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Multi-Functional Ties and Well-Being in Family Networks before and after Parental Divorce

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Abstract: This family network study analyses family relationships and well-being from the perspectives of 144 children, parents, grandparents, aunts, and uncles in 41 families. The study investigates whether multi-functional family ties, i.e., ties that serve multiple needs simultaneously, are associated with higher well-being, and whether these multi-functional ties are especially important in families that have experienced parental divorce. Additionally, the study examines whether receiving such ties from nuclear or extended family members contributes to well-being. The results of the study indicate that receiving multi-functional ties is associated with higher well-being, especially when these ties are received from one's nuclear family members. When comparing retrospective reports with prospective reports, family members from families that experienced parental divorce report an increase in well-being over time. However, this effect cannot be attributed to a change in the number of multi-functional ties received.

Keywords: family networks; multi-functional family relationships; well-being; parental divorce; nuclear/extended kin; safety net; resilience

1. Introduction

Family networks are often compared to safety nets (de Bel and Van Gasse 2020; Eggebeen and Davey 1998). The network resembles a dynamic web of interconnected relationships that can be activated or intensified based on the network's needs (Riley 1983; Riley and Riley 1993), enabling support ties within the network to be mobilized. The safety net can be activated in response to various family events, but this paper specifically examines the activation of the safety net in the process of parental divorce. Ties to extended family members, like grandparents and aunts/uncles, may be mobilized to support the divorcing parents and their children.

However, divorce is also known to alter the network's structure (e.g., Ahrons 2007; Anspach 1976; Johnson 1989; Spicer and Hampe 1975). Family networks of families who have experienced parental divorce are more disjoint, displaying fewer contacts between paternal and maternal kin, compared to families who have not experienced parental divorce (de Bel et al. 2023). Ties to former in-laws, and consequently ties between grandchildren and grandparents, are therefore at risk of becoming less active or even inaccessible following divorce, which may complicate the activation of the safety net.

The family network, however, is dynamic, and active family relationships can change to continue fulfilling their functions. This paper aims to examine whether the relationships that remain accessible after parental divorce start to serve multiple functions and, therefore, contribute to family resilience. Specifically, it studies whether multi-functional family ties, i.e., ties that serve multiple needs simultaneously, are associated with higher well-being. The study also explores whether multi-functional ties are particularly important for well-being in families that have experienced parental divorce. Additionally, it investigates whether receiving such ties from nuclear or extended family members affects well-being.

The contribution of this study is twofold. While previous studies have frequently theorized about families as systems or networks, families are not often analysed empirically as such. Moreover, the relative importance of nuclear and extended kin, especially when it comes to aunts and uncles (Furstenberg 2020; Milardo 2009), has been hardly explored in previous studies. One reason for this research gap is that data in which family relationships are reported by multiple—ideally all—family members in the family system are scarce (but see Van Parys et al. 2017; Vogl et al. 2018 for the qualitative exceptions). This paper empirically studies families as networks and disentangles the relative importance of nuclear and extended kin while considering family members' own positions in the network. It is the first to analyse data from the Lifelines Family Ties Study on 144 children, parents, grandparents, aunts, and uncles from 41 families reporting about their current and past family relationships (de Bel and van Duijn forthcoming).

1.1. Multi-Functional Ties and Well-Being

The quality and strength of family relationships contribute to a multitude of beneficial individual outcomes such as well-being (e.g., Merz et al. 2009; Polenick et al. 2018; Thomas et al. 2017). The contribution depends on the content of the family relationship (e.g., affection or instrumental support) and on the family members involved (Gilligan et al. 2017; Merz et al. 2009).

According to the Social Production Function (SPF) theory, individuals strive for the optimization of two universal goals: physical and social well-being (Lindenberg 1996; Ormel 2002; Ormel et al. 1997, 1999). Comfort and stimulation are the needs required to achieve physical well-being, while status, behavioural confirmation, and affection are the needs required for social well-being. This study focuses on social well-being.

An individual's social relationships, with family and friends, can supply affection and various forms of support that are the resources to fulfil the three social needs of status, behavioural confirmation, and affection (Steverink and Lindenberg 2006). Relationships in which multiple types of relational dimensions are transmitted are called multi-functional and are considered to be of high value for social well-being (Lindenberg 1996; Ormel 2002; Ormel et al. 1997, 1999). The first hypothesis of this study is therefore that—regardless of whether families experienced parental divorce—multi-functional family relationships are positively associated with family members' social well-being (H1).

1.2. Divorce

Social production function theory has often been applied in the context of aging (Steverink and Lindenberg 2006). Apart from the needs required for physical well-being, it may become more challenging at older ages to fulfil the three social needs of status, behavioural confirmation, and affection required for social well-being. For instance, when people retire, they may experience a loss of social status, or when they become a widow, they may lose an important source of affection. The theory can, however, also be applied in the context of parental divorce.

When parents divorce, it is generally anticipated that a sense of loyalty toward one's own kin will emerge, making continued contact with ex-kin difficult or even impossible (Lopata 1999). Previous research has indeed shown that, compared to non-divorced families, contact with former in-laws is less frequent in divorced families (de Bel et al. 2023). In other words, when parents are getting divorced, they have to give meaning to their new role as a single parent. This adjustment may not only entail a loss of affection but also a potential loss of status and behavioural confirmation. Similarly, children no longer have both parents available in the household, which can lead to a reduction in affection, whereas extended family members also face the challenge of losing an in-law family member. Additionally, the needs of family members themselves may become more pronounced as they navigate the divorce process.

Families exhibit resilience when they function as a cohesive system and manage to recover from such adversities (Walsh 2003, 2016). A resilient response in the context of

divorce would involve reshaping one's remaining family ties to fulfil the social needs required for social well-being (Ormel et al. 1997; Zettel and Rook 2004). By strengthening ties through additional relational dimensions, family members' social needs can still be met, preserving social well-being (Steverink and Lindenberg 2006).

Consider, for example, a uni-functional tie between a parent and a grandparent before the divorce, where, say, the grandparent provided emotional support to the parent. After the parental divorce, the tie might become multi-functional if, in addition to emotional support, the grandparent also offers instrumental support to the parent by taking on some childcare tasks. This study therefore hypothesizes that multi-functional ties are more strongly and positively associated with well-being when families have experienced parental divorce (H2).

1.3. Nuclear and Extended Family Members

Despite the joint nature of the family network, it does consist of smaller, partially overlapping subsystems in which family members play different roles (de Bel and Van Gasse 2020; Widmer 2016). For example, parents fulfil the role of parents in the subsystem with their own children, but they assume the role of children in the subsystem with their own parents and siblings. Moreover, after parental divorce, these roles are likely to change, as well as who is considered as a family member (Fang and Poortman 2023). Consequently, to understand the importance of relationships for individual family members' well-being, these relationships should be interpreted from the perspective of family members themselves.

The importance of relationships for individual family members' well-being is dependent on their family roles and the position they hold within a certain kin hierarchy (de Bel et al. 2023; Lee et al. 2003; Rossi and Rossi 1990), in which interactions with close kin are preferred, or in this case, have a greater impact on one's well-being, compared to interactions with distant kin and non-kin (Hamilton 1964; Tanskanen and Danielsbacka 2019). For example, the well-being of children will be more strongly affected by their relationships with their parents than by their relationships with their aunts and uncles. However, these aunts and uncles, i.e., the parents' siblings, are expected to more strongly affect parents' well-being compared to, for example, their parents-in-law. The last hypothesis, therefore, is that an individual's own nuclear family members—compared to their own extended family members—are expected to contribute to their well-being to the greatest extent (H3). No differences are expected between families that have experienced divorce and those that have not.

2. Materials and Methods

The Lifelines Family Ties data are multi-actor family network data collected between Autumn 2017 and Spring 2019 (de Bel and van Duijn forthcoming). The data were collected to study changes in family networks after parental divorce compared to 5–10 years earlier. Families were recruited from Lifelines, which is a multi-disciplinary prospective population-based cohort study examining in a unique three-generation design of the health and health-related behaviours of 167,729 individuals living in the North of the Netherlands (Stolk et al. 2008). Lifelines Family Ties consist of 43 family networks, in which a total of 160 children, parents, grandparents, aunts, uncles, and stepfamily members reported on their current and past family relationships with 524 family members, as well as on their well-being (de Bel and van Duijn forthcoming).

2.1. Measurements

2.1.1. Well-Being

Well-being was measured using the social part of the Social Production Function (SPF-IL) scale (Nieboer et al. 2005). It measures how well-being is influenced by people in the respondent's environment, who are not necessarily family members. The measure-

ment contains 9 items focusing on affection, behavioural confirmation and status (see Appendix A).

2.1.2. Family Ties

Based on the dimensions outlined in the solidarity–conflict model (Bengtson et al. 2002; Silverstein et al. 2010), Lifelines Family Ties distinguished several relational dimensions. This study analysed all available affection and support dimensions (emotional, material and instrumental). Social network studies commonly distinguish directionality of ties. Meaning that a tie, for instance support, can be sent or received from one network member to the other. In this study, the focus is on receiving ties.

Each relational dimension was measured with two questions. Affection received is measured with the questions: "With whom do you have a strong bond?" and "From whom do you receive affection (love, warmth, sympathy)?" Emotional support received is measured with the questions: "From whom do you receive advice?" and "With whom can you talk about your worries or problems?". Material support is measured with the questions: "From whom do you receive presents? (Do not only consider birthday presents, but also food, hobby materials, clothes, or other goods that your family members no longer use)" and "From whom do you receive financial support? (This means, who gives you occasional pocket money or who pays your bills or study costs?)". Instrumental support is measured with "Which family members help you with administrative tasks? (For example, with taxes, school assignments, or computer issues)" and "Which family members help you in the household? (For example, with cleaning, cooking, going places, doing groceries)". For each of these questions, participants selected their choice of family members from a list of all family members.

A tie received from a particular family member is scored as present (1) if this family member was selected for at least one of the two items. This definition of a tie considers that different family roles are related to various forms of affection and support. For example, children may receive money from their parents but gifts from a stepparent, which are both forms of material support.

Multi-functional relationships between family members are defined as present (1) if at least one of the affection and emotional support ties is present and at least one of the material and instrumental support ties is present. Affection and emotional support are closely related and together represent the "emotional dimension" of multi-functional ties. Instrumental and material support are also closely related. Together they represent the "practical dimension" of multi-functional ties. The total number of affection, emotional support, material support, instrumental support, and multi-functional ties received is calculated by summing ties received from all family members.

The definition of nuclear and extended family depends on the family role of the respondent. For example, the nuclear family of children is formed by siblings and their parents, whereas children's extended family includes paternal and maternal aunts, uncles, and grandparents. After parental divorce, stepfamily members, i.e., parents' new partners and their children, are added to children's extended family members. The complete definition of nuclear and extended family members for all family member roles (i.e., also for parents, grandparents, aunts, uncles) is provided in Appendix B.

2.1.3. Predictor and Control Variables

Other predictor variables included in the model are time (current time, t1 = 0.5; pre-divorce/5–10 years ago, t0 = −0.5) and parental divorce (0 = no, 1 = yes). Because the results may depend on family members' roles, gender (0 = male, 1 = female), and dummy variables for the child, grandparent, or aunt/uncle (0 = no, 1 = yes; with parents as the reference group) are also added as predictor variables to the model. Considering that receiving support from family members is easier when they live close enough to visit (Mulder and van der Meer 2009), geographical proximity ("Who lives nearby, i.e., within a 10 min travel distance") is also included in the model. Similar to the relational dimensions,

the sum of the number of family members living nearby is obtained. Because network size also affects the availability of support, family size, i.e., the number of family members mentioned in the survey, is also added to the models. The descriptive statistics of these measurements are presented in Table 1.

Table 1. Descriptive statistics.

	Divorced (*N* = 90)				Non-Divorced (*N* = 54)			
	T0		T1		T0		T1	
	Mean	**S.D.**	**Mean**	**S.D.**	**Mean**	**S.D.**	**Mean**	**S.D.**
Well-being	2.77 *	(0.53)	2.95	(0.51)	2.77 **	(0.44)	2.85	(0.46)
Multi-functional ties	5.46	(3.26)	5.31	(3.23)	6.13	(3.39)	6.33	(3.25)
Multi-functional ties NF	4.03	(2.71)	4.02	(2.89)	4.30	(2.34)	4.41	(2.28)
Multi-functional ties EF	1.37	(1.92)	1.12	(1.70)	1.80	(1.93)	1.89	(1.77)
Affection	7.58	(3.54)	7.71	(3.65)	7.31	(3.26)	7.41	(3.12)
Affection NF	5.23	(3.12)	5.33	(3.39)	4.74	(2.39)	4.87	(2.29)
Affection EF	2.10	(2.16)	1.94	(2.41)	2.41	(1.92)	2.37	(1.90)
Emotional support	4.38	(2.74)	4.66	(2.70)	4.87	(2.77)	5.09	(2.75)
Emotional support NF	3.50	(2.11)	3.76	(2.39)	3.81	(2.22)	4.00	(2.06)
Emotional support EF	0.82	(1.65)	0.76	(1.54)	1.04	(1.37)	1.07	(1.37)
Material support	5.62	(3.63)	5.38	(3.38)	6.94	(3.62)	6.96	(3.54)
Material support NF	3.99	(2.88)	4.00	(2.99)	4.52	(2.42)	4.63	(2.41)
Material support EF	1.58	(2.21)	1.20	(1.79)	2.39	(2.15)	2.30	(1.89)
Instrumental support	1.43	(1.66)	1.74	(1.53)	1.81	(1.54)	2.04	(1.59)
Instrumental support NF	1.30	(1.47)	1.50	(1.33)	1.59	(1.30)	1.93	(1.48)
Instrumental support EF	0.13	(0.50)	0.21	(0.55)	0.22	(0.57)	0.11	(0.32)
Nuclear family size	6.72	(4.23)	6.16	(4.07)	5.54	(2.34)	5.54	(2.34)
Extended family size	3.66	(2.96)	2.92	(3.37)	3.70	(2.58)	3.70	(2.58)
Family size			13.16	(4.14)			11.94	(2.61)
Proximate			3.30	(3.47)			4.93	(3.72)
Proximate NF			2.20	(2.18)			3.17	(2.38)
Proximate EF			0.53	(1.34)			1.52	(1.92)
			Proportion				Proportion	
Gender (1 = female)			0.64				0.63	
Parent (1 = yes)			0.29				0.35	
Child (1 = yes)			0.26				0.17	
Grandparent (1 = yes)			0.13				0.26	
Aunt/uncle (1 = yes)			0.32				0.22	

NF = nuclear family; EF = extended family; * *N* = 84; ** *N* = 52.

2.2. Analytical Sample

Out of the 160 family members who began the survey, 153 family members reported on their well-being at least at one of the two time points. Additionally, 145 family members provided information about the number of received multi-functional ties. Due to the inability to distinguish between one's nuclear and extended family members for stepfamily members before the parental divorce, the analytical sample size decreased to 144 family members. Of these 144 family members, 136 family members reported on their well-being at two time points and 8 family members reported on their well-being only at the current time point, which results in an analytical sample of 144 family members and 280 observations. The remaining variables, as described earlier, had complete information. The analytical sample of 144 family members from 41 families consists of 90 family members from 23 families that experienced divorce and 54 family members from 18 families that did not experience divorce. Among the 144 family members, there are 45 parents, 32 children, 26 grandparents, and 41 aunts or uncles. Of these, 32 family members are paternal (i.e., father, paternal grandparent, or paternal aunt/uncle), and 80 family members are maternal (i.e., mother, maternal grandparent, or maternal aunt/uncle). In case divorced partners

re-partnered each other, they were coded as divorced. In robustness checks, they were coded as non-divorced, which did not substantially affect the results.

2.3. Plan of Analysis

The data were analysed using a three-level repeated measures model (see, e.g., Snijders and Bosker 2012) in the RStudio Software. The two measurements are nested within 144 individuals, and these individuals are further nested within 41 families. The first model represents the null model, including only time as an explanatory variable. The contrast coding of time implies that the intercept refers to the average over the two time points. To investigate whether multi-functional family relationships are positively associated with family members' social well-being, regardless of whether families experienced parental divorce (Hypothesis 1), the number of multi-functional ties received was added to the model. Subsequently, other theoretically important predictor variables, including divorce, receiver's role, and gender, were added to the model. The final model included the control variables family size and proximity.

To test whether multi-functional ties are more strongly positively associated with well-being when families experienced parental divorce (Hypothesis 2), a three-way interaction of time, divorce, and multi-functional ties received (time $\times$ divorce $\times$ MF) should be added to the model. However, the sample size limitations prevented such detailed distinctions. Therefore, two two-way interactions were added to the model: one to examine whether the well-being of family members from families that experienced divorce is higher at t1 (time $\times$ divorced), and another to assess whether the effect of multi-functional ties is higher at t1 (time $\times$ MF). Adding the two-way interaction testing whether the effect of multi-functional ties is stronger in families that experienced parental divorce (divorce $\times$ MF) did not alter the main effect of multi-functional ties received in model 5. However, the main effect of multi-functional ties received did decrease when family size and proximity were added in model 6 (results available upon request). In summary, because models with additional interaction variables did not show improvements in terms of model fit and did not yield well-interpretable effects, model 6 (Tables 2 and 3) is considered the final model to test the hypotheses.

Finally, to study whether one's own nuclear family members, compared to one's own extended family members, contribute to family members' well-being to the greatest extent (Hypothesis 3), the model-building procedure was repeated, replacing the total number of multi-functional ties with the number of multi-functional ties received from nuclear and extended family members. Likewise, in these models, the control variables were replaced by their nuclear and extended family counterparts.

Table 2. Three-level repeated measures analyses of family members' social well-being (SPF): REML Estimates of Unstandardized coefficients (N = 144 family members, N = 280 observations).

	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
	Estimate	S.E.	Estimate	S.E.	Estimate	S.E.	Estimate	S.E.	Estimate	S.E.	Estimate	S.E.
Fixed part												
Intercept	2.833 ***	(0.042)	2.652 ***	(0.068)	2.644 ***	(0.107)	2.643 ***	(0.107)	2.645 ***	(0.107)	2.529 ***	(0.156)
Time	0.150 ***	(0.034)	0.150 ***	(0.034)	0.149 ***	(0.034)	0.072	(0.055)	−0.029	(0.086)	−0.028	(0.086)
MF ties received			0.032 ***	(0.010)	0.028 **	(0.009)	0.029 **	(0.009)	0.029 **	(0.009)	0.026 **	(0.010)
Divorce (1 = yes)					−0.013	(0.079)	−0.015	(0.079)	−0.014	(0.079)	−0.022	(0.081)
Gender (1 = female)					−0.100	(0.067)	−0.101	(0.067)	−0.103	(0.067)	−0.108	(0.068)
Receiver role (parent is ref.)												
… is child					0.502 ***	(0.087)	0.503 ***	(0.088)	0.505 ***	(0.088)	0.506 ***	(0.088)
… is grandparent					−0.112	(0.098)	−0.114	(0.098)	−0.118	(0.098)	−0.113	(0.099)
… is aunt/uncle					0.017	(0.086)	0.018	(0.086)	0.014	(0.086)	−0.013	(0.093)
Time × divorce							0.124 †	(0.070)	0.139 *	(0.070)	0.138 *	(0.070)
Time × MF									0.016	(0.011)	0.016	(0.011)
Family size											0.012	(0.012)
Proximity											−0.0001	(0.010)
Random part												
Variance level 3 (family) and s.d.	0.011	(0.105)	0.007	(0.086)	0.015	(0.121)	0.014	(0.120)	0.014	(0.120)	0.013	(0.113)
Variance level 2 (family members) and s.d.	0.161	(0.401)	0.145	(0.380)	0.095	(0.308)	0.096	(0.310)	0.096	(0.310)	0.099	(0.315)
Variance level 1 (time) and s.d.	0.077	(0.278)	0.080	(0.282)	0.080	(0.283)	0.079	(0.280)	0.078	(0.279)	0.078	(0.279)
Log Likelihood (ML)	−157.7		−152.6		−131.8		−130.2		−129.0		−128.4	

Note: Standard errors in parentheses † p < 0.10, * p < 0.05, ** p < 0.01, *** p < 0.001.

Table 3. Three-level repeated measures analyses of family members' social well-being (SPF): REML Estimates of Unstandardized coefficients (*N* = 144 family members, *N* = 280 observations).

	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
	Estimate	S.E.	Estimate	S.E.	Estimate	S.E.	Estimate	S.E.	Estimate	S.E.	Estimate	S.E.
Fixed part												
Intercept	2.833 ***	(0.042)	2.673 ***	(0.069)	2.613 ***	(0.108)	2.613 ***	(0.108)	2.616 ***	(0.108)	2.641 ***	(0.150)
Time	0.150 ***	(0.034)	0.157 ***	(0.034)	0.148 ***	(0.034)	0.073	(0.055)	−0.028	(0.087)	−0.018	(0.085)
MF ties received nuclear family			0.017	(0.013)	0.040 **	(0.013)	0.040 **	(0.013)	0.039 **	(0.013)	0.023 †	(0.013)
MF ties received extended family			0.060 ***	(0.016)	0.010	(0.018)	0.013	(0.018)	0.015	(0.018)	0.018	(0.019)
Divorce (1 = yes)					−0.021	(0.079)	−0.021	(0.079)	−0.017	(0.079)	−0.011	(0.081)
Gender (1 = female)					−0.106	(0.067)	−0.107	(0.067)	−0.109	(0.067)	−0.114 †	(0.066)
Receiver role (parent is ref.)												
...is child					0.568 ***	(0.103)	0.562 ***	(0.103)	0.555 ***	(0.103)	0.629 ***	(0.126)
...is grandparent					−0.094	(0.098)	−0.097	(0.098)	−0.105	(0.098)	−0.041	(0.103)
...is aunt/uncle					0.025	(0.085)	0.025	(0.085)	0.020	(0.085)	0.072	(0.095)
Time × divorce							0.122 †	(0.070)	0.142 *	(0.071)		
Time × MF nuclear family									0.013	(0.013)	0.014	(0.013)
Time × MF extended family									0.024	(0.020)	0.016	(0.020)
Family size											−0.032	(0.020)
Family size nuclear family											0.071 ***	(0.020)
Family size extended family											0.004	(0.018)
Proximity nuclear family											−0.035 *	(0.018)
Proximity extended family											0.061 *	(0.025)
Random part												
Variance level 3 (family) and s.d.	0.011	(0.105)	0.011	(0.105)	0.014	(0.119)	0.014	(0.117)	0.014	(0.120)	0.010	(0.099)
Variance level 2 (family members) and s.d.	0.161	(0.401)	0.134	(0.366)	0.093	(0.305)	0.095	(0.308)	0.095	(0.308)	0.089	(0.299)
Variance level 1 (time) and s.d.	0.077	(0.278)	0.081	(0.284)	0.080	(0.284)	0.079	(0.281)	0.079	(0.281)	0.076	(0.276)
Log Likelihood (ML)	−157.7		−150.1		−130.5		−129.0		−127.6		−117.7	

Note: Standard errors in parentheses † $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$.

3. Results

Table 1 indicates that the average well-being in both types of families is slightly higher at t1 than at t0, with a more noticeable increase among members who experienced parental divorce. The number of multi-functional ties received at both time points is higher in families that did not experience parental divorce and seems to have changed very little between the two time points. Affection is the tie received from most family members in both types of families, while instrumental support is received from the fewest members overall and is slightly lower for families that experienced divorce, both before and after the divorce. Family members report receiving more affection and emotional, material, and instrumental support from their nuclear family members compared to their extended family members. This pattern is consistent for both types of families and for the two periods reported, with only minor changes in the means at the two time points. Thus, at this point, there is no initial indication of a significant change in the safety net, as measured by the number of family members perceived as providing multi-functional relationships, among families that experienced parental divorce.

Table 2 (Model 6) shows that the number of received multi-functional relationships (MF) has a slight positive effect ($b = 0.026$; S.E. = 0.010) on well-being at t0, which is slightly stronger at t1 compared to t0 ($b = 0.016$; S.E. = 0.011). Well-being after divorce is higher (time $\times$ divorce: $b = 0.138$, S.E. = 0.070), whereas it changes negligibly for those who did not experience divorce. Children scored 0.506 (S.E. = 0.088) higher on well-being compared to parents. Grandparents ($b = -0.113$; S.E. = 0.099) and aunts and uncles ($b = -0.013$; S.E. = 0.093) did not report different scores compared to parents.

The results of the analyses involving multi-functional ties received from nuclear and extended family members are presented in Table 3. Model 6 shows that multi-functional ties received from nuclear family members are positively associated with family members' well-being ($b = 0.023$, S.E. = 0.013). The coefficient is somewhat larger than that of multi-functional ties from extended family members. This effect is significant in model 5 ($b = 0.039$, S.E. = 0.013) but becomes insignificant in model 6 due to the inclusion of the size and proximity. The effect of multi-functional ties received from nuclear family members does not differ at t0 compared to t1.

Table 3 also shows that the size of the nuclear family is positively related to well-being, meaning that family members from larger families score 0.071 (S.E. = 0.020) higher on well-being. Family members indicating a higher number of proximate nuclear family members score -0.035 (S.E. = 0.018) lower on well-being, while family members indicating a higher number of proximate extended family members score 0.061 (S.E. = 0.025) higher on well-being. Similar to Table 2, the differences in social well-being are most pronounced for children and family members in divorced families at t1.

In additional analyses (available upon request), it was examined whether the results of the final models, using the number of multi-functional ties received as the main explanatory variable for well-being, differed when compared to similar analyses with "single" ties, such as affection, emotional support, material support, and instrumental support analysed separately. Receiving affection, emotional support, and material support had a small positive effect on well-being. Well-being increased over time when family members received emotional support. The set of models distinguishing between nuclear and extended family showed that well-being increased over time when receiving emotional support from extended family members, whereas well-being decreased over time when instrumental support was received from extended family members. Although it was not directly tested whether receiving emotional support ties had a stronger effect on well-being than receiving multi-functional relationships, these results may indicate that receiving emotional support is a stronger indicator of the safety net.

4. Discussion

In light of the changing family networks after parental divorce, this paper aimed to study whether multi-functional family relationships contribute to family resilience, i.e.,

whether they maintain or increase family members' well-being. The first hypothesis was that, regardless of whether families experienced parental divorce, multi-functional family relationships are positively associated with family members' social well-being (Hypothesis 1). The results indeed show that family members' well-being is higher when receiving multi-functional ties. However, this association is relatively small, explaining approximately 10% of the variance at the individual level. While previous research primarily discussed the theoretical value of multi-functional ties for well-being (Lindenberg 1996; Ormel 2002; Ormel et al. 1997, 1999), this study was the first to empirically apply it on the context of divorce.

Secondly, it was hypothesized that multi-functional ties are more strongly positively associated with well-being when families experienced parental divorce (Hypothesis 2). The argument was that if relationships that were still accessible following divorce started to fulfil multiple functions, this could be seen as a resilient response. The results indicate that the increase in well-being over time is higher for members of families that experienced divorce compared to those that did not experience divorce. However, this effect cannot be solely attributed to a change in the number of multi-functional ties received. Thus, no clear indication of a safety net for families that experienced divorce was found.

One possible explanation might be that the safety net function was not well captured, as the data were collected 5–10 years after the parental divorce. This timeframe allowed participants to reflect on the changes after the divorce but may not have uncovered the immediate changes in the network that occurred during the divorce process, contributing to family resilience. Another possible explanation may be that, on an individual level, the safety net is much smaller than theorized. For instance, a divorced mother might rely on only one or two other family members as her personal safety net. To investigate this further, a qualitative investigation might provide additional insights.

Lastly, it was hypothesized that one's own nuclear family members, compared to one's own extended family members, would contribute to well-being to the greatest extent (Hypothesis 3). The results align with previous studies theorizing on kin hierarchy (de Bel et al. 2023; Lee et al. 2003; Rossi and Rossi 1990) and the preference for interactions with close kin (Hamilton 1964; Tanskanen and Danielsbacka 2019), showing that receiving multi-functional relationships from nuclear family members is associated with higher social well-being, whereas receiving multi-functional ties from extended family members is not. Again, the data did not allow for further, more precise analyses.

An unexpected finding, especially in view of the retrospective data, is that families that experienced divorce report higher well-being for the current time period. It may be that in the case of divorce, the notion of "it used to be better" does not hold, or processes related to the divorce may have affected family members' well-being even before the actual divorce. Another interesting point is that family members living near a larger number of nuclear family members score lower on well-being, whereas those living near a larger number of extended family members score higher on well-being. One possible explanation for this finding may be that ties with members of the nuclear family involve normative obligations (e.g., Lowenstein and Daatland 2006; Silverstein et al. 2006) that are less pronounced in ties with members of the extended family. While this study focused on "receiving" relationships, living nearby may also indicate frequent "giving" relationships, such as caring for a sick or needy family member.

4.1. Limitations

While this dataset is certainly rich in relational information, it is relatively small from a family-level perspective. This study analysed 144 family members from 41 families. Although the dataset can be considered a reasonably representative sample (see de Bel and van Duijn forthcoming for a comparison with the larger Lifelines sample), some caution should be exercised before generalizing these results to the broader population.

As a result, the sample size limited the ability to fully test all three hypotheses. Consequently, the results section primarily discussed sparse models.

4.2. Contribution

This study not only theorized on families as systems by framing them as a safety net (de Bel and Van Gasse 2020; Eggebeen and Davey 1998; Riley 1983; Riley and Riley 1993) but also empirically analysed families as such. It is the first study to analyse data from the Lifelines Family Ties dataset, a data collection project designed for collecting family network data among children, parents, grandparents, aunts, uncles, and step-family members. The results indicate that receiving multi-functional ties is associated with higher well-being. This finding may be of interest to family therapists who can help family members recognize such multi-functional relationships. By adopting a family network approach, the study disentangled the relative importance of nuclear and extended kin while considering family members' positions in the network. The importance of extended kin, especially aunts and uncles (Furstenberg 2020; Milardo 2009), has been rarely explored in previous studies. The results demonstrated that receiving multi-functional ties from one's nuclear family members is positively associated with well-being.

Appendix A. Items SPF-IL Scale

The items measuring affection are (1) "Do people pay attention to you?", (2) "Do people help you if you have a problem?", and (3) "Do you feel that people really love you?". The items measuring behavioural confirmation are (4) "There are situations in which we deal with groups of people, for example at home, at work or during our leisure time. Do others appreciate your role in the group?", (5) "When you are at school, at work, with family, at an association or in church, do you feel like you belong?", and (6) "Do others appreciate the things you do?". The items measuring status are (7) "Do people think you do better than others?", (8) "Do people find you an influential person?", and (9) "Are you known for the things you have accomplished?" (Lifelines 2019; Nieboer et al. 2005)[1]. Answer options are never (1), sometimes (2), often (3), and always (4). Because of item-nonresponse[2], the average of the items was computed if at least one affect item (1–3), one behavioural confirmation item (4–6) and one status item (7–9) was reported.

Appendix B. Definition of Nuclear and Extended Family Based on Family Role

For children of divorced and non-divorced families, the nuclear family is formed by their siblings and their parents. Children's extended family members are the paternal and

maternal aunts, uncles and grandparents. After parental divorce, stepfamily members, i.e., parents' new partners and their children, are added to the current extended family members of children.

Parents' nuclear family members are their children, their parents and their siblings with their partners, i.e., the aunts, uncles, grandparents from the child's perspective, on their own side of the family. Only in non-divorced families do parents belong to each other's nuclear family. New partners of divorced parents are also considered to be part of their current nuclear family. Non-divorced parents' extended family members are aunts, uncles and grandparents on the other (their spouse's) side from the child's perspective. Divorced parents without a new partner with children do not have any extended family members; divorced parents' new partner's children are considered to be part of their current extended family.

The nuclear family of aunts, uncles and grandparents on one side of the family is formed by themselves plus the parent (the central father or mother) on their side (i.e., their sibling or child) and the other parent, and, in divorced families, the new partner. Their extended family members are the children and in divorced families also the stepchildren.

Notes

[1] In 2006, the SPF-IL scale was slightly revised with the aim of reducing missing data and improving its consistency (Steverink, personal communication, 3 March 2020). In the original scale (Nieboer et al. 2005) items 5 and 6 were measured with the question (5) "Do people find you reliable?" and (6) "Do you feel useful to others?".

[2] Item-nonresponse concerned 26 cases (family members) at t0 and 15 cases at t1. Computing the mean if at least one affect item (1–3), one behavioural confirmation item (4–6) and one status item (7–9) was reported resulted in retaining 9 cases at t0 and 8 cases at t1.

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