



multilinks

**Consequences of intergenerational family solidarity for mental health:
Family ties as buffers or stressors?**

Nienke Moor & Aafke E. Komter
University of Utrecht

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1. Introduction:

In the contemporary literature on depression, depressive feelings are partly considered the result of biological and genetic factors, such as changes in brain chemistry and an inherited vulnerability for depression. It is also widely recognized that depressive feelings are affected by environmental factors (McGue & Christensen, 1997; Kendler & Karkowski, 1997; Sullivan, Neale & Kendler, 2000). More specifically, it is argued that depression can result from stressful emotional situations, like the break-up of intimate family ties (Kendler, Gardner and Prescott, 2002). However, it is not only broken family ties that can influence people's mental well-being but also the mere presence or absence of intimate family ties. After all, family ties can be both a source of support and a source of stress (Ross, Mirowsky & Goldstein 1990).

Family ties in Europe are affected by demographic trends associated with parenting and partnering, such as a decline in fertility (Sobotka, 2004), an increase in childlessness (Rowland, 2007), postponement of parenthood and of partnership formation, the rise of alternative relationship forms and rising divorce rates (Billari, 2005). In this study, we examine how ties with parents, siblings, a partner and children affect people's mental well-being. Because we aim to study the possible consequences of demographic changes for depressive mood, we explicitly focus on the number of family ties people have, rather than on their quality.

We aim to contribute to the existing literature in three respects. First, we examine the "autonomous" impact of different types of family ties on depression. Instead of studying the influence of different family ties such as parenthood or (not) having a partner separately, as is usual in the existing literature, we study the joint impact of these bonds. This is important because different types of family ties are often strongly related. For example, people who are married are more likely to have children than people who are not married, and people who experienced a parental divorce are more likely to be divorced themselves (Amato, 1996). Second, we investigate the possibility of a hierarchy of kinship relationships (Cantor, 1979). We examine whether ties with parents and siblings, "primary" ties during childhood, become more "secondary" in people's adult life, when more priority is given to spouses and children. Third, we aim to enhance the insight into the impact of family ties on mental well-being by including a life span perspective. Because of specific life course transitions, the importance of certain types of family ties for well-being is expected to vary over the life course (White, 2001).

Our overarching research question, then, reads: how do demographic characteristics associated with parenting and partnering affect depressive feelings across the life course?

2. Theory and hypotheses

The presence of intimate family ties can be considered an important "resource" of affection, whereas their absence may act as a "constraint" in achieving mental well-being (Pearlin, 1989; Lindenberg, 1986; Ormel et al., 1999). Ross, Mirowsky and Goldstein (1990) raised the question how exactly the family may contribute to, or threaten mental health. They present two sets of opposing arguments. On the one hand, family can positively affect health by offering family members social support in the form of commitment, care, advice, and aid (1990). On the other hand, a negative impact of the family on mental health is possible as a consequence of an increase of demands or the stress caused by the combination of different roles. In this article we assume that also family members who do not reside in

the same household may have an impact on people's mental well-being. Therefore, we will not only investigate ties with a partner and children, but also ties with parents and siblings.

2.1 *Specific family ties and mental well-being*

Ties with parents

Over the past decades the mean age at first birth has increased significantly (Billari & Kohler, 2004; Sobotka, 2004). Although this age is lowest in central-eastern Europe, the postponement of childbearing is clearly visible in all European countries (Billari, 2005). A possible consequence is that people lose their parents at an earlier age. After all, the postponement of childbearing results in a larger age gap between parents and their children. This is, however, only one side of the story. Nolte, McKee and Gilmore (2005) showed that life expectancy has gradually increased in western Europe and slowly improved in central and eastern Europe. The increase in life expectancy has the opposite effect of the postponement of childbearing: members of different generations will share more years of life together than ever before (Bengtson & Martin, 2001). Leaving aside the question how the joint effect of both demographic trends would look like, in this article we just investigate the extent to which the number of surviving parents affects people's mental well-being.

Both early and recent parental death are associated with depression in adult life, as is demonstrated in research conducted some decades ago (Birtchnell, 1970). However, more recent research either questions the impact of parental loss on people's mental well-being (Tennant, 1991), or argues that parental death excites depressive feelings not because of mourning, but because of a lack of care provided by significant others (Bifulco et al., 1992). Existing research focuses mainly on the consequences of *early* parental death for well-being in adult life (Maier & Lachman, 2000). The assumption is that parents play a central and formative role in childhood. We extend this argument by claiming that parental death later in life may also excite depressive feelings because parental ties remain an important source of emotional support in adult life (Cooney & Uhlenberg, 1992). This is especially true for the presence of the mother who, traditionally, fulfills the role of the family caretaker. The foregoing considerations lead to the following hypotheses concerning the role of parents in mental well-being. People who experienced parental death during their childhood are more depressed than people without this experience (H1a). Moreover, people with surviving parents are less depressed than people without surviving parents (H1b), and people with only a surviving mother are less depressed than people with only a surviving father (H1c).

The postponement of childbearing in Europe has resulted in a larger age gap between children and their parents. Generally, we assume that emotional ties between parents and children are the strongest and most stable when the age difference lies between twenty and thirty years. In comparison with adult children from older parents, those who grew up with teenage parents to all likelihood faced an emotional and financial less stable environment, which may have affected their mental well-being in adult life. On the other hand, adult children who differ more than thirty years with their parents are likely to have more problems with the so-called generation gap and to experience more emotional distance from their parents than do people with younger parents. We therefore expect people who differ less than twenty years in age with their parents to be most depressed in adult life and people who differ between twenty and thirty years in age with their parents to be least depressed (H1d).

The proportion of people who had experienced parental divorce increased considerably in Europe. Research evidence shows a negative influence of parental divorce on people's mental well-being, which influence is for the largest part mediated by people's socio-economic status and problems in interpersonal relationships in adult life (Ross & Mirowsky, 1999; Wauterickx et al., 2006). Children of divorced parents are more likely to drop out of school and are less inclined to attend higher education (Dronkers, 1994; Elder & Russell, 1996). Also children of divorced parents have more difficulties in forming interpersonal relations in adult life (Amato & Booth, 2001). Thus,

our hypothesis reads: people who experienced a parental divorce are more depressed than people without this experience (H1e).

Ties with siblings

An important implication of decreasing fertility rates is the decrease in the number of siblings people have. Cicirelli (1982) argued that sibling bonds are very durable and showed that most siblings continue to have contact with each other in their adult years. Only children are reported to have more difficulties in developing psychological abilities facilitating social cooperation than do children with siblings (Jiao et al., 1986). According to Amato (1989), children with siblings learn better how to cooperate, how to be supportive and how to deal with conflict, which can help them to make friends later in life. The finding that children with siblings have fewer problems with developing social skills suggests that only children run a higher risk to be depressed in adult life. However, on the basis of other research findings the supposed differences in social skills between children with and without siblings are questioned (Poston & Falbo, 1990).

Research showed that children with supportive siblings are less likely to be depressed (Huntley & Pelps, 1990), and that having supportive siblings contributes to the self-esteem of adolescents and young adults (Barrera & Garrison-Jones, 1992; Caya & Liem, 1998). Sibling ties can also be important for people's mental well-being in adult life. Research results indicate that most people perceive siblings as being available for them in crisis situations, even though a minority of them actually receive support (Connidis, 1994). Moreover, siblings tend to provide support when other resources are unavailable, for instance when there are no adult children or a partner who can provide care (Connidis, 1994; White & Riedmann, 1992). In sum, we expect sibling ties to protect people against depressive mood. Our hypothesis reads: people with (more) siblings have less depressive feelings (H2).

Ties with a partner

In the literature, marriage is considered as a special bond between partners and an important source of social support, especially emotional support (House et al., 1988; Ross & Mirowsky, 1989). It is a well-established fact that married people have a well-being advantage over non-married cohabiters and people without a partner (Shapiro & Keyes, 2008; Ross et al., 1990) and this is generally found across the world (Diener et al., 2000). Married people experience lower levels of depression, anxiety and other forms of psychological distress (Ross & Mirowsky, 1989; Robins & Regier, 1991; Stolzenberg & Waite, 2005). Longitudinal studies exclude the possibility of a selection bias and confirm that marrying improves people's mental health (Horwitz et al., 1996; Simon, 2002). Several explanations are presented (Ross et al., 1990): the mere fact that married people less often live alone is seen as a protective factor against depressive mood; another explanation is that married people provide each other with emotional and financial support. The first explanation is contested by Hughes and Gove (1989), who showed that the difference in well-being is much larger between married people and non-married people than between people living alone and people living with other adults. Apparently, the positive impact of marriage on depression cannot solely be explained by the mere presence of a partner. Regardless of the exact explanation for the well-being advantage, we expect that people with a partner, and especially married people, are less likely to be depressed than people without a partner (H3a).

Partner relationships have become less stable in all European countries (Billari, 2005). Partnership dissolution will have a strong impact on people's mental well-being, not only because people become single again but also because it decreases the availability of close confiding relationships and it brings along psychological distress (Menaghan & Lieberman, 1986; Sweeney & Horwitz, 2001; Cairney et al., 2003; Sbarra & Emery, 2005; Bokker et al., 2006; Cooper et al., 2007). In this article, we answer the question whether ever divorced people are more depressed than never divorced people, only because they are less likely to have a partner. We argue that the stress that

comes with a divorce will excite people's depressive mood, irrespective of their current marital status (H3b).

Ties with children

Frejka and Calot (2001) demonstrated that younger cohorts have fewer children, more often have one-child families and also remain childless more often. According to Ross et al. (1990) children can protect people from depressive moods by offering social support, but can also generate depression by invoking stress. Having children is supposed to positively affect people's mental well-being by providing personal gratification and a sense of purpose in life (Menaghan, 1989). Furthermore, it is suggested that children can function as an old-age insurance that dispels parental insecurity. On the other hand, involuntary childlessness may be a source of distress (Van Balen, 1991). Some scholars argue that people develop more healthy personalities as a consequence of parental responsibilities but others suggest that children can be an important source of worries because they can invoke stress by bringing economic hardships, decreasing the amount of emotional support that spouses receive from each other, and restricting their engagements in other life spheres (Callan, 1987; Dykstra & Hagestad, 2007; Rollins & Feldman, 1970; Ross et al., 1990).

Research on the impact of parenthood on depression remains inconclusive. Some studies showed that children decrease the mental well-being of parents or do not have a significant influence (Glenn & McLanahan, 1981; McLanahan & Adams, 1987; Ross et al., 1983), whereas other studies found a positive impact on the parents' mental well-being (Kandel et al., 1985; Burton, 1998). It has also been suggested that younger children and resident children increase depressive feelings of the parents, whereas adult children and non-resident children decrease depressive mood (Kandel et al., 1985; Ross et al., 1990). However, the positive impact of having non-resident children is not always found (Rempel, 1985; Evenson & Simon, 2005). Furthermore it is demonstrated that emotionally close parent-child relationships contribute to people's mental well-being, whereas problematic parent-child relationships are a hindrance for mental well-being (Koropecykj, 2002).

In general we expect the benefits of having children to exceed the drawbacks. But because having more children may also mean more stress and more financial difficulties, we expect the surplus value of having children for mental well-being to diminish with the number of children. Our hypothesis, then, reads: people with (more) children are less likely to be depressed, but this influence will diminish with the number of children people have (H4).

2.2 *Family ties and mental well-being across the lifespan*

2.1.1 *Primary and secondary family ties*

According to Cantor (1979) family relationships can be represented as a set of nested circles, reflecting a hierarchy of kinship relations. During the first stages of life parental and sibling ties are primary ties, and are thus part of the inner circle of family relationships. However, when people become adults and start having a family of their own, the importance of parental and sibling ties may diminish and be (partly) replaced by the ties with partner and children.

White (2001) found only minor support for a model in which siblings substitute for parents, spouses, and children. On the contrary, her research results suggest that the presence of additional children is more likely to energize than to diminish sibling relations (cf. also Connidis, 1994). A similar argument might apply to ties with parents. Young adults exchange high levels of support with their parents and experience the relationships with their primary family members as of high quality (Rossi & Rossi, 1990; Komter & Knijn, 2006). Becoming a parent may encourage people to maintain ties with their siblings and parents, perhaps to create opportunities for children to form active relationships with their grandparents, aunts and uncles. Another reason may be that parents and siblings can offer support with child care. For example, childless siblings appear to support their parenting siblings, especially in young childhood (Voorpostel et al., 2007).

Because empirical results are mixed, we formulate two competing hypotheses. First, the substitution hypothesis (H5a): the impact of parental and sibling ties on people's mental well-being is weaker when they have a partner and children; and second, the reinforcement hypothesis (H5b): the impact of parental and sibling ties on people's mental well-being is stronger when they have (young) children.

2.2.2. *Family ties and life course transitions*

Regarding the role of parental ties across the life course, Rossi and Rossi's research results reveal a steep decline of help given by parents to their adult children, as parents age. The help given to parents also gradually declines, but shows an upturn again when parents are over 80 years of age (Rossi & Rossi, 1990). Similarly, Cooney and Uhlenberg (1992) found that after having received a substantial amount of support from their parents in their 20s, there is a decline in all forms of support received from parents after age 30. In the Netherlands, the quality of relationships with primary family members – including parents and siblings – was investigated for various age groups; relationship quality showed a curvilinear pattern, with higher relationship quality among adults aged between 18 and 40, and people above 50 years of age; middle-aged people reported the lowest relationship quality (Komter & Knijn, 2006). Given the decline of support received from parents, the increased need to provide support to elderly parents, and the decline in relationship quality, we expect the impact of *parental ties* on mental well-being to diminish across the life course (H6a).

White and Riedmann (1992) showed that sibling exchange and affection were significantly lower for respondents who had adult children. Minor and Uhlenberg (1997) reported similar findings, but White (2001) found a decline of sibling support during early adulthood, whereas sibling exchange rises again after approximately age 70, indicating a curvilinear pattern. Therefore, we expect the impact of sibling ties on mental well-being to diminish in (young) adulthood but to increase in later stages of life (H6b).

Young children can have a negative effect on the parents' mental well-being, while such an effect is less likely in the case of adult and non-resident children (Kandel et al., 1985). Across the life span children's role may change from a source of stress to a source of support. Our hypothesis, then, reads: the impact of the ties with children on mental well-being is negative in the first phase of life and positive in the later stages of life (H6c).

Finally, one might argue that the partner has a lower impact on mental well-being in the first stages of adulthood because other family relationships are still relatively important, but it is also possible to argue that the partner is more important because the couple is in the phase of family formation. For older age similar diverging arguments are possible. Therefore, our hypothesis is that the impact of the partner tie on mental well-being is stable over the life course (H6d).

3. **Data and measurements**

3.1 *Generations and Gender surveys*

In order to test our hypotheses we make use of the Generations and Gender surveys (GGS), which are part of the Generations and Gender Program (GGP). The primary aim of the GGP is to improve the knowledge-base for policy-making in UNECE countries. The GGS is a panel survey of an 18-79 year-old resident population which is held in a number of European countries and is designed for a face-to-face interview. It aims to survey nationally representative samples of the population. The GGS contains information about the most important societal aspects of demographic choices in contemporary developed societies, focusing on the processes of childbearing, partnership dynamics, home-leaving and retirement. In this article we use the GGS data for the eastern European countries Bulgaria, Georgia, Romania and Russia. The first reason to choose these countries is that demographic

research on eastern European countries is relatively scarce (Kogan, Gebel & Noelke, 2008). The second reason was more pragmatic: only the selected countries contained all the variables relevant to the present study.

3.2 Measurements

People's *depressive feelings* are measured using a shorter version of the Epidemiological Studies Depression Scale or CES-D (Radloff, 1977), which measures the prevalence of depressive symptoms in society. Respondents were asked to tell how frequently they experienced the next seven feelings during the previous week: I felt that I could not shake of the blues; I felt depressed; I thought my life had been a failure; I felt fearful; I felt lonely; I had crying spells; I felt sad. The answer categories were: 1. seldom or never, 2. sometimes, 3. often, 4. most of the time. We computed a scale by adding up the scores of these seven items: the higher the score, the more severely a person suffers from depressive symptoms. Because this continuous scale is highly skewed, a log transformation was employed. The new depression scale ranges from 0.85 to 1.45. The Cronbach's alpha for this scale is 0.893 and is above 0.885 in each country.

We take into account different types of family bonds: bonds between siblings, bonds between parents and children and bonds between partners. The presence of *parental bonds* is measured with two variables: parental loss in people's youth and the number of surviving parents in the present situation. Respondents who lost at least one parent before the age of 18 receive a score 1 on the dichotomous variable 'early parental loss' (0-1). For the present situation we distinguish between four categories: 1. both parents are alive, 2. only the father is alive, 3. only the mother is alive and 4. neither is alive. The *age gap* between respondents and their parents is computed by subtracting the mean age of the parents with the age of the respondent. We distinguish between four categories: 1. age gap < 20 years, 2. age gap between 20-25 years, 3. age gap between 26-30 years and 4. age gap > 30 years.

The *number of siblings* people have refers to the present situation, not to the original number. We distinguish between people who have 1. no siblings, 2. one sibling, 3. two siblings, and 4. three siblings or more.

Regarding the *number of children* (biological, adoptive, foster), we distinguish between people who have 1. no children, 2. one child, 3. two children and 4. three children or more.

The variable *marital status* has five categories: 1. married, 2. cohabiting, 3. living apart together, 4. widowed and 5. single. Irrespective of the current status, we take into account whether or not a person experienced a *divorce* (0-1). We also take into account the parental situation: whether or not a person experienced a *parental divorce* (0-1).

To exclude the possibility of a spurious relationship between family ties and depressive feelings, we take into account people's religiosity and their educational level. Because information about people's church membership and church attendance is lacking, we measured people's *religiosity* by the importance they attach to religious ceremonies. A five-point agreement scale was constructed on the basis of three statements regarding religious ceremonies. The Cronbach's alpha for this scale is 0.853. The table in the appendix gives more specific information about the construction of this scale. Regarding the highest *educational level* people completed, we coded country-specific scores to the International Standard Classification of Education (ISCED). We distinguish between lower educated people (ISCED levels 0, 1, 2), middle-educated people (ISCED levels 3 and 4) and higher educated people (ISCED levels 5 and 6).

For the variables 'age gap with parents' and 'educational level', with respectively 4.0% and 5.4% of missing values, we created dummy-categories. For the other variables with less than 2.5 % missing values we applied a listwise deletion. Table 1 presents the descriptive statistics of the variables used in our analyses per country.

- Table 1 about here -

4. Results

We performed linear regression analyses to study the impact of people's family ties on depressive feelings. The analyses are based on 43.504 respondents from four eastern European countries. To take into account people's country of residence we decided to include dummy-variables for country. In our first analysis we examine to what extent specific family ties affect people's depressive feelings. Subsequently, we test our expectation that the impact of ties with the family of origin on mental well-being is weaker when people have a family of their own. Finally, we examine whether the impact of family ties on depressive feelings differs across the life course.

- Table 2 about here -

In model 1 of Table 2 we take into account the impact of people's family ties on depressive mood, controlling for people's age and gender. We see that older people and women are more depressed than younger people and men. In model 2 of Table 2 we add people's educational level and their level of religiosity as controls. Higher educated people appear to be less depressed; religiosity does not affect the level of depressive mood.

Table 2 shows that early parental loss does not affect people's mental well-being in adult life; hypothesis 1a has therefore to be rejected. However, the number of living parents in the present situation does affect depressive mood. People who only have their mother alive are more depressed than are people who still have two living parents. This influence is even stronger for people who only have a living father and for people without surviving parents. In accordance with hypothesis 1b and 1c, the absence of parents, in particular the absence of the mother, excites people's depressive feelings. For example, people who only have a father score 0.020 point higher on the depression scale (which has a range of 0.60 point) than do people with two surviving parents. Furthermore, our findings support hypothesis 1d which states that broken parental ties increase people's depressive mood. People who experienced a parental divorce are more depressed than are people whose parents stayed together (0.014 point higher on the depression scale).

Regarding the age gap between parents and children it appears that people from teenage parents are more depressed in adult life than are people from older parents. Model 2 shows that this effect can only be partially explained by people's educational level. Hypothesis 1c is partly supported by this finding. However, people who differ more than thirty years in age with their parents are not more depressed compared with people who differ between twenty and thirty years with their parents.

In accordance with hypothesis 2, people with one sibling are less depressed than are people without siblings. However, this effect is limited (0.004 point on the depression scale). In model 1 we see that people with more than three siblings are more depressed than are people without siblings. When we control for educational level in model 2, this effect disappears, suggesting that educational level functions as a proxy for socio-economic background.

As we expected in hypothesis 4, people with children are more depressed than childless people. However, our findings indicate that the number of children does not have an impact on depressive mood. The impact of having children is partially mediated by educational level (model 2). Apparently, lower educated people are more likely to have children and are also more likely to have depressive feelings.

As expected, married people are better off compared with people in other living arrangements. People who cohabit are more likely to have depressive feelings than married people, but less likely to feel depressed than people who have a partner without cohabiting. Moreover, people without a partner

are more likely to be depressed than people with a partner. Hypothesis 3a is supported by these findings. Compared with married people, widowed people are most depressed (0.082 point higher on the depression scale). In contrast to what we expected in hypothesis 3b, we find that (ever) divorced people do not differ in depressive mood from people without this experience. However, when we take into account people's educational level in model 2, we see that the experience of a divorce does excite depressive mood. This suggests that the higher educational level of (ever) divorced people may suppress the negative consequences of divorce for their mental well-being.

We can conclude that family ties do affect people's mental well-being. The presence of parents, siblings and a partner all prevent people from having depressive feelings. In contrast, the presence of children appears to excite people's depressive mood. Comparing the size of the effects of family ties on depressive mood, the presence of a partner turns out to have the strongest influence. Having siblings only affects people's mental well-being to a limited degree.

In Table 3 we present the effects of parental ties and sibling ties on depressive mood for people with and without a partner and / or children, controlled for the variables in Table 2 (Table 3 focuses on the mere presence or absence of family ties, not on the exact number).

- Table 3 about here -

For people without a partner the presence of at least one parent diminishes their depressive mood with 0.028 point on the depression scale. However, for people with a partner the effect of parental ties is not significant (0.028 - 0.031). Regarding the presence of children, a similar picture emerges. For childless people the presence of at least one parent diminishes their depressive mood with 0.049 on the depression scale. For people with young children (below the age of 12) and older children (above the age of 12) the effect of parental ties diminishes with respectively 0.034 and 0.054 point and is no longer significant. Apparently, parental ties contribute to people's mental well-being only when they do not have a family of their own. Furthermore, Table 3 shows that the impact of sibling ties on depressive mood is not different for people with and without a partner. In both cases, sibling ties do not affect people's depressive mood. In accordance with our expectation, sibling ties only have a small effect on mental well-being when people do not have children. The findings in Table 3 imply that parental and sibling ties only have an impact on mental well-being when people do not have a family of their own, confirming the substitution hypothesis (H5a) rather than the reinforcement hypothesis (H5b).

Finally, in Table 4, we compared the reliability range of parameters (parameter plus and minus standard error) between age groups in order to test whether or not the impact of certain family ties differs across the life course. When the reliability range of a parameter in one age group does not overlap with the reliability range of the same parameter in another age group, this parameter significantly differs between these groups. For reasons of comparability between age groups, it was sometimes necessary to merge categories of variables.

- Table 4 about here -

In accordance with hypothesis 6a, Table 4 shows that the impact of parental ties on mental well-being diminishes over the life course. For people in young adulthood (20-35 years), the presence of at least one parent diminishes depressive mood with 0.027 point on the scale. For people above the age of 50, this effect is around 0.010. The difference in parameter between people below and above 50 is significant. Parental ties are especially important for people's mental well-being in the first phase of their adult life. Furthermore, Table 4 indicates that sibling ties have a limited effect on depressive mood in all age groups. However, for young adults we see that people with four siblings or more have more depressive feelings than do people without siblings. This is the other way around for people who

are aged over 65: people with four siblings or more have fewer depressive feelings. Apparently, having a large number of siblings can diminish depressive mood in old age. However, our expectation that the impact of sibling ties on mental well-being will diminish in adulthood (hypothesis 6b) is not supported.

The impact of having children on mental well-being differs strongly across the life span. For young adults, having children increases depressive mood with around 0.025 point on the scale. For people aged between 36 and 50 years the influence of having children on depressive mood is not significant, whereas for people above the age of 50 this influence turns negative. For elderly people, having children diminishes depressive mood with around 0.035 point on the depression scale. These findings support the argument that adult children are an important source of support and company for parents, whereas younger children can also bring about stress. Hypothesis 6c is confirmed by our data.

Finally, in each age group married people are somewhat less depressed than are people who have a partner without being married. Moreover, single people are more depressed than are married people in all age groups. However, this influence is strongest for people who are aged between 36 and 50 years old, and weakest for people aged 35 or younger. A possible explanation is that younger people have a large social network and can therefore rely on other people than the partner for affection and emotional support. Hypothesis 6d, which states that the impact of having a partner on mental well-being will be stable over the life span, is largely supported by these findings.

5. Conclusion and discussion

Demographic trends may affect people's mental well-being by influencing the number, the stability and the duration of family ties. In this article, we examined how ties with parents, siblings, a partner and children affect people's mental well-being. We argued that intimate family ties provide people with emotional support and affection, and therefore contribute to their mental well-being. This claim is partly supported by our findings. People with surviving parents, especially when this is the mother, are less depressed than are people without surviving parents. Moreover, people with a partner, and especially married people, have less depressive feelings than people without a partner. The presence of sibling ties only has a limited effect on depressive mood. In accordance with Ross et al. (1990), we found that family ties can also act as stressors and thereby foster depressive feelings. In contrast to parental and partner ties, having children excites people's depressive mood. Moreover, broken family ties negatively affect mental well-being: people who experienced a divorce or a parental divorce are more depressed than are people without this experience. Also being raised by teenage parents excites depressive mood in adult life.

Our results indicate that the impact of certain types of family ties on depressive mood varies across the life span. Parental ties are especially important for mental well-being in young adulthood, while their influence diminishes over the life span. In contrast, the impact of having a partner on depressive mood is weakest in young adulthood. The impact of having children on mental well-being differs strongly across the life course. For young adults having children increases depressive mood, whereas for people above the age of 50 it diminishes depression. Apparently, adult children can be an important source of support, whereas younger children may also bring about stress.

Our findings support the hierarchical model of family relations, as proposed by Cantor (1979). Parental ties, and especially sibling ties, have a weaker impact on people's depressive mood than do ties with a partner and children. Moreover, parental and sibling ties only have an impact on mental well-being when people do not have a family of their own. This supports the substitution hypothesis (in people's adult life the original primary ties with parents and siblings are being substituted by new ties with partner and children) rather than the reinforcement hypothesis (the impact of parental and sibling ties on mental well-being is stronger when people have children).

A few limitations of our study should be mentioned here. First, we did not dispose of longitudinal data, which would have allowed us to draw conclusions about the effect of demographic trends over time. Another limitation is that we could not do a cross-nationally comparative analysis due to data limitations. Otherwise, it would have been interesting to study the impact of family ties on mental well-being for different parts of Europe. Eastern European countries have lower GDP's and lower levels of social security and welfare in comparison with other European countries (e.g. Deacon 2000; Sykes et al. 2001). Thus far, it remains unknown to what extent these differences have affected the importance of family ties for well-being in these countries. Thirdly, it would have been interesting to also study happiness as another aspect of mental well-being since certain family ties, such as having children, can simultaneously foster depressive mood and happiness; however, data restrictions prevented us from doing so.

Despite our lack of longitudinal data, our research results do suggest that demographic trends affect people's mental well-being by influencing the presence, the stability and the duration of family ties. In general, our findings do not indicate that declining fertility rates have a large, negative impact on people's mental well-being. Having sibling ties only affects people's depressive mood to a limited extent. However, the presence or absence of children (not the actual number) may affect people's depressive mood; especially childlessness in old age may foster a decrease in mental well-being. In line with other studies we found a robust impact of the partner tie on mental well-being. The demographic trend of increasing partnership dissolution may therefore have large consequences for people's mental well-being.

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Table 1: Descriptive statistics by country

	<i>Bulgaria</i>		<i>Georgia</i>		<i>Romania</i>		<i>Russia</i>	
	mean	SE	mean	SE	mean	SE	mean	SE
depression (7-28)	9.40	3.68	10.08	3.67	10.03	3.44	10.17	3.71
age (20-85)	43.88	15.88	46.06	16.20	49.64	15.75	47.33	16.22
woman (0-1)	0.54	0.50	0.56	0.50	0.50	0.50	0.63	0.48
lost parent during youth (0-1)	0.08	0.28	0.15	0.36	0.10	0.30	0.23	0.42
no surviving parents (0-1)	0.30	0.46	0.37	0.48	0.45	0.50	0.43	0.50
age gap with parents (13-59)	26.36	5.20	27.96	5.97	27.11	5.79	28.17	5.89
parental divorce (0-1)	0.08	0.27	0.03	0.18	0.19	0.39	0.14	0.35
siblings (0-29)	1.38	1.29	1.96	1.51	2.05	1.80	1.59	1.51
children (0-12)	1.42	1.05	1.77	1.32	1.62	1.36	1.50	1.03
marital status								
married (0-1)	0.63	0.48	0.57	0.49	0.69	0.46	0.51	0.50
cohabiting (0-1)	0.08	0.27	0.09	0.29	0.04	0.19	0.09	0.29
living apart together (0-1)	0.05	0.22	0.02	0.12	0.03	0.18	0.09	0.29
widowed (0-1)	0.05	0.23	0.11	0.31	0.11	0.31	0.13	0.33
single (0-1)	0.19	0.40	0.21	0.41	0.13	0.34	0.18	0.38
ever divorced (0-1)	0.06	0.24	0.02	0.14	0.07	0.26	0.20	0.40
religiosity (0-4)	2.83	0.85	3.53	0.63	3.74	0.46	2.80	0.82
educational level (1-3)	1.92	0.70	2.15	0.63	1.70	0.64	2.08	0.69
N	11.283		9.504		11.503		9.852	

Source: Data from the Generations and Gender program (GGP)

Table 2: linear regression analysis on depressive feelings by family ties, religiosity and educational level

	<i>Model 1</i>		<i>Model 2</i>	
	b	SE	b	SE
constant	0.902 ^{***}	0.003	0.937 ^{***}	0.005
age	0.001 ^{***}	0.000	0.001 ^{***}	0.000
woman (0-1)	0.053 ^{***}	0.001	0.053 ^{***}	0.001
<i>Family ties</i>				
lost parent during youth (0-1)	0.003	0.002	0.001	0.002
surviving parents				
both parents (ref.)				
one parent: father	0.020 ^{***}	0.003	0.020 ^{***}	0.003
one parent: mother	0.013 ^{***}	0.002	0.013 ^{***}	0.002
neither parents	0.017 ^{***}	0.002	0.013 ^{***}	0.002
parental divorce	0.014 ^{***}	0.002	0.013 ^{***}	0.002
age gap with parents				
< 20 years	0.014 ^{***}	0.002	0.010 ^{***}	0.002
20-25 years (ref.)				
26-30 years	-0.002	0.001	-0.001	0.001
> 30 years	-0.001	0.002	0.000	0.002
number of siblings				
no siblings (ref.)				
one sibling	-0.004 [*]	0.002	-0.004 [*]	0.002
two siblings	0.002	0.002	-0.002	0.002
three siblings	0.006 ^{**}	0.002	0.000	0.002
four siblings or more	0.009 ^{***}	0.002	0.002	0.002
children				
no children (ref.)				
one child	0.008 ^{***}	0.002	0.009 ^{***}	0.002
two children	0.006 ^{**}	0.002	0.005 [*]	0.002
three children or more	0.010 ^{***}	0.002	0.004	0.002
marital status				
married (ref.)				
partner, cohabiting	0.032 ^{***}	0.002	0.026 ^{***}	0.002
partner, not cohabiting	0.050 ^{***}	0.003	0.050 ^{***}	0.003
widowed	0.082 ^{***}	0.002	0.078 ^{***}	0.002
single	0.066 ^{***}	0.002	0.063 ^{***}	0.002
ever divorced (0-1)	0.003	0.002	0.006 ^{**}	0.002
<i>Control variables</i>				
educational level				
low (ref.)				
mid			-0.025 ^{***}	0.002
high			-0.042 ^{***}	0.002
religiosity			0.000	0.001
N	43.504		43.504	
R ²	0.165		0.174	

*** = $p \leq .001$, ** = $p \leq .01$, * = $p \leq .05$

Controlled for country

Source: Data from the Generations and Gender program (GGP)

Table 3: the impact of parental ties and sibling ties on depressive feelings for people who do (not) have a partner / children (controlled for the variables in table 2)

	<i>Interactions</i>	
	b	SE
parent(s) (0-1)	-0.028 ^{***}	0.003
* partner (0-1)	0.031 ^{***}	0.003
parent(s) (0-1)	-0.049 ^{***}	0.004
* child(ren) ≤ 12	0.034 ^{***}	0.006
* child(ren) > 12	0.054 ^{***}	0.004
sibling(s) (0-1)	-0.003	0.003
* partner (0-1)	0.000	0.003
sibling (s) (0-1)	-0.008 [*]	0.003
* child(ren) ≤ 12	0.008	0.005
* child(ren) > 12	0.008 [*]	0.004
N = 43.504		

*** = $p \leq .001$, ** = $p \leq .01$, * = $p \leq .05$

Controlled for country

Source: Data from the Generations and Gender program (GGP)

Table 4: linear regression analysis on depressive feelings by family ties, religiosity and educational level – by age groups

	20-35 years		36-50 years		51-65 years		65-80 years	
	b	SE	b	SE	b	SE	b	SE
constant	0.984***	0.009	1.023***	0.008	1.044***	0.009	1.088***	0.011
woman (0-1)	0.050***	0.002	0.053***	0.002	0.048***	0.003	0.046***	0.004
<i>Family ties</i>								
surviving parent(s) (0-1)	-0.027***	0.006	-0.019***	0.003	-0.007**	0.003	-0.011	0.01
number of siblings								
no siblings (ref.)								
one sibling	-0.004	0.003	-0.006	0.003	-0.007	0.004	-0.004	0.004
two siblings	-0.001	0.003	-0.005	0.004	-0.006	0.004	-0.008	0.005
three siblings	0.006	0.004	-0.006	0.004	-0.007	0.005	-0.004	0.006
four siblings or more	0.013***	0.004	-0.004	0.004	-0.004	0.005	-0.014*	0.006
children								
no children (ref.)								
one child	0.023***	0.003	-0.002	0.004	-0.019***	0.005	-0.028***	0.006
two children	0.025***	0.003	0.004	0.004	-0.024***	0.005	-0.039***	0.006
three children or more	0.025***	0.005	0.003	0.005	-0.015**	0.005	-0.041***	0.006
marital status								
married (ref.)								
partner, not married	0.036***	0.003	0.039***	0.004	0.031***	0.005	0.025*	0.011
single	0.053***	0.003	0.095***	0.003	0.085***	0.003	0.080***	0.004
<i>Control variables</i>								
educational level								
low (ref.)								
mid	-0.031***	0.003	-0.029***	0.003	-0.018***	0.003	-0.028***	0.004
high	-0.037***	0.003	-0.049***	0.004	-0.038***	0.004	-0.057***	0.005
religiosity	-0.001	0.001	0.001	0.001	0.002	0.002	0.001	0.002
N	13.852		12.614		9.880		7.155	
R ²	0.096		0.151		0.153		0.165	

*** = p ≤ .001, ** = p ≤ .01, * = p ≤ .05

Controlled for country

Source: Data from the Generations and Gender program (GGP)

Appendix: construction of religiosity scale:

Importance attached to religious ceremonies (Cronbach's alpha = 0.853)
It is important for an infant to be registered in the appropriate religious ceremony
It is important for people who marry in registry offices to have a religious wedding too
It is important for a funeral to include a religious ceremony