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Research Article

Family ties and depressive mood in Eastern and Western Europe

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Abstract

BACKGROUND
Family ties in Europe are affected by demographic trends associated with parenting and partnering, such as a decline in fertility, an increase in childlessness, postponement of parenthood and of partnership formation, the rise of "new" relationship forms and divorce rates. It is unclear how the contemporary family structure and composition are associated with people's mental wellbeing.

OBJECTIVE
This article examines how ties with parents, siblings, a partner and children are associated with depressive mood of men and women in seven Eastern and Western European countries.

METHODS
To test our hypotheses we made use of data from the Generations and Gender Surveys. We performed logistic regression analyses to study the associations between people's family ties and depressive mood.

RESULTS
Our research findings show that family ties can diminish people's depressive feelings. Although we find some gender differences in these associations, we do not find support for the argument that family ties are more important for the mental wellbeing of women than of men. Moreover, our findings support the hierarchical model of family relations in which new ties with partner and children in adulthood gain precedence over the original primary ties with parents and siblings. Finally, we find that the association between family ties and depressive mood is quite similar in Eastern and Western Europe, but being married or having a partner more strongly reduces depressive feelings in Eastern than in Western Europe.

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CONCLUSIONS
Although longitudinal data were not available to us, our research results do provide some indications about how demographic changes, for instance, those affecting family size -- the number of children or siblings -- might be associated with mental wellbeing. Our findings also suggest that the demographic trend of increasing partnership dissolution may have larger consequences for people's mental wellbeing in Eastern than in Western Europe.

1. Introduction

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 "new" relationship forms and divorce rates (Billari 2005). In this article, we examine to what extent contemporary family structure and composition are associated with mental wellbeing. Assuming that intimate family ties can provide people with affection and social support, we study how the presence or break-up of ties with parents, siblings, a partner and children diminish or excite depressive mood.

We start our article by presenting an overview of the associations between family ties and depressive mood. Instead of studying the influence of different family ties such as parenthood or having or not having a partner separately as is usual in the existing literature, we consider them together. Doing so is important because of the interconnections in the availability of different types of family ties. 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). In our overview we include both family ties that have already been studied extensively, such as ties with children, and family ties that have been less often investigated, such as ties with siblings.

Secondly, we investigate potential gender differences in the relationship between family ties and depressive mood. While it is generally known that women are more likely to develop depressive feelings than men (Almeida and Kessler 1998; Nolen-Hoeksema 2001; Klose and Jacobi 2004), we do not know of any studies that focus on gender differences in the ways family ties affect people's depressive moods. Is it the case that family ties are more important for the wellbeing of women, given their traditional role as "kin keepers" (Rosenthal 1985)?

Thirdly, we examine whether or not different types of family ties are differentially associated with depressive mood. We investigate the possibility of a hierarchy of

kinship relationships (Cantor 1979) by examining whether ties with parents and siblings, "primary" ties during childhood, are more "secondary" in people's adult life, when greater priority is given to spouses and children.

Finally, we study the relationship between family ties and depressive mood for both Eastern and Western European countries. Despite the fact that demographic trends are similar in Western and Eastern European countries, convergence does not seem to be the predominant pattern (Therborn 2004; Viazzo 2010). Family patterns, such as levels of co-residence and age at marriage and parenthood continue to show regional variation. The regional differences are linked to differences in economic development, religious and cultural climates, and inheritance laws. How family ties are associated with depressive mood in Western and Eastern Europe has not yet been investigated, to our knowledge.

Our overarching research question, then, reads: how are family ties related to the depressive feelings of men and women in Eastern and Western Europe?

2. Background

An explanation for the relationship between family ties and depressive mood is offered by the "conservation of resources theory" (Hobfoll 1989, 2001). People aim to obtain and retain material and non-material resources throughout their lives. With these resources people can fulfill their physical and psychological needs. Therefore, people with more resources will have higher levels of wellbeing. A loss of resources may lead to stress, which may reduce psychological wellbeing (Soons and Liefbroer 2008; Soons, Liefbroer and Kalmijn 2009). In the literature, three main categories of resources are distinguished: material, social and personal (Diener and Fujita 1995). Social resources are expected to be strongly associated with wellbeing, because they provide people with affection, social support and social integration. Intimate social ties are an important "resource" of affection, whereas their absence or loss can lead to loneliness or alienation.

The resources theory states that people with family ties have access to family resources and hence, a lower likelihood of having depressive feelings. This assumption is both too straightforward and too simplistic. That intimate family ties are important for human wellbeing seems to be common knowledge. However, the theory leaves some important questions unanswered. Are potential associations with wellbeing equally strong for each type of family tie? And are these associations always positive? As Ross, Mirowsky and Goldsteen (1990) argue, family can be positively associated with wellbeing, but may in some cases also be a source of stress, thereby diminishing the positive association with available family resources. While we do not dispute that in

most cases the beneficial aspects of family ties outweigh the negative aspects, we try to answer the above-mentioned questions.

2.1 Family resources and depressive mood

2.1.1 Ties with parents

On the basis of the resources perspective, we expect parental ties to have a positive influence on psychological wellbeing and reduce the likelihood of depressive mood, especially in childhood and young adulthood where parents have a formative and central role. The loss of parental ties is likely to negatively affect psychological wellbeing and excite depressive mood (Birtchnell 1970; Bifulco, Harris and Brown 1992; Morgan et al. 2007; Slavich, Monroe and Gotlib 2011). Existing research focused mainly on the consequences of early parental death for wellbeing in adult life (Maier and Lachman 2000). We argue that parental death later in life may also excite depressive feelings because parental ties remain an important source of support and affection in adult life (Cooney and Uhlenberg 1992). Thus, people who lost a parent or both parents are more likely to feel depressed than people with both parents alive (H1a).

The proportion of people with divorced parents has increased over the past decades. On the basis of the resources perspective, we argue that a parental divorce causes stress for both parents and children and damages people's social, personal and material resources. This is supported by previous research (Dronkers 1994; Elder and Russell 1996; Ross and Mirowsky 1999; Amato and Booth 2001; Wauterickx, Gouwy and Bracke 2006). Children of divorced parents are more likely to drop out of school, are less inclined to attend higher education and have more difficulties in forming interpersonal relations in adult life. Therefore, people who experienced a parental divorce are more likely to feel depressed than people without this experience (H1b).

2.1.2 Ties with siblings

Research has shown that having siblings can protect children from depressive mood (Huntley and Phelps 1990), and that having supportive siblings contributes to the self-esteem of adolescents and young adults (Barrera and Garrison-Jones 1992; Caya and Liem 1998). Sibling ties can also play an important part in people's adult life (Eriksen and Gerstel 2002). Where there is a decrease in contact and exchanges between siblings in young adulthood, this stabilizes in the middle years and even increases slightly in old age (White 2001). Most people perceive siblings as being available for them in crisis

situations, even though only 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 and Riedmann 1992). In sum, we expect sibling ties to protect people against depressive mood (H2).

2.1.3 Ties with a partner

Marriage is considered an important source of social and emotional support (House, Landis and Umberson 1988; Ross and Mirowsky 1989). It is a well-established fact that married people have a wellbeing advantage over non-married cohabiters and people without a partner (Diener et al. 2000; Shapiro and Keyes 2008; Ross et al. 1990). Married people experience lower levels of depression, anxiety and other forms of psychological distress (Ross and Mirowsky 1989; Robins and Regier 1991; Stolzenberg and Waite 2005; Hughes and Waite 2009). Longitudinal studies exclude the possibility of a selection bias and confirm that marrying improves people's mental health (Horwitz, White and Howell-White 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 (1981), who showed that the difference in wellbeing is much larger between married people and non-married people than the difference between people living alone and people living with other adults. Apparently, the protection against depression provided by marriage cannot solely be explained by the mere presence of a partner. Regardless of the exact explanation for the wellbeing advantage, we expect that people with a partner, and especially married people, are less likely to feel depressed than people without a partner (H3a). Furthermore, we expect on the basis of the resources perspective that people who lost their partner by death or divorce are more likely to feel depressed than people who are single and never married (H3b). Partnership dissolution will be strongly and negatively associated with people's wellbeing, 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 and Lieberman 1986; Sweeney and Horwitz 2001; Cairney et al. 2003; Sbarra and Emery 2005; Bokker, Farley and Bailey 2006; Cooper et al. 2008). Previous research also indicated that depression and anxiety levels are relatively high among widowed people (Bowling 1987; Ross et al., 1990; Vink et al. 2009).

2.1.4 Ties with children

According to Ross et al. (1990) children can protect people from depressive mood by offering affection and social support, but can also generate depression by invoking stress. Children - especially young children - increase economic strains on the family and decrease the amount of emotional support that partners receive from each other (Keizer and Schenk 2012). Research on the association between parenthood and depression remains inconclusive. Some studies showed that children decrease the mental wellbeing of parents or do not have a significant influence (Glenn and McLanahan 1981; McLanahan and Adams 1987; Ross, Mirowsky and Huber 1983), whereas other studies found a positive association with the parents' mental wellbeing (Kandel, Davies and Raveis 1985; Burton 1998; Helbig et al. 2006). Recent evidence suggests that childlessness is associated with enhanced wellbeing, at least for certain social groups in society (Umberson, Pudrovska and Reczek 2010). It has also been suggested that the presence of younger children and resident children increases depressive feelings of the parents (Nomaguchi and Milkie 2003; Kluwer and Johnson 2007), 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 and Simon 2005; Pudrovska 2008). In line with the findings mentioned previously we expect that people with younger children are more likely to feel depressed, whereas people with older children are less likely to feel depressed, compared with the situation in which no children are present (H4).

2.2 Gender differences

Gender roles provide people with normative guidelines that are considered to be socially appropriate for individuals of both sexes. Traditionally there are feminine and masculine gender roles, in which women have the role of caretaker and men have the role of financial provider. In other words, men are socialized to be productive members of the work domain, whereas women are socialized to be productive members of the family domain (Bielby and Bielby 1988). However, in modern society traditional gender roles have become less strict. It has become more common for women to have a career, whereas men are increasingly expected to participate in household and child caring tasks. Although feminine and masculine gender roles intertwine, a majority of women still put more effort in the family role than in the work role, whereas the reverse is true for men (Bianchi et al. 2000). The male gender role as financial provider continues to be important in contemporary society (Loscocco and Spitze 2007), whereas

the combination of the family role and the work role is still characteristic for the social position of most women nowadays. From this perspective, we expect the relationship between the presence and break-up of family ties and depressive mood to be stronger for women (H5).

2.3 Substitution and reinforcement

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 to partner and children.

In the empirical literature, two contrasting views about the impact of marriage on family ties prevail. On the one hand, modern marriage is assumed to have a privatizing, instead of an integrating function: marriage competes with, or even undermines relationships with others, notably parents and adult siblings, because spouses are thrown upon each other. After marriage people have fewer contacts with others (Kalmijn 2003), a phenomenon originally called "dyadic withdrawal" (Johnson and Leslie 1982; Milardo 1982). This view pictures marriage as a "greedy institution", requiring undivided commitment of the spouses to each other (Coser and Coser 1974). On the other hand, marriage is portrayed as serving an integrating function and as strengthening the ties between adult children and their parents and siblings. Marriage is assumed to serve as a primary building block of community and as a key linchpin for social ties, including one's own parents and siblings (Sarkisian and Gerstel 2008).

Empirical support for both views has been found. Sarkisian and Gerstel (2008) found that marriage detracts from investment in other relationships; partnered children tend to have fewer contacts and fewer exchanges of support with aging parents than those never married or divorced. White and Riedmann (1992) showed that sibling exchange and affection were significantly lower for older respondents who had adult children themselves, and Minor and Uhlenberg (1997) reported similar findings. However, other research results suggest that the presence of children is more likely to energize than to diminish sibling relations (Connidis 1994; White 2001; Voorpostel et al. 2007). A similar argument might apply to ties with parents. Young adults have been found to exchange high levels of support with their parents and to experience the relationships with their primary family members as of high quality (Rossi and Rossi 1990; Komter and Knijn 2006). Becoming a parent may encourage people to maintain ties with their siblings and parents.

Because empirical results are mixed, we formulate two competing hypotheses. First, the substitution hypothesis (H6a): the association between parental and sibling ties and depressive mood is weaker when they are in a stage of life in which they have a partner and/or children; and second, the reinforcement hypothesis (H6b): the association between parental and sibling ties and depressive mood is stronger when they are in a stage of life in which they have a partner and / or children.

2.4 The importance of family ties for wellbeing in Eastern and Western Europe

In the literature differences between "strong family countries" in Southern Europe and "weak family countries" in the North of Europe have been found to exist (Reher 1998). Eastern European family arrangements bear more resemblance to the patterns that are prevalent in the familialistic Southern European countries than those in the more individualistic Scandinavian and North-Western European countries (Viazzo 2010). Countries in Central and Eastern Europe are characterized by a pattern of early and universal marriage, whereas in Western Europe marriage is more often delayed and rates of never-married people are higher (Kalmijn 2007). In Northern Europe small (nuclear) households are predominant, whereas in Southern and also Eastern Europe the family structure is more often "extended" and the density of the kinship network is higher. In general, the role of kinship - both reflected in norms of family obligation and in actual contact with and support given to family - is believed to be of greater importance in Southern and Eastern European countries compared with Western and Northern Europe. Family ties are supposed to be based on a stronger "kinship culture" in Southern and Eastern Europe than in the rest of Europe (Viazzo, 2010). These differences have been associated with the contrasting systems of welfare provision in North-West Europe on the one hand, and Southern and Eastern Europe on the other hand (cf. also Castles 1993; Esping-Andersen 1990).

Although there are several studies examining East-West differences in family trends or patterns (e.g. Fokkema and Liefbroer 2008), we know of only a few comparative studies focusing on East-West differences in the relationship between family arrangements and wellbeing. For example, it was demonstrated that levels of co-residence are higher in the Russian Federation, Bulgaria and especially Georgia than in France and Germany, and that its influence on older adults' loneliness is higher in Eastern Europe; more generally, East-West differences in older adult loneliness have been found (De Jong Gierveld 2009; De Jong Gierveld, Dykstra and Schenk 2009; Fokkema, De Jong Gierveld and Dykstra 2012). Another recent study showed that the negative effect of divorce on wellbeing is weaker in familialistic than in more individualistic countries (Kalmijn 2010), which was explained by the stronger support

norms (Kalmijn and Saraceno 2008). Interestingly, the effect of divorce on wellbeing was also weaker in countries where divorce is more common, such as the Eastern European countries.

We expect the presence of family ties for people's wellbeing to be especially important in the familiaristic Eastern European countries where people have strong support norms and where people cannot rely on the support of a strong welfare state (H7a). However, we also expect that the break-up of family ties, caused by death or divorce, is less strongly associated with depressive mood among people in Eastern European countries, because they can fall back upon the support and comfort of other family members (H7b).

3. Data and measurements

3.1 Generations and gender surveys

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 have information on the most important societal aspects of demographic choices in contemporary, developed societies, focusing on the processes of childbearing, partnership dynamics, home-leaving and retirement. Currently data are available for thirteen European countries. In this study, we use GGS data for the seven countries for which information is available about people's depressive mood: the Eastern European countries Bulgaria (2004), Georgia (2006), Romania (2005) and Russia (2004), and the Western European countries Belgium (2008-2010), France (2005) and Norway (2007-2008).

3.2 Measurements

People's *depressive feelings* are measured using a subscale of the Epidemiological Studies Depression Scale or CES-D (Radloff 1977), which measures the prevalence of depressive symptoms in society.

The CES-D is a 20-item self-report scale composed of four factors: depressed affect, positive affect, somatic disturbances and interpersonal difficulties (Joseph and Lewis, 1995). Here we use the seven items of the depressed affect subscale.

Respondents were asked to tell how frequently they experienced the following feelings during the previous week: "I felt that I could not shake off 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: 0. seldom or never, 1. sometimes, 2. often, 3. most of the time. We computed a scale with a range of 0-21 by adding up the scores of these seven items: higher scores indicate more depressive symptoms. The Cronbach's alpha for this scale is 0.889 and is above 0.844 in each country. We use a cut-off point of 6 to identify people with depressive symptoms, which matches the widely used cut-off point of 16 on the original CES-D scale with a range of 0-60.

The presence of *parental bonds* is measured with the number of surviving parents in the present situation. We distinguish between three categories: 1. both parents are alive, 2. one parent is alive and 3. neither is alive. Respondents who don't know anything about their biological parent(s) have a missing value on this variable.

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

Regarding the *presence of children* (biological, adoptive, foster), we distinguish between people who have 1. no children, 2. children aged twelve years or younger, and 3. children older than twelve years. Respondents who have both younger children (≤ 12 years) and older children (> 12 years) received score 2.

The variable *marital status* has five categories: 1. married, 2. partner, not married, 3. widowed, 4. divorced and 5. single, never married.

We also include a variable indicating whether or not a person experienced a *parental divorce* (0-1).

Health status, educational level, economic activity, and easiness of making ends meet are included because these variables are strongly intertwined with both family ties and depressive mood. Being healthy, highly educated, employed and having no financial difficulties decreases the likelihood of feeling depressed (Gurland, Wilder and Berkman 1988; Lorant et al. 2003). These characteristics also have an impact on choices regarding parenting and partnering. It was found, for example, that more highly educated people were the last to bear children (Rindfuss et al. 1996), whereas fertility rates are highest among women who were housewives and who did not pursue a career for themselves (Di Giulia et al. 1999). People's *subjective health status* is measured with a four-point scale which ranges from a very bad health to a very good health. 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). The

variable *economic activity* has four categories: 1. fulltime employed, 2. part-time employed, 3. homemaker, 4. other. Finally, we control for people's financial situation by taking into account the extent to which people are able to make ends meet. The six-point scale '*easiness of making ends meet*' ranges from 0. with great difficulty to 5. very easily.

For the variables 'parental bonds', 'parental divorce', 'number of siblings' and 'educational level', we created dummy-categories for the missing values (between 1.1%-2.4% of missing values). For the other variables with less than 1.0 % missing values we applied a listwise deletion. Our dependent variable *depressive feelings* has less than 1.0% missing values for all countries, except Norway. In Norway, the depression scale was included in a postal questionnaire, and about 70% of the respondents turned in this questionnaire (which means 30% missing values; unfortunately, no information about the potential selectivity of the Norwegian missing data was available). Table 1 presents the descriptive statistics of the variables used in our analyses per country.

Table 1: Descriptive statistics by country

	Bulgaria		Georgia		Romania		Russia		Belgium		France		Norway		Sig.
	mean	%	mean	%	mean	%	mean	%	mean	%	mean	%	mean	%	
depressive mood (0-1)		15.3%		19.5%		16.1%		17.7%		12.2%		15.5%		13.1%	***
age (20-85)	46.7		46.3		45.7		45.6		47.7		47.0		48.0		***
surviving parents															***
both (0-1)		39.4%		36.1%		40.5%		31.6%		28.5%		42.6%		43.0%	
one (0-1)		24.6%		27.4%		24.0%		29.9%		32.2%		26.0%		23.2%	
none (0-1)		36.0%		36.5%		35.5%		38.4%		39.3%		31.4%		33.8%	
parental divorce (0-1)		7.4%		3.7%		17.9%		15.8%		11.9%		15.4%		14.0%	***
siblings (0-29)	1.4		1.9		2.0		1.6		2.3		2.6		2.1		***
children															***
none (0-1)		(22.3%)		(23.1%)		(24.9%)		(17.5%)		(31.9%)		(26.8%)		(25.0%)	
≤ 12		22.3%		26.2%		27.4%		25.0%		25.0%		28.3%		27.8%	
> 12		55.4%		50.7%		47.7%		57.5%		43.1%		45.0%		47.1%	
marital status															***
married (0-1)		61.7%		56.2%		68.8%		57.8%		56.2%		55.0%		55.3%	
partner, not married (0-1)		11.3%		10.8%		8.5%		18.1%		22.4%		22.3%		23.9%	
widowed (0-1)		6.8%		10.6%		7.2%		8.5%		2.5%		4.4%		3.1%	
divorced (0-1)		3.0%		1.2%		2.8%		4.7%		3.4%		2.7%		5.5%	
single, never married (0-1)		17.2%		21.2%		12.7%		10.9%		15.5%		15.5%		12.3%	
woman (0-1)		51.8%		56.0%		51.9%		60.8%		50.3%		51.7%		53.1%	***
subjective health (1-4)	2.8		2.3		2.8		2.2		3.1		2.9		3.3		***

Table 1: (Continued)

	Bulgaria		Georgia		Romania		Russia		Belgium		France		Norway		Sig.
	mean	%	mean	%	mean	%	mean	%	mean	%	mean	%	mean	%	
educational level (1-3)	1.9		2.1		1.7		2.3		2.0		1.9		2.1		***
economic activity															***
fulltime employment		44.3%		29.9%		46.4%		50.0%		44.5%		45.2%		54.5%	
part-time employment		3.0%		12.2%		5.4%		2.1%		12.9%		8.2%		12.5%	
homemaker		1.0%		14.5%		9.4%		5.0%		6.5%		6.5%		1.8%	
other		51.8%		43.4%		38.8%		42.9%		36.1%		4.1%		31.2%	
ease of making ends meet (0-5)	1.1		1.3		2.1		1.4		3.0		2.5		3.5		***
N	11,960		9,698		11,722		10,774		6,938		9,815		10,199		

Source: Data from the Generations and Gender program (GGP).
Differences between countries were tested statistical by means of F-test (Anova) and Chi-square; *** = $p \leq .001$.

4. Results

We performed logistic regression analyses to study the associations between people's family ties and depressive mood. The analyses are based on 71,106 respondents from seven European countries. To take into account people's country of residence, we decided to include dummy-variables for country, with France as the reference category. In our first analysis we examine to what extent the presence or absence of family ties are related to depressive mood. Subsequently, we take into account possible gender differences in the associations between family ties and depressive mood. Thirdly, we test our expectation that the association between parental and sibling ties and depressive mood is weaker when people have a family of their own. Finally, we examine to what extent the associations between family ties and depressive mood differ for Eastern and Western European countries.

In model 1 of Table 2 we investigate the associations between people's family ties and depressive mood, controlling for people's age[3]. We see that older people are more likely to feel depressed than younger people. In model 2 of Table 2 gender, health, educational level, economic activity, and ease of making ends meet are added as controls. Men, people who are healthy, highly educated, and fulltime employed, and people who have no problems making ends meet are least likely to feel depressed. In both models, we control for people's country of residence. Model 1 shows that the

[3] Although age strongly correlates with number of parents, having (young) children, and health, our results do not substantially change when we exclude age from the analyses.

likelihood of feeling depressed is highest in Eastern European countries, especially in Georgia, whereas it is lowest in the Western European countries Belgium and Norway. In model 2 we see a completely different pattern. When we take into account country differences in people's socio-economic status and health status, people in Eastern European countries are less likely, instead of more likely, to feel depressed than people in the Western European countries.

Table 2: Logistic regression analysis on depressive mood by family ties

	Model 1		Model 2	
	b	SE	b	SE
age	0.012***	.001	-0.004**	.001
Family ties				
surviving parents				
no parents (ref.)				
one	-0.141***	.032	-0.027	.034
both parents	-0.389***	.039	-0.182***	.041
missing	0.105	.067	0.094	.070
parental divorce				
no (ref.)				
yes	0.287***	.031	0.161***	.033
missing	0.301***	.083	0.207*	.087
number of siblings				
no siblings (ref.)				
one or two siblings	-0.056	.030	-0.090**	.032
three or more siblings	0.115***	.033	-0.056	.036
missing	0.078	.084	0.085	.088
children				
no children (ref.)				
children ≤ 12	0.259***	.036	0.00	.038
children > 12	0.120***	.035	-0.133***	.037
marital status				
married (ref.)				
partner, not married	0.614***	.033	0.473***	.035
widowed	1.375***	.035	0.975***	.038
divorced	1.253***	.045	0.937***	.049
single, never married	1.153***	.035	0.891***	.036
Control variables				
woman (0-1)			0.695***	.025
subjective health (1-4)			-0.678***	.015

Table 2: (Continued)

	Model 1		Model 2	
	b	SE	b	SE
educational level				
low (ref.)				
mid			-0.181***	.028
high			-0.226***	.035
missing			-0.163	.113
economic activity				
fulltime employed (ref.)				
part-time employed			0.120**	.045
homemaker			0.145**	.049
other			0.163***	.029
ease of making ends meet (0-5)			-0.364***	.010
country				
France (ref.)				
Bulgaria	0.038	.040	-0.640***	.044
Georgia	0.250***	.039	-0.649***	.045
Romania	0.143***	.038	-0.218***	.041
Russia	0.122**	.039	-0.783***	.044
Belgium	-0.254***	.046	-0.084	.049
Norway	-0.242***	.042	0.378***	.045
N	71,106		71,106	
Nagelkerke R^2	0.102		0.229	

*** = p ≤ .001, ** = p ≤ .01, * = p ≤ .05
Source: Data from the Generations and Gender program (GGP)

Model 1 of Table 2 shows that people who still have two parents are less likely to feel depressed than people who lost both parents. When we control for people's health status and socio-economic characteristics in model 2 this effect decreases, but remains significant. Moreover, model 1 shows that people who lost one parent feel less depressed than people who lost both parents. However, after the inclusion of health status in model 2 - which strongly correlates with parental death - this effect disappears. Hypothesis 1a is partly supported by these findings: the loss of both parents is positively associated with people's depressive mood. Furthermore, Table 2 demonstrates that the experience of a parental divorce increases the likelihood of depressive mood in adult life. The odds for feeling depressed are seventeen percent higher for people who experienced a parental divorce than for people whose parents stayed together (exp(0.161)). Hypothesis 1b is confirmed by this result.

Table 2 demonstrates that having one or two siblings lowers the risk of depressive mood: the odds of feeling depressed are almost nine percent lower for people who have one or two siblings than for people without siblings (exp(-0.090)). This effect only becomes significant when we control for people's socio-economic characteristics in model 2. Having three or more siblings is not significantly associated with the likelihood of depressive mood. Therefore, hypothesis 2, which states that sibling ties protect people against depressive mood is partly supported by our results.

As expected, married people are better off, compared to unmarried people. Unmarried people who have a partner are more likely to feel depressed than married people, but less likely than people without a partner. Hypothesis 3a is supported by this finding. In regard to depressive mood, people who are divorced or widowed do not significantly differ from single people who never married, which does not support hypothesis 3b. When we compare the results from models 1 and 2, we see that the association between marital status and depressive mood decreases strongly after controlling for people's socio-economic characteristics. This is probably because people who are alone tend to have more financial difficulties than people with a partner. As compared to the associations with other family ties, the association between marital status and depressive mood is substantial. The odds of feeling depressed are about one and a half times as large for people without a partner as for married people.

In model 1 of Table 2, we see that people with children - especially young children - are more likely to feel depressed than people without children. People with (young) children are more likely to feel depressed, because they less often work full-time and have more difficulties making ends meet. When we control for the economic and financial situation of people in model 2, we see that the effect of having young children ($\leq$ 12 years) is no longer significant. The effect of having older children becomes negative: people with older children (> 12 years) are less likely to feel depressed than people without children. The odds for feeling depressed are twelve percent lower for people with older children than for people without children (exp(-0.133)). After controlling for people's economic and financial situation, the results show a partial confirmation of hypothesis 4.

In Table 3, we look at possible gender differences in the associations between family ties and depressive mood, by comparing separate models for men and women (controlled for the variables in model 2 of Table 2). In order to know whether the gender differences in the associations between family ties and depressive mood are significant, we computed interactions between gender and the different types of family ties. The last column of Table 3 shows whether the gender differences are significant.

Table 3: The associations between family ties and depressive mood by gender

	Men		Women		Significance of interaction family tie * gender
	b	SE	b	SE	
surviving parents					
no parents (ref.)					
one	-0.014	.061	-0.032	.041	n.s.
both parents	-0.179*	.075	-0.179***	.049	n.s.
missing	0.103	.128	0.089	.085	n.s.
parental divorce					
no (ref.)					
yes	0.131*	.061	0.172***	.040	n.s.
missing	0.204	.141	0.215	.111	n.s.
number of siblings					
no siblings (ref.)					
one or two siblings	-0.195***	.056	-0.043	.039	***
three or more siblings	-0.107	.063	-0.036	.043	n.s.
missing	0.110	.150	0.077	.109	n.s.
children					
no children (ref.)					
children ≤ 12	0.120	.070	-0.041	.046	n.s.
children > 12	-0.095	.067	-0.144***	.044	*
marital status					
married (ref.)					
partner, not married	0.529***	.064	0.462***	.043	n.s.
widowed	1.398***	.083	0.900***	.042	***
divorced	1.379***	.094	0.794***	.057	***
single, never married	1.189***	.069	0.791***	.043	***
N	31,881		39,225		
Nagelkerke R^2	0.212		0.200		

*** = p ≤ .001, ** = p ≤ .01, * = p ≤ .05
Controlled for all the variables in Table 2, model 2
Source: Data from the Generations and Gender program (GGP)

We see that for both men and women, the presence of two parents is associated with a lower likelihood of depressive mood. This association is equally strong for men and women. Moreover, Table 3 shows that parental divorce is similarly associated with depressive mood for men and women: it increases the likelihood of feeling depressed.

Regarding siblings ties, we see that having one or two siblings is associated with a lower likelihood of depressive mood for men, but not for women. This gender difference is significant, as can be seen in the last column of Table 3. Having more than two siblings is not associated with the depressive mood of either men or women. Table 3 also demonstrates that having older children (> 12 years) reduces the likelihood of depressive mood for women, but not for men. This gender difference is significant. Finally, the fourth model demonstrates that the associations between having no partner and depressive mood are stronger for men than for women. People who are widowed, divorced or never married are more likely to feel depressed than married people. These associations are stronger for men than for women.

Summarizing, we can conclude that family ties are associated with depressive mood for both men and women. However, there are some notable gender differences but these are not in line with our hypothesis 5, in which we expected a generally stronger association between the presence and break-up of family ties with women's depressive mood.

In Table 4 we present the associations between parental ties and sibling ties with depressive mood for people with and without a partner and/or children, controlled for the variables in model 2 of Table 2. For reasons of simplicity and clarity, we decided to only show the main effects of parental ties and sibling ties on depressive mood and the interactions with ties with a partner and children.

Table 4: The associations between parental ties and sibling ties, and depressive mood for people who do (not) have a partner / children

	Partner		Children	
	b	**SE**	**b**	**SE**
surviving parents				
no parents (ref.)				
one parent	0.026	.051	-0.255***	.071
* partner (0-1)	-0.102	.059		
* children ≤ 12			0.100	.111
* children > 12			0.271***	.076
both parents	-0.343***	.058	-0.544***	.071
* partner (0-1)	0.218***	.058		
* children ≤ 12			0.277**	.104
* children > 12			0.540***	.078
number of siblings				
no siblings (ref.)				
one or two siblings	-0.062	.047	-0.186**	.062
* partner (0-1)	-0.060	.063		

Table 4: (Continued)

	Partner		Children	
	b	SE	b	SE
* children ≤ 12			0.065	.101
* children > 12			0.148*	.074
three or more siblings	-0.056	.054	-0.077	.073
* partner (0-1)	0.026	.070		
* children ≤ 12			0.049	.112
* children > 12			0.021	.085
N = 71,106				

*** = p ≤ .001, ** = p ≤ .01, * = p ≤ .05
Controlled for all the variables in Table 2, model 2
Source: Data from the Generations and Gender program (GGP)

First, Table 4 shows that people with both parents are less likely to feel depressed than people without parents. However, this association is much smaller for people with a partner than for people without a partner. This finding is in accordance with the substitution hypothesis (6a). Regarding the interaction between parental ties and parenthood, we see a similar picture. Only for people without children is the association between having one parent and depressive mood significant. Also, the association between having both parents and depressive mood becomes weaker when people have young children (≤ 12 years) and completely disappears when people have older children (> 12 years). Apparently, the importance of parents for wellbeing decreases when people start a family of their own. Furthermore, Table 4 shows that the effect of having siblings is not different for people with a partner and without a partner. In accordance with the substitution hypothesis, having one or two siblings decreases people's likelihood of depressive mood, but not when they have older children. There is no association between having three or more siblings and depressive mood, whether people do or do not have children. Concluding, the findings in Table 4 offer more support for the substitution hypothesis (6a) than for the reinforcement hypothesis (6b).

Finally, in Table 5, we examine whether associations between family ties and depressive mood differ between Eastern and Western Europe. We compare separate models for the Eastern and Western European countries in our dataset, controlling for the variables in model 2 of Table 2. In order to know whether the East-West differences in the associations between family ties and depressive mood are significant, we computed interactions between the dichotomous variable *Western Europe* and the different types of family ties. The last column of Table 5 shows whether the East-West differences are significant.

Table 5: The associations between family ties and depressive mood in Eastern and Western European countries

	Eastern Europe		Western Europe		Significance of interaction family tie * West
	b	SE	b	SE	
surviving parents					
no parents (ref.)					
one	-0.001	.043	-0.052	.057	n.s.
both parents	-0.172***	.052	-0.142*	.067	n.s.
missing	0.064	.095	-0.016	.113	n.s.
parental divorce					
no (ref.)					
yes	0.249***	.042	0.156**	.054	n.s.
missing	0.138	.144	0.199	.113	n.s.
number of siblings					
no siblings (ref.)					
one or two siblings	-0.104**	.037	-0.006	.063	n.s.
three or more siblings	-0.052	.043	0.039	.065	n.s.
missing	-0.007	.107	0.272	.158	n.s.
children					
no children (ref.)					
children ≤ 12	-0.001	.051	-0.023	.057	n.s.
children > 12	-0.187***	.048	-0.071	.059	n.s.
marital status					
married (ref.)					
partner, not married	0.513***	.046	0.286***	.054	***
widowed	1.010***	.042	0.745***	.083	***
divorced	1.036***	.063	0.840***	.078	***
single, never married	0.974***	.047	0.663***	.058	***
N	44,154		26,952		
Nagelkerke R^2	0.244		0.182		

*** = p ≤ .001, ** = p ≤ .01, * = p ≤ .05
Controlled for all the variables in Table 2, model 2
Source: Data from the Generations and Gender program (GGP)

First, we see that the negative association between parental ties and depressive mood is equally strong for people in Eastern and Western Europe. Also the effect of parental divorce is similar for people living in the East or West: it increases the

likelihood of feeling depressed. Regarding sibling ties, Table 5 shows that the negative association between having one or two siblings and depressive mood is only significant for people living in Eastern Europe. However, the last column of Table 5 demonstrates that this East-West difference is not significant. We see something similar with regard to ties with children: the negative association between having older children and depressive mood is only significant for people in Eastern Europe. However, this East-West difference is not significant. Finally, Table 5 demonstrates that ties with a partner are more strongly associated with people's depressive mood in the Eastern European countries. Unmarried people with a partner are more likely to be depressed than married people, but this is especially the case in our Eastern European countries. Furthermore, we see that being single (widowed, divorced or never married) is more strongly associated with depressive mood in the Eastern European countries. These effects are approximately 30% smaller in our Western European countries. However, all effects remain significant.

Our results only partly support hypothesis 7a. The associations between parental ties, sibling ties and ties with children and depressive mood do not differ significantly between the Eastern and Western European countries in our study. However, the presence of a partner/spouse appears to be more important for the wellbeing of people in Eastern Europe. Hypothesis 7b is not supported by our results: the break-up of family ties, caused by death or divorce, is more instead of less strongly associated with depressive mood among people in Eastern European countries.

5. Conclusion and discussion

In this article, we examined how family ties are associated with depressive feelings of men and women in Eastern and Western Europe. On the basis of the resources perspective, we argued that intimate family ties provide people with material and non-material support and affection, and therefore reduce the risk of depressive mood. The break-up of family ties, caused by death or divorce, can foster depressive mood. The resources perspective is partly supported by our findings. People with two surviving parents are less likely to feel depressed than are people without surviving parents. The experience of a parental divorce, as distinct from loss of a parent, is also associated with people's depressive mood in adult life. Having one or two siblings decreases people's depressive feelings; however, this is not the case when people have more than two siblings. Possibly, the buffering effect of having siblings is restricted to having only a few siblings because having more than two siblings renders the contact with each of them less personal or intimate, preventing them from being an important source of support. Moreover, people with a partner, and especially married people, are less likely

to feel depressed than people without a partner. Having children fosters people's depressive mood. However, when we take into account the financial situation of people, having younger children (≤ 12 years) is not associated with depressive mood, and having older children (> 12 years) diminishes depressive feelings. When we compare the relative strength of the associations between the different types of family ties and depressive mood, we can conclude that marital status shows the strongest association of all types of family ties.

We also examined under which conditions and for which people family ties are more strongly associated with depressive mood. Regarding gender differences, we assumed that family ties would have a stronger influence on the frame of mind of women than men, because of the feminine gender role of family caretaker. Our research findings did not support this assumption. We found that the presence of older children diminishes women's but not men's depressive mood; a possible explanation is that women's ties with their older children are closer - and thereby potentially a stronger source of support - compared with men's ties with their adolescent children. Having one or two siblings is associated with a lower likelihood of depressive mood for men but not for women; the buffering effect on mental wellbeing provided by a small number of siblings may be stronger for men than for women because for women the ties with their own children serve as a greater source of support compared with men's ties with their own children. Moreover, having a partner is more strongly associated with the depressive mood of men than of women, which is in line with the existing literature. Our expectation that family ties would generally be more strongly associated with women's than with men's mood, was not confirmed by our data.

Our findings support the hierarchical model of family relations, as proposed by Cantor (1979). Parental ties, and especially sibling ties, are less strongly associated with people's depressive mood than are ties with a partner and children. Moreover, parental ties are less strongly associated with depressive mood when people have a partner and children. Sibling ties only protect people from depressive mood when they do not have older children. 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 association between parental and sibling ties and mental wellbeing is stronger when people have children).

We have found that the association between family ties and depressive mood is partly similar and partly different in the Eastern and Western European countries in our study. The association between parental ties, sibling ties and ties with children, and depressive feelings does not differ significantly between East and West. However, the importance of having a partner to people's wellbeing differs greatly between the Eastern and Western countries in our dataset. Being married or having a partner reduces people's depressive mood to a larger extent in Eastern than in Western Europe.

Apparently the specific support a partner can provide protects people living in Eastern Europe to a greater extent than people from Western European countries. The more extended welfare state in Western European countries on which single or widowed people can rely as an "alternative source of support" may be at the background of this difference.

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 changes in the availability of family ties over time. Second, it would have been interesting to also study happiness as another aspect of mental wellbeing, since certain family ties, such as having children, can simultaneously foster depressive mood and happiness (Hansen, Slagsvold and Moum 2009); however, data restrictions prevented us from doing so.

Although we did not dispose of longitudinal data, our research results do provide some indications about how demographic changes, for instance, those affecting family size - the number of children or siblings - might be associated with mental wellbeing. Whereas the association between sibling ties and people's mood is weak, the presence or absence of older children does show a relationship with people's depressive mood; childlessness, especially in old age, may foster poor psychological wellbeing. In line with other studies, we found the partner tie to be of great importance for people's mood. The demographic trend of increasing partnership dissolution may therefore have large consequences for people's psychological wellbeing.

A final word on cross-national comparisons seems to be in order here. As Therborn (2004) argues on the basis of his historical overview, a variety of family patterns across Europe can be distinguished which do not necessarily correspond with national boundaries. Cultural and structural differences between European regions may be at the background of such differences in family patterns, rendering North-South, and East-West comparisons too monolithic and simplistic. Our results indeed show similarities as well as differences between Western and Eastern European countries in the associations between family ties and mental wellbeing. More research is needed to interpret and explain the precise nature and origin of these patterns.

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