henretta et al., 2002). Dichotomous items have a more intuitive interpretation than ordinal measures, especially since the ordinal measures in our study have no exact time or frequency scale. Because the interest was in strong reliance on parents, we contrasted frequent support on the one hand (3), and occasional and no support on the other (1 and 2). Given the three-month window, category (3) can be interpreted as support on a monthly basis (or more), which, in our view, reflects a substantial degree of dependence on parents. Less frequent support can be triggered by idiosyncratic reasons and is therefore less meaningful. For financial support, the time window was 12 months, and a contrast was made between large amounts of money (over \in 500) and no support or smaller sums. Because of their

similarity, the first two support items were combined and labeled as 'practical' support. The frequencies of the dichotomized measures are presented in Table 2. In a supplementary analysis, models were estimated using a linear coding of the three outcome measures, from 1 to 3 (Appendix Table 1). These models add the difference between no support and incidental support to the analysis but assume linearity. The key results are very similar to the main results.

Table 1. Original items for	support to adult child	Iren	
Household support	Ν	Percent	
None	20,395	69.95	
Once or twice	4,760	16.33	
More frequently	4,002	13.73	
Total	29,157	100.00	
Other practical support	Freq.	Percent	
None	16,428	56.34	
Once or twice	7,560	25.93	
More frequently	5,169	17.73	
Total	29,157	100.00	
Informational support	Freq.	Percent	
None	6,920	23.56	
Once or twice	11,363	38.69	
More frequently	11,087	37.75	
Total	29,370	100.00	
Financial help	Freq.	Percent	
None	22,428	76.68	
<€ 500	1,693	5.79	
>€ 500	5,128	17.53	
Total	29,249	100.00	

Note: All parent-child dyads in the longitudinal file. Source: NKPS longitudinal data 2002-2014.

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Information on the life course of children was based on either the respondents' reports about their own life course or on what parents reported about the two selected children. Two key variables were used: children's ages and children's stage in the life course. Age was analyzed with linear and quadratic variables in the models and with age groups in the graphs. Four life course stages were distinguished: (a) single without children, (b) living with a partner without children, (c) living with a partner and children, and (d) living without a partner but with children. More details are available in the data but only when respondents had the child role. In a separate model for this subsample, school enrollment and employment were included. The more basic set of variables was considered sufficient given the research questions. Single parenthood was preferred over separation as the more relevant life course variable for this stage given the stronger implications of separation in the presence of children for well-being (Leopold & Kalmijn, 2016) and family relationships (Jappens & Van Bavel, 2019).

The socioeconomic status of the parents – the support givers – was first measured in terms of education. Educational categories were recoded into the metric of ISLED which facilitated the use of a linear variable (Schröder & Ganzeboom, 2014). Two approaches to measuring parents' education were considered, an individual approach and a family approach. In the individual approach, the education of the parent who gave support was used; in the family approach, the average education of both parents (if present) was used. We compared the approaches, found only trivial differences, and opted for the family approach. When respondents were children, we took the average of the respondent's fathers' education and the respondent's mothers' education. When respondents were parents, we took the average of the respondent's partner's education. Similarly, we calculated the parents' average occupational status as a more direct proxy for the economic dimension of family status than education. Occupational status was scaled by ISEI scores, which correlate strongly with income (Ganzeboom et al., 1992). In the regression models, education and occupation were rescaled to a 0-1 range.

Control variables were used for the child and parent's gender in the dyad, whether parents were divorced/separated, an interaction of parent gender and divorce/separation, whether a parent was 80 or older (as a proxy for health limitations), and a variable indicating

who reported (i.e., the parent reported about the support given to the child versus the child reported about the support received from the parent). The main effect of parental divorce/separation applied to fathers and the interaction tested if this effect was weaker for mothers. Given the descriptive focus of the current paper and the fixed-effects longitudinal models (see below), no additional control variables were included that could mediate the effects of parents' socioeconomic status. Means and standard deviations are presented in Table 2. Missing values were not common and were therefore not imputed.

Table 2. Descriptive statis	lies of variable	s in the analyses			
Variable	Ν	М	SD	Min	Max
Practical help	29,157	.23		0	1
Advice	29,370	.38		0	1
Financial help	29,249	.18		0	1
Age child (centered)	29,970	0	8.9	-20.4	20.6
Age child square	29,970	79.7	93.5	.142	425.3
Partner no child	29,970	.192		0	1
Partner and child	29,970	.565		0	1
Single and child	29,970	.071		0	1
Family education	29,783	.417	.263	0	1
Family occupation	29,476	.486	.197	0	1
Parent 80+	29,949	.123		0	1
Daughter vs son	29,970	.578		0	1
Mother vs father	29,970	.585		0	1
Bio-parents separated	29,970	.155		0	1
Mother x separated	29,970	.107		0	1
Child vs parent report	29,970	.567		0	1
Child paid work ^a	16,991	.839		0	1
Child in college ^a	16,940	.08		0	1

 Table 2. Descriptive statistics of variables in the analyses

Note: NKPS longitudinal data. No SD's for dichotomous variables. N's vary because of missing values. Missing values were not imputed.

^a Only measured if children were anchors.

Design and models

The data were transformed into a dyad-wave file where each line represents a dyad in a

specific wave. The data were analyzed with random and fixed-effects models using STATA

14. Random- and fixed-effects models take into account the nesting of repeated observations

in dyads. Errors are allowed to vary separately between dyads and between time points

(waves) within dyads (Brüderl, Kratz, & Bauer, 2019; Petersen, 2004). The random-effects

models combine differences within persons over time and differences between persons. The advantage of these models is that they allow for the inclusion of variables that are constant within dyads (e.g., parents' education). The fixed-effects models only focus on differences within persons and cancel out average differences between persons. The advantage is that these models provide the strictest test of individual change. A disadvantage is that these models only allow the inclusion of time-varying variables only and hence not parents' SES. The fixed-effects models can accommodate an interaction of parents' SES and children's life course changes but it does not become clear from these models what the 'initial' differences were based on parents' SES. The nesting of dyads in families was addressed by correcting the standard errors with a cluster option in all models. Linear probability models were used instead of logit models since these have a more straightforward interpretation, make comparisons between groups or models simpler, and are more appropriate in the fixed-effects framework (Holm, Ejrnaes, & Karlson, 2015; Mood, 2010; Timoneda, 2021).

Important to note is that the measures of support were based on one side of the dyad (the respondent). Respondents were either children reporting on parents or parents reporting on children. In a few cases, respondents reported on their parents and their children, and these dyads were also included. In the NKPS, there are direct data from adult children and parents but these are incomplete due to non-response and were not used. Another caveat is that we had observations over time for approximately 12 years. Because the first wave of the data included people of all ages, we were able to observe changes during the entire age range (18-60). However, we did not observe individual dyads for such a long period. Only by pooling short segments of the life course across all ages can we observe this long stretch of the life course.

To examine life-course changes, we estimated a random-effects model with control variables and a fixed-effects model without control variables (Table 3). To examine the

effects of parents' socioeconomic status, we estimated random-effects models with parents' education and random-effects models with parents' education and occupation (Table 4). To test hypotheses about interactions, we interacted parents' education and life course variables in the random-effects models (Table 5). Random-effects models were estimated here because the main interest was in the parents' socioeconomic status effects. The main findings are also presented in figures using the margins of the models, evaluated at the means or modes of the independent variables (Figures 1-3).

FINDINGS

Life course changes

We begin with discussing the age pattern of support received from parents. To this end, we present margins obtained from the fixed-effects models, including only the respondent's age (Figure 1). Practical support declined sharply from age 18 to the mid-twenties, from about 60% to 30% receiving help frequently. After that age, the decline continued but at a slower pace. In their late fifties, only 10% of the children frequently received practical support from parents. The second subgraph shows that many children frequently received advice from their parents. The prevalence of informational support declined from about 55% when children were 18 to about 30% when children were in their late fifties. The decline in receiving informational support was weaker than the decline in practical support, with many children still receiving advice and guidance from their parents at older ages. The third subgraph shows the age pattern of financial support. Financial support was most common when children were young. Financial support declined until age 30 and then stabilized at about 15%. In the late forties, we observed an increase again in the share of children who received financial support. This is possibly due to tax-free inter-vivos transfers to children when parents are older

(Nordblom & Ohlsson, 2006). In sum, there were strong age effects but the exact shape of the age pattern differed substantially for the three types of support.

	Practical support (re)	Practical support (fe)	Informational	Informational	Financial support	Financial support
	· ·		support (re)	support (fe)	(re)	(fe)
Age child (decades)	109 [*]	119 [*]	104*	056*	026*	025*
	(.000)	(.000)	(.000)	(.000)	(.000)	(.001)
Age child square	.002	.019*	.015*	.013*	.026*	$.040^{*}$
	(.580)	(.000)	(.000)	(.029)	(.000)	(.000)
Partner no child	063*	054*	057*	046*	015	.008
	(.000)	(.000)	(.000)	(.005)	(.124)	(.559)
Partner and child	.018~	$.079^{*}$	062*	008	036*	.016
	(.078)	(.000)	(.000)	(.708)	(.000)	(.357)
Single and child	$.085^{*}$.186*	.039*	.079*	009	.072*
	(.000)	(.000)	(.022)	(.007)	(.513)	(.001)
Parent 80+	034*		018		.037*	
	(.000)		(.125)		(.000)	
Daughter vs son	.044*		.036*		.004	
	(.000)		(.000)		(.479)	
Mother vs father	009		.071*		038*	
	(.114)		(.000)		(.000)	
Bio-parents separated	129*		080*		056*	
	(.000)		(.000)		(.002)	
Mother x separated	$.102^{*}$.042~		008	
	(.000)		(.072)		(.672)	
Child vs parent report	037*		082*		051*	
	(.000)		(.000)		(.000)	
Constant	.240*	.171*	.402*	.375*	$.228^{*}$.128*
	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)
N person-waves	29138	29157	29351	29370	29230	29249
N persons	10643	10648	10690	10695	10685	10690
Chi2-test	1632.6		1321.3		289.9	
F-test		57.9		12.5		15.6

Table 3. Random- and fixed-effects models of parental support with main life course effects

Note: NKPS longitudinal data 2002-2014. Linear probability models. Standard errors corrected for clustering of dyads in families. Single is the reference category. $\sim p < 0.10, * p < 0.05$



Figure 1. Age-related changes in monthly support received from parents

Note: Based on fixed-effecs models with categorical age.

18 20 22 24 26 28 30 32 34 36 38 40 42 44 46 48 50 52 54 56 58 Age adult child

τ.



Figure 2. Life course changes in monthly support received from parents

Note: Based on fixed-effecs models controlled for linear and quadratic age.

In Figure 2, we present the life course pattern of support after adjusting for age effects, again using the fixed-effects regression model. The regression models for practical and informational support reveal changes across the life course, both in the random and fixed-effects specifications (Table 3). The margins of these models show that for practical support, there was a decline in support from parents when children began living with a partner. When children became parents, practical support from parents increased again, and the decline in support during the initial partner stage was nullified. Single parenthood was the stage that was most strongly associated with receiving practical support from parents. Children who were separated while having children received even more practical support from parents than children who were single without children.

We observe a similar but weaker life course pattern for informational support from parents. Having a partner reduced parents' informational support, but having children increased support again. Informational support was most common when children became single parents. For financial support, we did not observe a life course pattern, except for an increase when children became single parents. Additional analyses showed that the single parenthood effects were present for both genders, even though fewer sons became single parents.

Parents' socioeconomic status effects

To analyze socioeconomic status differences in support, we estimated random-effects regression models which included control variables (Table 4). Model 1 includes the effect of parents' education only; Model 2 includes the effect of parents' education and occupation simultaneously. The parents' socioeconomic status variables were rescaled from 0 (lowest status) to 1 (highest status).

	Practical	Practical	Informational	Informational	Financial	Financial	Financial
	support (M1)	support (M2)	support (M1)	support (M2)	support (M1)	support (M2)	support (M3)
Age child (decades)	110*	111*	099*	100*	017*	020*	014*
	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.021)
Age child square	.002	.002	.015*	.016*	.026*	.026*	$.018^{*}$
	(.462)	(.513)	(.000)	(.000)	(.000)	(.000)	(.000)
Partner no child	062*	064*	053*	053*	009	009	.017
	(.000)	(.000)	(.000)	(.000)	(.359)	(.371)	(.256)
Partner and child	.019~	.019~	053*	052*	020*	020*	013
	(.055)	(.060)	(.000)	(.000)	(.026)	(.030)	(.326)
Single and child	$.087^{*}$	$.088^{*}$	$.047^{*}$	$.048^{*}$.008	.007	010
	(.000)	(.000)	(.006)	(.005)	(.552)	(.581)	(.550)
Family education (0-1)	006	013	.136*	.112*	$.240^{*}$.173*	.121*
	(.658)	(.459)	(.000)	(.000)	(.000)	(.000)	(.000)
Family occupation (0-1)		.010		.052~		.142*	.163*
		(.639)		(.053)		(.000)	(.000)
Parent 80+	034*	033*	018	019	.036*	.036*	.038*
	(.000)	(.000)	(.123)	(.100)	(.000)	(.000)	(.001)
Daughter vs son	.044*	.044*	.036*	.036*	.004	.004	.006
	(.000)	(.000)	(.000)	(.000)	(.551)	(.570)	(.477)
Mother vs father	010	008	$.074^{*}$.074*	033*	029*	030*
	(.106)	(.174)	(.000)	(.000)	(.000)	(.000)	(.000)
Bio-parents separated	129*	130*	080*	079*	056*	055*	.024
	(.000)	(.000)	(.000)	(.000)	(.001)	(.002)	(.762)
Mother x separated	.102*	.103*	$.048^{*}$.059*	.001	.002	068
	(.000)	(.000)	(.042)	(.014)	(.942)	(.923)	(.414)
Child vs parent report	038*	040*	070*	069*	030*	032*	
	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	
Child paid work							.014
							(.187)
Child in college							.009
							(.550)
Constant	.241*	.240*	.330*	.312*	.103*	$.060^{*}$.021
	(.000)	(.000)	(.000)	(.000)	(.000)	(.000)	(.254)
N person-waves	28973	28510	29181	28713	29060	28593	16206
N persons	10569	10392	10614	10437	10609	10432	6031
Chi-2 test	1629.4	1623.3	1411.6	1408.3	584.1	615.4	277.1

Table 4. Random-effects models of parental socioeconomic status effects on parental support

Note: NKPS longitudinal data 2002-2014. Linear probability models. Standard errors corrected for clustering of dyads in families. $\sim p < 0.10$, * p < 0.05

When looking at practical support in the first model of Table 4, there was no overall effect of parents' education on the support children received. The same conclusion was reached for parents' occupation, and the effect of education was unchanged after adding occupation. In other words, lower-SES parents provided as much practical support to their children as higher-SES parents.

The models for informational support revealed a different pattern. According to the third model in Table 4, higher-educated parents more often gave informational support to their children than lower-educated parents. The strength of this effect was moderate to strong: when comparing the highest to the lowest educated parent, there was a difference of 13.6 percentage points in frequent informational support. Parents' occupational status also had a positive effect but this effect was weaker than the effect of parents' educational attainment. The educational effect was only slightly reduced when adding occupation. Education thus appeared more influential than occupational status for informational support.

The model for financial support revealed the strongest degree of stratification. Higher-educated parents gave more financial support to children than lower-educated parents. There was a difference of 24 percentage points in financial support to children when comparing the lowest to the highest educated parents. Parents' occupational status had an additional positive effect, and when occupation was added, the educational effect was reduced. Formally, 28% of the education effect was mediated by occupation (Model 2 versus Model 1, Z = 6.56, p < .01). Given the link between parents' occupational status and income, the added occupational effect was in line with expectations, although it was interesting to see that the net effect of education was not smaller than that of occupation.

In sum, the hypothesized stratification of support was confirmed for financial and informational support. Lower-SES parents gave as much practical support to children as higher-SES parents, but there was no evidence for reverse stratification either. Hence, there was only partial confirmation of H_1 .

To what extent was the effect of parents' socioeconomic status on financial support related to children's college attendance? Higher-SES parents more often have children who attend college (Tolsma & Wolbers, 2010), so children's education could mediate part of the parental SES effect on financial support. To evaluate this, we estimated a model for respondents who were adult children and added adult children's college enrollment in each wave as well as a variable indicating the child's employment (Model 3, Table 4). The model shows that the effects of parents' socioeconomic status on financial support remained strong and significant when controlling for children's college enrollment. In other words, parents' SES effects on financial support were not only due to their parents' support during their children's college years. Of course, the association between parents' education and children's college enrollment is far from perfect, nor did all college students receive financial support from parents in the Netherlands during the study period.

The control variables had effects that were generally in line with expectations. For practical support, we found that daughters received more support than sons (Table 3). As expected, the effect of separation on practical support depended on the parents' gender. There was a negative effect for fathers, whereas for mothers, the effect was significantly weaker. Parents over 80 gave less practical support than younger parents. For informational support, the control variables had effects similar to what they were for practical support. An additional effect emerged for parent gender, with mothers more often giving advice to adult children than fathers. Finally, there were effects on financial support. Older parents were more likely to give financial support, in line with the notion of inter-vivos transfers at the end of life (Lennartsson, Silverstein, & Fritzell, 2010). Separated parents gave less financial support to

children but there was no parent gender interaction as there was for practical support and advice.

In all models, a control variable was included for who reported. For all three forms of downward intergenerational support, we found that parents reported more support than children, in line with earlier studies on intergenerational transfers. This discrepancy can be due to people overstating what they give, people understating what they receive, or both (Mandemakers & Dykstra, 2008; Rossi & Rossi, 1990). Alternatively, the reporting difference can be interpreted in terms of the intergenerational stake hypothesis which argues that transfers are more salient for the parent generation (Birditt, Hartnett, Fingerman, Zarit, & Antonucci, 2015).

Interactions of parents' socioeconomic status and children's life course

To what extent were the life course patterns of support to children moderated by parents' socioeconomic status? And what are possible implications for how socioeconomic status effects vary across the life course of children? To examine this, interaction effects were added to the random-effects models (Table 5). Two models for each type of support were estimated. The first model includes only age interactions; the second model simultaneously includes age and life course interactions. Age was included as a linear and quadratic variable in the model. In the figure, age was included as a categorical variable. Parents' SES was indicated by education as this was the most important variable across the board. Where significant interactions were found, we used graphs to illustrate the effects (Figure 3). All other independent variables were set at the means.

	Practical support	Practical support	Informational	Informational	Financial support	Financial support
			support	support		
Age child (decades)	127*	112*	083*	082*	002	.001
	(.000)	(.000)	(.000)	(.000)	(.810)	(.855)
Age child square	.016*	.009	.016*	.016*	.010~	.009
	(.006)	(.110)	(.017)	(.018)	(.075)	(.106)
Partner no child	066*	071*	051*	023	005	.018
	(.000)	(.001)	(.000)	(.328)	(.622)	(.320)
Partner and child	.016	048*	051*	038~	017~	016
	(.108)	(.012)	(.000)	(.065)	(.063)	(.329)
Single and child	.084*	.006	.049*	.054~	.010	004
	(.000)	(.824)	(.004)	(.067)	(.421)	(.856)
Family education (0-1)	.015	094*	.142*	.168*	.211*	.216*
	(.380)	(.006)	(.000)	(.000)	(.000)	(.000)
Age x parents education	.037*	000	041*	041*	032*	038*
	(.005)	(.982)	(.008)	(.015)	(.026)	(.014)
Age squared x parents education	026*	011	007	009	.035*	.036*
	(.020)	(.329)	(.574)	(.521)	(.004)	(.004)
Partner x parents education		.013		058		047
		(.726)		(.172)		(.200)
Child x parents education		.149*		025		.001
		(.000)		(.531)		(.982)
Single parent x parents education		.188*		007		.042
		(.001)		(.911)		(.396)
N person-waves	28973	28973	29181	29181	29060	29060
N persons	10569	10569	10614	10614	10609	10609
Chi2-test	1673.4	1702.0	1415.4	1416.4	590.0	596.1

Table 5. Random-effects models of parental support with interaction effects

Note: NKPS longitudinal data 2002-2014. Linear probability models. Standard errors corrected for clustering of dyads in families. Single is the reference category. Control variables of Table 3 included. $\sim p < 0.10, * p < 0.05$









Note: Margins based on random-effects models (Table 5).

We start with the findings for practical support (Table 5). In the first model for practical support, there were significant interactions between children's ages and parents' SES. However, when interactions with children's life course stages were included in the second model, these were no longer significant. There was no interaction between parents' SES and union formation, refuting H₃. However, we did find a significant interaction between parents' SES and parenthood (Table 5). The top panel of Figure 3 shows that when children were single or had a partner, lower-SES parents gave more practical support to children than higher-SES parents. In the parenthood stage, this difference was reversed. For lower-SES parents, there was a modest increase in support when children became parents, whereas, for higher-SES parents, this increase was significantly larger. A similar interaction effect was found for single parenthood. The transition to becoming a single parent had a significantly stronger elevating effect on practical support among higher-SES parents.

For informational support to children, we found a significant and negative interaction between children's ages and parents' SES in Table 5. This interaction remained present when life course interactions were added. The middle panel of Figure 3 shows that there was a steeper decline in informational support with children's age when parents had a higher SES. Higher-SES parents gave children more informational support but this difference was larger when children were in their twenties and early thirties, the early stages of their life courses. In the later stages of the life course, the informational support of higher-SES parents declined more rapidly and no parental SES difference remained. For informational support, we found no significant interactions between parents' SES and children's life course stages.

The effect of parents' SES on financial support to children also interacted significantly with children's ages, although in a nonlinear fashion, since both the main and the quadratic variables for age interacted with parents' SES (Table 5). These interactions remained significant after life course interactions were included. The bottom panel of Figure

3 shows that the stratification of financial support to children was largest when children were in their twenties. The difference between higher- and lower-SES parents declined with age but increased later in life (ages 55+). That the gap increased at the very end of the observed age range is most likely due to the ability of higher-SES parents to pass on their wealth at older ages (inter-vivos transfers). For transfers of financial support, we found no significant interactions between parents' SES and children's life course stages.

In sum, the findings partly confirmed our hypothesis of prolonged support to children in higher-SES families, at least for financial and informational support (H₂). There was also support for the hypothesis about stronger effects of parenthood and single parenthood in higher-SES families, although this only applied to practical support. This provided confirmation of H_{4a} and H_{5a} and a refutation of the alternative hypotheses H_{4b} and H_{5b}. Interestingly, the general absence of an effect of parents' SES on practical support masked opposing effects for different life course stages. When children were not yet parents, lower-SES parents offered more practical support than higher-SES parents, but when children became parents themselves, the pattern was reversed. The hypothesis about union formation was not confirmed (H₃), although we did find a decline in support during this stage.

To check whether the results are similar or different when taking into account the difference between no support and incidental support, we replicated the models in Table 5 using a linear scale for support (from 1 to 3). The results, presented in Appendix Table 1, show that the effects of life course variables, parents' education, and key interactions were very similar in terms of significance and direction.

CONCLUSION AND DISCUSSION

Longitudinal analyses of a large and national sample of parent-child dyads provided new evidence on whether, how, and when support to adult children is socially stratified.

Stratification of support was clearest for financial transfers, something that previous studies have shown as well. One of the new findings on this issue was that the effect of parents' socioeconomic status on financial support was especially large for children in their twenties. Later in children's life course, the status gap was smaller. This age dependency may have to do with the help that parents give to children in buying or renting a house, setting up a household, and buying new consumer durables. Expenses for college will also play a role, although this is probably less important in the Dutch context than in the American context. In the cohorts we were studying, there were strong state subsidies for going to college and larger subsidies for children from low-income families. Moreover, a control for college enrollment did not eliminate the parents' socioeconomic status effect.

Another important new finding was that informational support to children was stratified as well. Higher-SES parents more often gave advice to their children than lower-SES parents. The role of parents' education was larger than the role of occupational status, in line with an interpretation of status effects in terms of the cultural resources of parents. The effect of parents' SES on advice declined with age, showing that the largest gaps existed when children were in their late twenties and thirties, the 'settling stage' of the life course. Like the interaction for financial support, this interaction was in line with the idea that children in higher-SES families, on average, make life course transitions later than children in lower-SES families and the parents prolonging their support accordingly. Giving frequent advice to children may sometimes be unsolicited and could, in some cases, be perceived as interference, but the patterns observed do testify to parents' tendency to stay involved in children's lives longer. An interesting follow-up question is how children evaluate parents' relatively high levels of informational support at older ages and how this differs by socioeconomic status.

No stratification was found for practical support. There were no overall effects of parents' education or occupation on the practical support parents gave to their children. This is an important null finding as it makes clear that lower-SES families gave the same amount of support to adult children as higher-SES families. Although the pattern for practical support was thus different than the pattern for financial and informational support, there was no evidence for compensation effects either: the SES effect was absent, not reversed. This finding confirms two recent papers using American and British data (Fingerman et al., 2015; Henretta et al., 2002), in the present case, using a larger set of (longitudinal) data with both parent and child reports. Given the large sample of dyads analyzed here, we believe our evidence is a robust null finding.

Although parents' socioeconomic status did not have an overall effect on support, it did moderate the effects of life course transitions. An important interaction that emerged from our analysis was that the positive effects of parenthood and single parenthood on the practical support parents gave to children were stronger for children of higher-SES parents than for children of lower-SES parents. As a result, the status gap appeared different in different life course stages, a finding already hinted at by Henretta et al. (2002). We found that in the single and early partner stages, lower-SES parents gave more practical support than higher-SES parents, whereas, in the parenthood stages (including the stage of single parenthood), higher-SES parents gave more support than lower-SES parents.

Our interpretation is that the entry of grandchildren into the family may set families back 'into support mode.' Parents may provide various other forms of practical support to children that are either related or not related to the care of grandchildren. In other words, grandparenting is an element of this, but many other needs for support arise in this stage as well or can be given in combination with giving care to grandchildren. That these effects were stronger for higher-SES families was in line with our hypotheses suggesting that the

demand for parental support among parents would be higher in dual-earner couples. Given the strong association between education and mothers' labor force participation in many countries, including the Netherlands (Portegijs et al., 2006), this interaction was as expected. An interesting avenue for new research is the question of how changes in the public childcare system in the Netherlands have modified the SES gradient in downward intergenerational support in the parenthood stage (De Vries, 2012). Evidence on the link between grandparents' SES and caring for grandchildren in other countries is mixed and depends on the nature and the extent of grandparenting (Di Gessa et al., 2016; Di Gessa et al., 2022; Igel & Szydlik, 2011; Zamberletti et al., 2018).

The current study used a design that had several advantages: a large sample, multiple dyads per family, a longitudinal perspective, and reports from parents and children. There were also limitations. First of all, our data did not allow us to examine changes in support among ethnic minorities and migrant groups separately. There have been many studies comparing intergenerational support in migrant and ethnic groups in the European context (Albertini, Mantovani, & Gasperoni, 2019; De Valk & Schans, 2008), but there are no (sufficiently) large panels available to study life course changes in these groups. Second, the analyses focused on children who were living independently. Theoretically, it is clear that by living together in a household, parents and children can support each other (Albertini & Kohli, 2013; Fingerman et al., 2015). In the Netherlands, and for the cohorts considered in this analysis, women's average age at leaving home was approximately 20 years (Billari & Liefbroer, 2010). Because the forms of support analyzed are not defined when children live at home, coresidence could not be analyzed as a parallel outcome variable. Third, support for taking care of grandchildren was not included. The main reason for doing so was that this form of support is defined for one stage in the life course only, namely the years in which

adult children have young children at home. Adding this to the support items would have artificially increased the life course effects we have been studying.

The current analysis could not offer explanations of the patterns that we found; the focus was primarily on if and how parents' socioeconomic status moderated life course effects. Moreover, we could not include children who lived at home as many forms of support were not measured for this subset of children. Sharing residence provides options for – or can be seen as an indicator of – support and may also be stratified. Finally, no socioeconomic status measures for children were included in the models. Possibly, part of the effects of parents' socioeconomic status had an effect via the children's educational and occupational attainment. We do not consider this as a bias, however, since such variables would be mediators and not confounders of the effects that we found. For studying how the parent generation stratifies its support to the next generation, it would not be appropriate to 'control' for children's status characteristics.

Although support declined when children grow older, declines were modest and even at higher ages, there was a considerable amount of downward support. These findings confirm that the period of dependence on parents goes beyond the transition from school to work and extends into the remaining life course. Continuing dependence on parents may likely increase as a result of increasing uncertainties in the labor market, difficulties in finding steady and secure employment paths, and inefficiencies in the housing market in many European countries. Dependence has been strengthened by the postponement of children's marriage and fertility transitions and by new complexities in the modern life course, such as the breakup of cohabiting unions and repartnering (Lesthaeghe, 2014; Perelli-Harris & Lyons-Amos, 2016). In a more general sense, the adult life course of today is surrounded by stronger and prolonged uncertainty (Blossfeld, Klijzing, Mills, & Kurz, 2005; Druta & Ronald, 2017). That current generations of parents have fewer children than past

generations makes many parents also more able to provide that support, depending, of course, on their financial, cultural, and time resources, as this paper showed (Sayer, Bianchi, & Robinson, 2004).

Support from parents to adult children has a double meaning. On the one hand, support streams can strengthen mutual relationships between parents and children and can be seen as a sign of family solidarity in contemporary society (Dykstra et al., 2006; Silverstein & Bengtson, 1997). On the other hand, support can have unintended negative consequences for both the giver and the receiver. Under certain conditions, receiving support can lead to over-dependence of children and to caregiver burden among parents (Fingerman et al., 2012). The adverse effects may occur when support is intensive and structural rather than extensive and incidental (Di Gessa et al., 2022). Over-dependence on parents may also occur when children remain dependent on parents for too long and have few alternatives for support. Future research could zoom in on the nature, motivations, and intensity of support streams and focus more on these potentially negative effects of family solidarity.

REFERENCES

- Albertini, M., & Kohli, M. (2013). The Generational Contract in the Family: An Analysis of Transfer Regimes in Europe. *European Sociological Review*, 29(4), 828-840. doi:10.1093/esr/jcs061
- Albertini, M., Kohli, M., & Vogel, C. (2007). Intergenerational transfers of time and money in European families: common patterns - different regimes? *Journal of European Social Policy*, 17(4), 319-334. doi:10.1177/0958928707081068
- Albertini, M., Mantovani, D., & Gasperoni, G. (2019). Intergenerational relations among immigrants in Europe: the role of ethnic differences, migration and acculturation. *Journal of Ethnic and Migration Studies*, 45(10), 1693-1706. doi:10.1080/1369183x.2018.1485202
- Albertini, M., & Radl, J. (2012). Intergenerational transfers and social class: Inter-vivos transfers as means of status reproduction? *Acta Sociologica*, *55*(2), 107-123. doi:10.1177/0001699311431596
- Bengtson, V. L., Biblarz, T., Clarke, E., Giarrusso, R., Roberts, R., Richlin-Klonsky, J., & Silverstein, M. (2000). Intergenerational relationships and aging: Families, cohorts, and social change. In J. M. Clair & R. Allman (Eds.), *The Gerontological Prism*. London: Routledge.

- Billari, F. C., & Liefbroer, A. C. (2010). Towards a new pattern of transition to adulthood? *Advances in Life Course Research*, 15(2-3), 59-75. doi:10.1016/j.alcr.2010.10.003
- Birditt, K. S., Hartnett, C. S., Fingerman, K. L., Zarit, S. H., & Antonucci, T. C. (2015). Extending the Intergenerational Stake Hypothesis: Evidence of an Intra-individual Stake and Implications for Well-being. *Journal of Marriage and Family*, 77(4), 877-888. doi:10.1111/jomf.12203
- Blossfeld, H.-P., Klijzing, E., Mills, M., & Kurz, K. (Eds.). (2005). *Globalization, uncertainty, and youth in society*. London: Routledge.
- Blossfeld, H.-P., Klijzing, E., Mills, M., & Kurz, K. (Eds.). (2005). *Globalization, uncertainty, and youth in society*. London: Routledge.
- Brandt, M., & Deindl, C. (2013). Intergenerational Transfers to Adult Children in Europe: Do Social Policies Matter? *Journal of Marriage and Family*, *75*(1), 235-251. doi:10.1111/j.1741-3737.2012.01028.x
- Brandt, M., Deindl, C., Haberkern, K., & Szydlik, M. (2008). Reciprocity between adult generations: Family transfers over the life course. *Zeitschrift Fur Gerontologie Und Geriatrie*, 41(5), 374-381. doi:10.1007/s00391-008-0003-7
- Breen, R. (2004). Social mobility in Europe. Oxford: Oxford University Press.
- Breen, R., & Jonsson, J. O. (2005). Inequality of opportunity in comparative perspective: Recent research on educational attainment and social mobility. In *Annual Review of Sociology* (Vol. 31, pp. 223-243). Palo Alto: Annual Reviews.
- Breen, R., Luijkx, R., Muller, W., & Pollak, R. (2009). Nonpersistent Inequality in Educational Attainment: Evidence from Eight European Countries. *American Journal* of Sociology, 114(5), 1475-1521. Retrieved from <Go to ISI>://WOS:000265676200006
- Brüderl, J., Kratz, F., & Bauer, G. (2019). Life course research with panel data: An analysis of the reproduction of social inequality. *Advances in Life Course Research*, *41*, 1-12. doi:10.1016/j.alcr.2018.09.003
- Bucx, F., van Wel, F., & Knijn, T. (2012). Life Course Status and Exchanges of Support Between Young Adults and Parents. *Journal of Marriage and Family*, 74(1), 101-115. doi:10.1111/j.1741-3737.2011.00883.x
- Bucx, F., van Wel, F., Knijn, T., & Hagendoorn, L. (2008). Intergenerational contact and the life course status of young adult children. *Journal of Marriage and Family*, 70(1), 144-156. Retrieved from <Go to ISI>://WOS:000253314900011
- Chan, T. W., & Ermisch, J. (2015). Proximity of Couples to Parents: Influences of Gender, Labor Market, and Family. *Demography*, *52*(2), 379-399. doi:10.1007/s13524-015-0379-0
- Connidis, I. A., & Barnett, A. E. (2019). Family Ties & Aging. Beverly Hills: SAGE.
- De Graaf, N. D., De Graaf, P. M., & Kraaykamp, G. (2000). Parental cultural capital and educational attainment in the Netherlands: A refinement of the cultural capital perspective. *Sociology of Education*, *73*, 92-111.
- De Graaf, P. M., & Kalmijn, M. (2001). Trends in the intergenerational transmission of cultural and economic status. *Acta Sociologica*, 44(1), 51-66.
- De Valk, H. A. G., & Schans, D. (2008). 'They ought to do this for their parents': perceptions of filial obligations among immigrant and Dutch older people. *Ageing & Society, 28*, 49-66. doi:10.1017/s0144686x07006307
- De Vries, J. (2012). Kinderopvang. Tijdschrift voor Arbeidsvraagstukken, 28(4), 505-515.
- De Vries, J., Kalmijn, M., & Liefbroer, A. C. (2009). Intergenerational transmission of kinship norms? Evidence from siblings in a multi-actor survey. *Social Science Research*, 38(1), 188-200. doi:10.1016/j.ssresearch.2008.09.005

- Di Gessa, G., Glaser, K., Price, D., Ribe, E., & Tinker, A. (2016). What Drives National Differences in Intensive Grandparental Childcare in Europe? *Journals of Gerontology Series B-Psychological Sciences and Social Sciences*, 71(1), 141-153. doi:10.1093/geronb/gbv007
- Di Gessa, G., Glaser, K., & Zaninotto, P. (2022). Is grandparental childcare socioeconomically patterned? Evidence from the English longitudinal study of ageing. *European Journal of Ageing*, 19(3), 763-774. doi:10.1007/s10433-021-00675-x
- Druta, O., & Ronald, R. (2017). Young Adults' Pathways into Homeownership and the Negotiation of Intra-Family Support: A Home, the Ideal Gift. Sociology-the Journal of the British Sociological Association, 51(4), 783-799. doi:10.1177/0038038516629900
- Dykstra, P. A., Kalmijn, M., Knijn, T. C. M., Komter, A. E., Liefbroer, A. C., & Mulder, C. H. (2006). *Family solidarity in the Netherlands*. Amsterdam: Dutch University Press.
- Dykstra, P. A., Kalmijn, M., Knijn, T. C. M., Komter, A. E., Liefbroer, A. C., & Mulder, C. H. (2007). *Codebook of the Netherlands Kinship Panel Study Wave 2*. The Hague: Netherlands Interdisciplinary Demographic Institute.
- Dykstra, P. A., Kalmijn, M., Komter, A. E., Liefbroer, A., & Mulder, C. H. (2005). Codebook of the Netherlands Kinship Panel Study, a multi-actor, multi-method panel study on solidarity in family relationships, Wave 1. NKPS Working Paper No. 4. The Hague: Netherlands Interdisciplinary Demographic Institute.
- Fingerman, K. L., Cheng, Y. P., Wesselmann, E. D., Zarit, S., Furstenberg, F., & Birditt, K. S. (2012). Helicopter Parents and Landing Pad Kids: Intense Parental Support of Grown Children. *Journal of Marriage and Family*, 74(4), 880-896. doi:10.1111/j.1741-3737.2012.00987.x
- Fingerman, K. L., Kim, K., Davis, E. M., Furstenberg, F. F., Birditt, K. S., & Zarit, S. H. (2015). "I'll Give You the World": Socioeconomic Differences in Parental Support of Adult Children. *Journal of Marriage and Family*, 77(4), 844-865. doi:10.1111/jomf.12204
- Fritzell, J., & Lennartsson, C. (2005). Financial transfers between generations in Sweden. *Ageing and Society, 25*, 397-414. doi:10.1017/s0144686x04003150
- Ganzeboom, H. B. G., De Graaf, P. M., & Treiman, D. J. (1992). A standard international socio-economic index of occupational status. *Social Science Research*, 21, 1-56.
- Geurts, T., Van Tilburg, T., & Poortman, A.-R. (2014). Child care by grandparents: changes between 1992 and 2006. *Ageing & Society, In press*, 1-17.
- Grundy, E., & Shelton, N. (2001). Contact between adult children and their parents in Great Britain. *Environment and Planning A*, *33*, 685-697.
- Grusky, D. B. (Ed.) (2001). Social stratification: Class, race, and gender in sociological perspective. 2nd edition. Boulder, Colorado: Westview Press.
- Hank, K. (2007). Proximity and contacts between older parents and their children: A European comparison. *Journal of Marriage and Family, 69*(1), 157-173. doi:10.1111/j.1741-3737.2006.00351.x
- Henretta, J. C., Grundy, E., & Harris, S. (2002). The influence of socio-economic and health differences on parents' provision of help to adult children: a British-United States comparison. *Ageing and Society*, *22*, 441-458. doi:10.1017/s0144686x02008735
- Henretta, J. C., Van Voorhis, M. F., & Soldo, B. J. (2018). Cohort Differences in Parental Financial Help to Adult Children. *Demography*, 55(4), 1567-1582. doi:10.1007/s13524-018-0687-2
- Hochguertel, S., & Ohlsson, H. (2009). Compensatory inter vivos gifts. *Journal of Applied Econometrics, 24*(6), 993-1023. doi:10.1002/jae.1071

- Hogendoorn, B. (2022). *Divorce and inequality: Stratification in the risk and consequences of union dissolution*. Amsterdam: Thesis Publishers.
- Hogerbrugge, M. J., & Dykstra, P. A. (2009). The family ties of unmarried cohabiting and married persons in the Netherlands. *Journal of Marriage and Family*, *71*, 135-145.
- Hogerbrugge, M. J. A., De Hoon, S., Dykstra, P. A., Komter, A. E., Liefbroer, A. C., & Mulder, C. H. (2015). *Codebook of the Netherlands Kinship Panel Study Wave 4*. The Hague: Netherlands Interdisciplinary Demographic Institute.
- Holm, A., Ejrnaes, M., & Karlson, K. (2015). Comparing linear probability model coefficients across groups. *Quality & Quantity*, 49(5), 1823-1834. doi:10.1007/s11135-014-0057-0
- Igel, C., & Szydlik, M. (2011). Grandchild care and welfare state arrangements in Europe. *Journal of European Social Policy*, 21(3), 210-224. doi:10.1177/0958928711401766
- Jaeger, M. M., & Holm, A. (2007). Does parents' economic, cultural, and social capital explain the social class effect on educational attainment in the Scandinavian mobility regime? *Social Science Research*, 36(2), 719-744. doi:10.1016/j.ssresearch.2006.11.003
- Jappens, M., & Van Bavel, J. (2019). Relationships with Grandparents and Grandchildren's Well-being after Parental Divorce. *European Sociological Review*, 35(6), 757-771. doi:10.1093/esr/jcz033
- Kalmijn, M. (2006). Educational inequality and family relationships: Influences on contact and proximity. *European Sociological Review*, 22(1), 1-16. doi:10.1093/esr/jci036
- Kalmijn, M. (2012). Longitudinal analyses of the effects of age, marriage, and parenthood on social contacts and support. *Advances in Life Course Research*, 17(4), 177-190. doi:10.1016/j.alcr.2012.08.002
- Kalmijn, M. (2014). Adult intergenerational relationships. In J. Treas, J. Scott, & M. Richards (Eds.), *The Wiley-Blackwell Companion to the Sociology of Families* (pp. 385-403). Hoboken: Wiley-Blackwell.
- Kalmijn, M. (2016). Children's Divorce and Parent-Child Contact: A Within-Family Analysis of Older European Parents. *Journals of Gerontology Series B-Psychological Sciences and Social Sciences*, 71(2), 332-343. doi:10.1093/geronb/gbu141
- Kalmijn, M. (2019). The Effects of Ageing on Intergenerational Support Exchange: A New Look at the Hypothesis of Flow Reversal. *European Journal of Population-Revue Europeenne De Demographie*, *35*(2), 263-284. doi:10.1007/s10680-018-9472-6
- 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 Family*, *60*, 924-938.
- Kohli, M. (1999). Private and public transfers between generations: Linking the family and the state. *European Societies, 1*, 81-104.
- Kraaykamp, G., & van Eijck, K. (2010). The Intergenerational Reproduction of Cultural Capital A Threefold Perspective. *Social Forces*, *89*(1), 209-231. Retrieved from <Go to ISI>://WOS:000284919700009
- Künemund, H., Motel-Klingebiel, A., & Kohli, M. (2005). Do intergenerational transfers from elderly parents increase social inequality among their middle-aged children? Evidence from the German Aging Survey. *Journals of Gerontology Series B-Psychological Sciences and Social Sciences*, 60(1), S30-S36.
- Lennartsson, C., Silverstein, M., & Fritzell, J. (2010). Time-for-Money Exchanges Between Older and Younger Generations in Swedish Families. *Journal of Family Issues*, *31*(2), 189-210. doi:10.1177/0192513x09344158

- Leopold, T., & Kalmijn, M. (2016). Is Divorce More Painful When Couples Have Children? Evidence From Long-Term Panel Data on Multiple Domains of Well-being. *Demography*, 53(6), 1717-1742. doi:10.1007/s13524-016-0518-2
- Leopold, T., & Schneider, T. (2011). Family Events and the Timing of Intergenerational Transfers. *Social Forces*, *90*(2), 595-616. doi:10.1093/sf/sor030
- Lesthaeghe, R. (2014). The Second Demographic Transition: A concise overview of its development. *Proceedings of the National Academy of Sciences of the United States of America*, 111(51), 18112-18115. doi:10.1073/pnas.1420441111
- Liefbroer, A. C., & Zoutewelle-Terovan, M. (Eds.). (2021). Social Background and the Demographic Life Course: Cross-National Comparisons. The Hague: Springer.
- Mandemakers, J. J., & Dykstra, P. A. (2008). Discrepancies in parent's and adult child's reports of support and contact. *Journal of Marriage and the Family*, *70*(2), 495-506. Retrieved from <Go to ISI>://000254791400018
- Mayer, K. U. (2009). New Directions in Life Course Research. *Annual Review of Sociology*, 35, 413-433. doi:10.1146/annurev.soc.34.040507.134619
- Merens, A., & van den Brakel, M. (Eds.). (2014). *Emancipatiemonitor 2014*. Den Haag: SCP/CBS.
- Merz, E.-M., Dykstra, P. A., Hogerbrugge, M. J. A., Komter, A. E., C., L. A., & Mulder, C. H. (2012). *Codebook of the Netherlands Kinship Panel Study Wave 3*. The Hague: Netherlands Interdisciplinary Demographic Institute.
- Michielin, F., & Mulder, C. H. (2007). Geographical distances between adult children and their parents in the Netherlands. *Demographic Research*, *17*, 655-677. doi:10.4054/DemRes.2007.17.22
- Min, J., Johnson, M. D., Anderson, J. R., & Yurkiw, J. (2022). Support exchanges between adult children and their parents across life transitions. *Journal of Marriage and Family*, 84(2), 367-392. doi:10.1111/jomf.12787
- Mood, C. (2010). Logistic Regression: Why We Cannot Do What We Think We Can Do, and What We Can Do About It. *European Sociological Review*, *26*(1), 67-82. doi:10.1093/esr/jcp006
- Mooyaart, J. E., Liefbroer, A. C., & Billari, F. C. (2021). The changing relationship between socio-economic background and family formation in four European countries. *Population Studies-A Journal of Demography, early access.* doi:10.1080/00324728.2021.1901969
- Mulder, C. H., & Kalmijn, M. (2006). Geographical distances between family members. In P. A. Dykstra, M. Kalmijn, T. C. M. Knijn, A. E. Komter, A. C. Liefbroer, & C. H. Mulder (Eds.), *Family solidarity in the Netherlands* (pp. 63-88). Amsterdam: Dutch University Press.
- Mulder, C. H., & van der Meer, M. J. (2009). Geographical Distances and Support from Family Members. *Population Space and Place*, *15*(4), 381-399. doi:10.1002/psp.557
- Nazio, T., & Saraceno, C. (2013). Does Cohabitation Lead to Weaker Intergenerational Bonds Than Marriage? A Comparison Between Italy and the United Kingdom. *European Sociological Review*, 29(3), 549-564. doi:10.1093/esr/jcr103
- Nordblom, K., & Ohlsson, H. (2006). Tax avoidance and intra-family transfers. *Journal of Public Economics*, *90*(8-9), 1669-1680. doi:10.1016/j.jpubeco.2005.10.005
- OECD. (2002). Women at work: who are they and how are they faring? In OECD (Ed.), OECD Employment outlook: OECD.
- OECD. (2011). Divided We Stand: Why Inequality Keeps Rising. Paris: OECD Publishing.
- OECD. (2017). The Pursuit of Gender Equality: An Uphill Battle. Paris: OECD Publishing.
- Onderwijsinspectie. (2018). De staat van het onderwijs 2016/2017. Utrecht: Inspectie van het Onderwijs.

- Parcel, T. L., Dufur, M. J., & Zito, R. C. (2010). Capital at Home and at School: A Review and Synthesis. *Journal of Marriage and Family*, 72(4), 828-846. doi:10.1111/j.1741-3737.2010.00733.x
- Perelli-Harris, B., & Lyons-Amos, M. (2016). Partnership Patterns in the United States and across Europe: The Role of Education and Country Context. *Social Forces*, *95*(1), 251-281. doi:10.1093/sf/sow054
- Petersen, T. (2004). Analyzing panel data: Fixed- and random-effects models. In M. Hardy & A. Bryman (Eds.), *Handbook of data analysis* (pp. 331-345). London: Sage.
- Portegijs, W., Cloïn, M., Ooms, I., & Eggink, E. (2006). *Hoe het werkt met kinderen: Moeders over kinderopvang en werk*. Den Haag: Staatsuitgeverij.
- Reher, D. S. (1998). Family ties in Western Europe: Persistent contrasts. *Population and Development Review, 24*, 203-234.
- Rossi, A. S., & Rossi, P. H. (1990). *Of human bonding: Parent-child relations across the life course*. New York: Aldine de Gruyter.
- Sarkisian, N., & Gerstel, N. (2008). Till marriage do us part: Adult children's relationships with their parents. *Journal of Marriage and Family*, *70*(2), 360-376.
- Sayer, L. C., Bianchi, S. M., & Robinson, J. P. (2004). Are parents investing less in children? Trends in mother's and father's time with children. *American Journal of Sociology*, 110(1), 1-43.
- Schröder, H., & Ganzeboom, H. B. G. (2014). Measuring and Modelling Level of Education in European Societies. *European Sociological Review*, 30(1), 119-136. doi:10.1093/esr/jct026
- Seltzer, J. A., Lau, C. Q., & Bianchi, S. M. (2012). Doubling up when times are tough: A study of obligations to share a home in response to economic hardship. *Social Science Research*, 41(5), 1307-1319. doi:10.1016/j.ssresearch.2012.05.008
- Silverstein, M., & Bengtson, V. L. (1997). Intergenerational solidarity and the structure of adult child-parent relationships in American families. *American Journal of Sociology*, 103, 429-460.
- Silverstein, M., Conroy, S. J., Wang, H., Giarrusso, R., & Bengtson, V. L. (2002). Reciprocity in Parent-Child Relations Over the Adult Life Course. *Journals of Gerontology Series B: Pyschological Sciences and Social Sciences*, 57B(1), 3-3.
- Silverstein, M., Gans, D., Lowenstein, A., Giarrusso, R., & Bengtson, V. L. (2010). Older Parent-Child Relationships in Six Developed Nations: Comparisons at the Intersection of Affection and Conflict. *Journal of Marriage and Family*, 72(4), 1006-1021. doi:10.1111/j.1741-3737.2010.00745.x
- Silverstein, M., Gans, D., & Yang, F. M. (2006). Intergenerational support to aging parents: The role of norms and needs. *Journal of Family Issues*, 27(8), 1068-1084.
- Silverstein, M., & Marenco, A. (2001). How Americans enact the grandparent role across the family life course. *Journal of Family Issues*, 22(4), 493-522.
- Silverstein, M., Parrott, T. M., & Bengtson, V. L. (1995). Factors That Predispose Middle-Aged Sons and Daughters to Provide Social Support to Older Parents. *Journal of Marriage and the Family*, 57(2), 465-475. Retrieved from <Go to ISI>://A1995RA46800018
- Steelman, L. C., & Powell, B. (1991). Sponsoring the Next Generation Parental Willingness to Pay for Higher-Education. *American Journal of Sociology*, 96(6), 1505-1529. Retrieved from <Go to ISI>://A1991FM34600007
- Swartz, T. T. (2009). Intergenerational Family Relations in Adulthood: Patterns, Variations, and Implications in the Contemporary United States. *Annual Review of Sociology*, 35, 191-212. doi:10.1146/annurev.soc.34.040507.134615
- Szydlik, M. (2016). Sharing Lives: Adult Children and Parents. Oxon: Routledge.

- Timoneda, J. C. (2021). Estimating group fixed effects in panel data with a binary dependent variable: How the LPM outperforms logistic regression in rare events data. *Social Science Research*, *93*. doi:10.1016/j.ssresearch.2020.102486
- Tolsma, J., & Wolbers, M. (2010). *Naar een open samenleving? Recente ontwikkelingen in sociale stijging en daling in Nederland*. Den Haag: Raad voor Maatschappelijke Ontwikkeling.
- Tomassini, C., Kalogirou, S., Grundy, E., Fokkema, T., Martikainen, P., Broese van Groenou, M., & Karisto, A. (2004). Contacts between elderly parents and their children in four European countries: current patterns and future prospects. *European Journal of Ageing*, 1(1), 54-63. doi:10.1007/s10433-004-0003-4
- Tosi, M., & Albertini, M. (2019). Does Children's Union Dissolution Hurt Elderly Parents? Linked Lives, Divorce and Mental Health in Europe. *European Journal of Population-Revue Europeenne De Demographie, 35*(4), 695-717. doi:10.1007/s10680-018-9501-5
- Van de Werfhorst, H. G., & Hofstede, S. (2007). Cultural capital or relative risk aversion? Two mechanisms for educational inequality compared. *British Journal of Sociology*, 58(3), 391-415. doi:10.1111/j.1468-4446.2007.00157.x
- van den Berg, L. (2020). The impact of student financial aid reforms on leaving home: Evidence from the Netherlands. *Population Space and Place, 26*(2). doi:10.1002/psp.2281
- van Ham, M., Mulder, C. H., & Hooimeijer, P. (2001). Spatial flexibility in job mobility: macrolevel opportunities and microlevel restrictions. *Environment and Planning A*, 33(5), 921-940. doi:10.1068/a33164
- van Putten, A. E., Dykstra, P. A., & Schippers, J. J. (2008). Just like mom the intergenerational reproduction of womens paid work. *European Sociological Review*, 24(4), 435-449. doi:10.1093/esr/jcn030
- Zamberletti, J., Cavrini, G., & Tomassini, C. (2018). Grandparents providing childcare in Italy. *European Journal of Ageing*, *15*(3), 265-275. doi:10.1007/s10433-018-0479-y

	Practical support	Practical support	Informational support	Informational support	Financial support	Financial support
Age child (decades)	218*	195*	164*	161*	016	009
	(.000)	(.000)	(.000)	(.000)	(.256)	(.513)
Age child square	.013	.003	.015	.014	.028*	$.027^{*}$
	(.144)	(.734)	(.174)	(.219)	(.010)	(.016)
Partner no child	134*	129*	074*	035	028	.035
	(.000)	(.000)	(.000)	(.327)	(.149)	(.355)
Partner and child	.030*	063*	068*	064~	054*	045
	(.042)	(.024)	(.000)	(.063)	(.003)	(.169)
Single and child	.133*	.019	.052~	.068	.013	007
	(.000)	(.626)	(.053)	(.172)	(.613)	(.880)
Family education (0-1)	.125*	031	.335*	.353*	.449*	.473*
	(.000)	(.542)	(.000)	(.000)	(.000)	(.000)
Age x parents education	.031	026	020	026	085*	099*
	(.118)	(.251)	(.429)	(.353)	(.002)	(.001)
Age squared x parents education	059*	037*	024	022	.081*	$.082^{*}$
	(.001)	(.037)	(.258)	(.305)	(.001)	(.001)
Partner x parents education		005		077		127~
		(.920)		(.208)		(.083)
Child x parents education		.218*		004		011
		(.000)		(.954)		(.872)
Single parent x parents education		.272*		033		.065
		(.002)		(.746)		(.510)
N person-waves	28973	28973	29181	29181	29060	29060
N persons	10569	10569	10614	10614	10609	10609
Chi2-test	3127.1	3179.1	1914.5	1923.6	790.1	799.1

Appendix Table 1. Random-effects models of parental support with alternative coding

Note: NKPS longitudinal data 2002-2014. Models as in Table 5 but with linear scale for support. p < 0.10, * p < 0.05