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The “kinship penalty”: Parenthood and in-law conflict in contemporary Finland

Abstract: Intergenerational relations between affinal kin create both support and tensions to family members. Previous studies indicate that relations with affines may change once a grandchild is involved, yet this has not been explored with respect to conflicts. We use survey data of contemporary Finns (n=1,202) to investigate how parenthood is associated with the likelihood of reporting conflicts with one’s own parents and parents-in-law. Based on inclusive fitness theory we hypothesize that affinal kin will be treated more like biological kin if a couple has children as compared to childless couples. Results show that overall, Finns reported higher conflict occurrence with their own parents than with their in-laws. Compared to childless couples, parents were as likely to report conflicts with their own parents, but more likely to report conflicts with their parents-in-law. Results were robust after taking into account several sociodemographic factors as well as the contact frequencies and emotional closeness between the parties concerned. Daughters-in-law were more likely to report conflicts when paternal grandmothers provided more grandchild care, indicating that the conflict measure used here is indeed related to investment in offspring. We conclude that shared relatedness to a grandchild renders affines “more like kin” with regards to conflicts, indicating the existence of a ‘kinship penalty’ in family relation in addition to the previously reported ‘kinship premium’.

Key words: Affinal kin, conflicts, cross-generational relations, grandchild care, grandparents, in-laws, mother-in-law, parenthood

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Introduction

Across societies, grandparents are in many ways involved in the lives of their adult children and grandchildren (Sear and Coall, 2011; Sear and Mace, 2008). Intergenerational relations include not only extensive and various forms of help and support (e.g., Coall and Hertwig 2010; Hagestad 2006) but also tensions and conflicts (Apostolou 2015; Lüscher, 2002; Lüscher and Pillemer, 1998; Pillemer et al., 2007; Strassmann and Garrard, 2011). Childcare provided by grandparents often constitutes significant help to parents of young children, but may also be a source of conflicts, for instance when grandparents are perceived as intruding in the life of the young family. Although relations with mothers-in-law are the subject of many anecdotes and proverbs across cultures, to date few studies have investigated how parenthood is associated with relations to in-laws in contemporary societies (Chong et al., 2017; Danielsbacka et al., 2015; Rossi and Rossi, 1990). Conflicts between these two family generations have been even less explored (but see Fischer, 1983; Fowler and Rittenour, 2017). Here, we are interested in how parenthood is associated with the occurrence of cross-generational conflicts with affinal (kin through marriage) and consanguineal (or genetical) kin.

Humans are cooperative breeders, so that both mother and father and their respective kin may form an attachment to a child and invest time and resources in rearing it (Hrdy, 1999; 2009).

Evolutionary theory makes several predictions about the forms of kin altruism and conflict arising from the constellation of two sexes, three generations, and two lineages that characterizes the human family (Rotkirch, 2017). Cross-generational relationships are shaped by three reproductively relevant variables: gender, lineage, and genetic relatedness. Regarding genetic relatedness, natural

selection is predicted to have favoured investment in genetically close kin (the inclusive fitness theory, Hamilton 1964). Regarding gender and lineage, women typically invest most in reproduction so that the mother and her kin become especially important for child survival and well-being (Euler and Michalski, 2007; Leonetti et al., 2007). In contemporary societies with high gender equality in the family, this often means that mothers typically act as “gatekeepers” between her child and other people, for instance regulating and monitoring the access of in-laws to the child (Fagan & Barnett, 2003; Robertson, 1975).

Empirical support for inclusive fitness theory has been found for humans in contemporary developed societies, showing that individuals tend to feel emotionally closer (e.g., Danielsbacka et al., 2015; Euler et al., 2001; Waynforth, 2011; Willson et al., 2003) and have stronger feelings of obligation (Rossi and Rossi, 1990) towards their biological kin compared to their in-laws. Individuals also provide more assistance to their close kin compared with distant kin or non-kin (Salmon and Shackelford, 2011) and expect less gratitude in return for provided assistance (Rotkirch et al., 2014). Close kin also tend to be emotionally very close, and emotional closeness usually means fewer conflicts (Korchmaros and Kenny, 2001). However, and notably, the tendency to behave altruistically towards close kin remains also after taking into account their emotional closeness (ibid.). Kinship contributes to altruistic behaviour irrespective of how much the parties like each other, an effect called “the kinship premium” (Curry et al. 2013).

Inclusive fitness theory was expanded and modified vis-à-vis human kinship by Hughes (1988, pp. 65). Hughes predicted that human kin altruism would vary not only by the initial degree of genetic relatedness, but also among individuals who become related to each other through marriage. In-laws, who are usually not closely genetically related, become ‘inversely’ genetically related to each other through common descendants, e.g., a grandchild (Danielsbacka et al., 2015, pp. 890).

Consequently, the existence of a common descendant can be expected to influence relations between in-laws by making them more similar to relations with biological parents.

Burton-Chellew and Dunbar (2011) were the first to test Hughes' predictions regarding affines. Using data from a contemporary Belgian population, they found that associations between contact frequencies and emotional closeness were quite similar for in-laws and biological kin, but different for non-kin friends. Danielsbacka et al. (2015) compared the emotional closeness towards parents and parents-in-law, and reported that Finnish men with children were closer to their mothers-in-law than were men without children. Both studies thus supported Hughes' predictions. To date, however, Hughes' hypothesis of behavior towards affines has not been investigated with regards to family conflicts, which is our focus here.

The term "kinship premium" has been used to describe the effect of genetic relatedness on helping behavior – we help our closest kin because we are emotionally close to them, but additionally simply because they are kin (Burton-Chellew and Dunbar, 2011). Similarly, there may exist a "kinship penalty", so that conflict occurrence is also higher among persons perceived as close kin. One reason for conflicts within close family is that family members compete over resources, and the severity of kin competition may reduce or even overrun the tendencies to altruistic helping among kin (Griffin and West, 2002; Mace, 2013; Tanskanen et al., 2016a, 2016b). Inclusive fitness theory has usually been interpreted as predicting less competition and fewer conflicts with close genetic kin compared to more distant kin and non-kin (e.g., Salmon and Hehman, 2014). This assumption has been shown to be problematic when kin competition is involved, as between siblings (e.g., Salmon and Hehman, 2015; Tanskanen et al., 2016b). Additionally, the presence of a young and dependent generation in the kin network could increase conflict occurrence between different generations. This idea is particularly relevant when one considers milder conflicts, such as

disagreements over upbringing of a child or life style choices that are a standard part of close social relations (Szydlik, 2016).

Our aim is to investigate how parenthood is associated with cross-generational conflict proneness between affinal and consanguineal kin. Previously, in-law conflicts have been mainly studied in historical and traditional societies, and often in relation to how the presence of mothers-in-law affects the survival or well-being of children (e.g., Chan et al., 2008; Lahdenperä et al., 2012; Leonetti et al., 2007; Mace 2013; Voland and Beise, 2005). We expand the field by investigating conflicts in a contemporary Western society and by including fathers-in-law. Taking into account gender, there are eight possible relationship dyads among adult child/parent and adult child/parent-in-law (Euler, 2011). We use survey data of younger adults from contemporary Finland and compare couples with and without children in order to explore how parenthood is associated with the likelihood of reported conflicts in each of the eight dyads.

We investigate four research questions:

1. How likely are younger and middle-aged adult Finns living with a spouse to report conflicts with their own parents and their parents-in-law?
2. Is emotional closeness towards own parents and parents-in-law associated with conflict occurrence?
3. Is conflict occurrence associated with being a parent?
4. Is provision of grandparental childcare related to conflict occurrence?

Due to the dearth of studies on conflicts in extended families we have no strong a priori hypotheses regarding conflict occurrence and parenthood that is whether being a parent will be associated with a higher or lower likelihood of reporting any conflicts. However, based on Hughes' hypothesis of

the shared interest in a common descendant, we hypothesize that the relationship closeness towards one's own parents and parents-in-law will be *more similar* among couples who have children compared to couples without children. Because relationship closeness is known to vary both with degree of genetic relatedness and with conflict occurrence, we control for emotional closeness in every analyses and also investigate with interaction models whether the emotional closeness towards a particular relative (own mother, own father, mother-in-law, father-in-law) is associated with conflict occurrence. Childcare is a crucial expression of both parental and grandparental investment (Coall and Hertwig, 2010) as well as a cause for conflicts between generations, related to differences in child raising ideologies or to unmet need or demand for child care provision. Hence, we expect differences in conflict occurrence to be associated with the amount of childcare provided by grandparents. In addition, due to sex-specific reproductive strategies and maternal gatekeeping tendencies, we expect the effects studied here to be more pronounced among women than men.

Our analyses take into account several factors well known to affect intergenerational relations but which are not the focus of interest here, such as age and health of respondents and parents/in-laws, education of respondents, the geographical distance and contact frequency between the parties concerned (Danielsbacka et al., 2015; Szydlik, 2016).

Study context

Contemporary Finland is a wealthy country characterised by high gender equity, dual breadwinner families and extensive welfare state support to children and families (Kangas and Kvist, 2013). Women's educational level has increased strongly since the 1950s so that Finnish women are currently on average more highly educated than the men are (Official Statistics of Finland, 2017).

Also women's labour market participation is strong, and Finnish women typically work full time. Women-friendly welfare systems aimed at promoting gender equality and maternal work force participation have been adopted and currently include free or inexpensive health care, extensive care for the elderly and a subjective right to public day care for children under three years old (Anttonen, 1999). Parental leaves and care leaves are available until the child is 1–3 years old, after which most children enter municipal day care. These public services providing help with childcare and care for the elderly alleviate the need for kin help, so that few Finns provide full-time grandchild care or care of their elderly parents (Danielsbacka et al., 2013).

During our study period, the median age to enter a first union either through marriage or cohabitation remained relatively stable at around 25 years (Jalovaara, 2012). More than half (51 per cent) of Finnish women born in the latter part of the 20 century had formed a union by the age of 22, and almost half (48 per cent) of the men had done so by the age of 24. Overall, men enter into their first union 2 years later than women (Jalovaara, 2012). The great majority of children are born within unions, and most first-borns are born in the first union of the mother and father.

While age at union formation has not risen much, Finns have postponed parenthood to later ages. The median age at first birth is now 28.5 for women and individuals who become parents typically have two or three children (Official Statistics of Finland, 2015).

A Finnish child born today has on average three grandparents alive (Official Statistics of Finland, 2012). Grandparenting in Finland can be described as extensive, so that several grandparents are present in the child's life, but none of them to a very high degree, due to the availability of institutionalised day care (Danielsbacka et al., 2013). This type of extensive but "light" grandparenting is common for families in the Nordic welfare states (Hank and Buber, 2009; Igel and Szydlik, 2011).

Data and methods

This study uses survey data from the Generational Transmissions project in Finland (Gentrans). The aim of Gentrans is to gather information on two family generations: the Finnish baby boomer generation born between 1945 and 1950 ($M=1947$, $SD=1.67$) (referred to as the older generation) and their adult children born between 1962 and 1993 ($M=1976$, $SD=5.6$) (the younger generation); the older generation is the pivot generation of the study. Statistics Finland collected two separate surveys in Finland (excluding the Åland islands) for the Gentrans project in spring 2012 via postal mail. Respondents from the younger generation could also respond to the questionnaire via the Internet. Only one person per household participated in the survey. Here, we use only data from the younger generation, because the older generation data do not include information concerning in-law relations. The younger generation's survey reached 1,753 respondents and the response rate was 50% (see also Tanskanen et al., 2014; Tanskanen and Danielsbacka, 2014, and Danielsbacka et al., 2015 who used the same data).

To study conflicts with own parents and in-laws, we selected only those respondents who had a partner. This left us with 1,202 observations (women=62.6%, men=37.4%) in the sample born between 1962 and 1990 ($M=1975$, $SD=5.1$). For the analyses the data were reshaped in the form of a long format, meaning that in the present data observations are viewed from the perspective of the original respondent's parents and parents-in-law (i.e., the grandparents). After this data reconstruction, there are as many observations as there are parents/parents-in-law (4,067 observations in the analytical study sample; on average 3.6 parents or parents-in-law alive per respondent).

The dependent variable measured the frequencies of reported conflict between a respondent and his/her parent or in-law. The question was asked as follows: “Disagreements between close people can lead to conflicts. Have you had conflicts with him/her? How often?” and the response alternatives were: 1=Never, 2=Rarely, 3=Occasionally, and 4=Often. The question was asked separately by kin sex and lineage. We coded the variable into two categories 0=No conflicts, 1=Conflicts. Sensitivity analyses with different cut points and a continuous variable produced results similar to the analyses using the binary variable, so that the results presented here may be considered robust. We also tested the results by fitting the regression models with ordered logistic regression that takes into account ordered categories (0=No conflicts, 1=Rarely, 2=Occasionally or often) without equal spacing between the categories (‘ologit’ command in Stata 13.1; see Liu, 2009). This modelling did not considerably alter the results compared to the binary analysis (results based on ordered logistic regression models are not presented in tables except in the case of the additional analysis of childcare and conflicts).

The main independent variables measured whether or not the respondent perceived her or his relationship towards parents and parents-in-law to be emotionally close and whether or not the respondent had children. The original scale measuring reported emotional closeness (1=“Very close”, 2=“Close”, 3=“Not close or distant”, 4=“Distant”, 5=“Very distant”) was classified into two groups (1=“Close and very close”, 0=“Other”). Logistic regression, including the interaction between kin lineage and emotional closeness and the interaction between kin lineage and parenthood status, was used to predict the likelihood of conflicts. Results are illustrated by calculating the predicted probabilities of conflicts by kin lineage and parenthood status from the logistic regression models. Because the data are clustered within kin lineages (i.e., the data may include more than one observation from the same respondent), we used Stata’s statistical software

cluster option to compute the standard errors. This method takes into account the non-independence of answers reported by the same respondent.

Among couples with children (n=886), respondents reported whether they had received childcare help from their parents or in-laws during the past 12 months. The question was asked separately by gender and lineage (i.e., for the mother, father, mother-in-law, and father-in-law). The response alternatives were 0="Never", 1="1–6 times", 2="7–12 times", 3="13–25 times", 4="26–50 times", and 5="Over 50 times". To study whether childcare received was associated with conflict occurrence, we used ordered logistic regression analyses, a method that takes into account ordered conflict categories (0=No conflicts, 1=Rarely, 2=Occasionally or often). Childcare received was used as a continuous variable. Because the data are clustered within kin lineages, Stata's statistical software cluster option was used to compute the standard errors.

In all the analyses we have controlled for several potentially confounding variables known to affect the relations between young couple and their in-laws (Danielsbacka et al., 2015; Willson et al., 2003). These variables include respondents' age, education and health, geographical distance between respondent and parent/in-law, contact frequency with parent/in-law (0="Never", 1="Less than once a month", 2="About 1–3 times a month", 3="Once a week", 4="Several times a week), emotional closeness, age of the parent/in-law, and parent's/in-law's health as reported by the respondent (see Table 1 and 2 for descriptive statistics). In addition, in the analyses concerning the childcare received we included the age of the youngest child of the respondent and the number of grandparents of the child. These variables were added because age of a grandchild and the number of other potential providers of grandparental help affect the amount of childcare provided by a particular grandparent (Danielsbacka and Tanskanen, 2012).

Our data unfortunately lacks data about the duration of the union formation and the duration of how long the spouses in the studied couples have been together. However, due to the stability of Finnish union and family formation patterns as discussed in the previous section, controlling for age of the respondents is an acceptable proxy for union duration and thus also for how long in-laws have known each other.

< TABLE 1 >

< TABLE 2 >

Results

To study research questions 1, 2 and 3 we ran three logistic regression models separately for women and men (see Table 3). Models 1 and 4 show the main associations between kin lineage, emotional closeness, parenthood status, contact frequency and conflicts when other confounding factors are controlled for. Results show that both women and men were more likely to report having had any conflicts with their own parents than with their in-laws. For women, reported emotional closeness toward a parent or parent-in-law reduced the likelihood of conflicts, whereas parenthood as well as frequent contacts increased the likelihood of conflicts. For men, only contact frequency was in addition to kin lineage significantly associated with conflict occurrence.

< TABLE 3 >

To investigate how emotional closeness and parenthood were associated with conflicts within each parent/in-law dyad we then added interaction terms (emotional closeness*kin lineage and

parenthood status*kin lineage) in models 2, 3, 5 and 6. Table 4 shows the odds ratios and statistical significance for these interaction terms. The interactions between emotional closeness and kin lineage are also illustrated in Figures 1 (women) and 3 (men) and interactions between parenthood status and kin lineage in Figures 2 (women) and 4 (men). Women who perceive their mother to be close or very close were much less likely to report having any conflicts with her than did women whose mothers were not emotionally close (Table 4, Figure 1). The same applies to men and their fathers (Table 4, Figure 3). However, there were no statistically significant differences within any other dyad. Emotional closeness did thus not affect how likely women were to have conflicts with their fathers, men with their mothers, or women or men with the in-laws, in this data.

< TABLE 4 >

Although both women and men were more likely to report any conflicts with their own parents than with their in-laws, having children was significantly associated with being more likely to report conflicts with in-laws. By contrast, parenthood had no effect on conflict proneness with own parents. Figure 2 illustrates women's predicted probability to report conflicts with their parents or in-laws depending on parenthood status. Being a mother was not associated with women's probability to report conflicts with their own parents, but was significantly associated with the likelihood for conflicts with both their mothers- and fathers-in-law. Figure 4 illustrates men's predicted probability to report conflicts with their parents or in-laws, depending on whether or not they had children. Fatherhood was not associated with men's probability to report conflicts with their own parents, but was significantly associated with the likelihood for conflicts with their mothers-in-law and with their fathers-in-law.

We assumed that the relationship towards one's own parents and parents-in-law would be more similar among couples who have children compared to those without children. Results are overall in line with this assumption. As expected, the closer the respondent felt to his or her parent or parent-in-law, the less likely he or she was to report any conflicts with that person (although this effect was statistically significant only between mother and daughter and son and father). Controlling for emotional closeness or contact frequency toward parent/parent-in-law did not alter the association between parenthood and reported conflicts in any regression models. Thus the association between parenthood status and conflicts with in-laws is independent of contacts or perceived emotional closeness toward parents and parents-in-law. Consequently, it seems that conflicts and closeness measure somewhat different aspects of family relations.

< FIGURE 1 >

< FIGURE 2 >

< FIGURE 3 >

< FIGURE 4 >

Finally, we investigated provision of childcare, which is one main potential reason for the conflicts between couples with children and the grandparental generation. If grandparents participate in childcare, interactions with the child's family consequently may increase, potentially also affecting tensions and conflicts. We analysed whether the amount of reported received childcare from grandparents was related to the likelihood of reported conflicts. The same variables were included as in the previous analyses, with the addition of the age of the youngest child of the respondent and the number of grandparents of the child. These variables were added because grandchild age and the number of other potential providers of grandparental help affect the amount of childcare provided

by a particular grandparent (Danielsbacka and Tanskanen, 2012). Ordered logistic regression analyses which included only parent respondents (n=886) were conducted.

Results showed a significant association between reported conflicts and childcare for the daughter-in-law/mother-in-law dyad. No significant associations for other parent-grandparent dyads were detected. The more a daughter-in-law received childcare help from her mother-in-law, the more likely she was to report frequent conflicts with her (see Tables 5 and 6). When repeating the analyses with binary logistic models, this association remained significant (OR= 1.2; $p= .037$) (result not shown in Tables), indicating that for mothers receiving childcare from mothers-in-law may not only increase the number of conflicts, but also whether they occur at all.

< TABLE 5 >

< TABLE 6 >

Discussion

Conflicts between in-laws remain the subject of countless anecdotes and proverbs, yet few studies concern the prevalence and dynamics of such conflicts in contemporary societies (but see Fischer, 1983; Fowler and Rittenour, 2017). Here, we investigated how parenthood is associated with the occurrence of cross-generational conflicts with affinal and consanguineal kin. Based on inclusive fitness theory as extended to in-laws (Hughes, 1988), we predicted conflict proneness between affines to be more similar to that among biological kin if there was a common shared descendant, and that this effect would be especially pronounced among mothers. These hypotheses were supported: while being a parent was not associated with the likelihood for conflicts with an individual's own parents compared to childless couples, the likelihood for conflicts with parents-in-law was substantially higher among parents. Results were similar for women and men, although the

likelihood for conflicts with in-laws were higher among mothers than among fathers compared to childless individuals. Both also reported more conflicts with their mother-in-law than with their father-in-law. In our data, emotional closeness reduced the overall likelihood for conflicts. This effect was statistically significant among adult children and their same-sex parents (i.e., between mothers and daughters and fathers and sons; see also Hogerbrugge and Komter, 2012), but not among the other six family dyads investigated. Crucially, the association between parenthood and higher likelihood of conflicts with in-laws remained robust also after controlling for emotional closeness as well as for how often the parties met each other.

Hughes (1988) predicted that affinal kin would be treated more like genetic kin, because lineages become linked through a joint interest in descendants. From his predictions it is not clear, however, at which point of the family life course affines become 'kin-like'. This transformation could happen when the couple is formed, e.g. through cohabitation or marriage, or once the child has arrived. Hughes (1988) and Burton-Chellew and Dunbar (2011) investigated only families who already had children. Danielsbacka et al. (2015) found that fathers were emotionally closer to their parents-in-law compared to childless male spouses. It thus appears that it is the presence of a child that turns affines into kin, at least in a contemporary and liberal Western society. However, this picture may be different in societies where pregnancy and childbearing are more tightly related to union formation, or where kin is more heavily involved in the couple's lives before parenthood, e.g. through arranged marriages or shared residence.

Gender differences in reproductive strategy, including women's higher parental investment and the female dominance in monitoring and investing in cross-generational family relations (Coall and Hertwig, 2010; 2011) can explain why conflict occurrence with in-laws was higher among mothers than fathers and for both more likely vis-à-vis the mother-in-law than the father-in-law. A higher

amount of childcare provision was related to frequent conflicts between daughter-in-law and mother-in-law. This indicates that the relationship dynamics with in-laws is indeed related to investments in offspring, and that conflicts may reflect “gatekeeping” from the mother who can guard and monitor other people’s access to her child (Allen & Hawkins, 1999; Fagan & Barnett, 2003; Robertson, 1975; Thompson & Walker, 1987). Our results appear to be in line with Fischer’s (1983) classic study on mothers-in-law which found that the most frequent source of irritation between daughters-in-law and mothers-in-law concerned young children.

The arrival of a grandchild in itself changes the role of the older generation, creating new demands and expectations from all adults involved in childrearing. From this point of view it is interesting that conflict proneness with own parents did not differ by parenthood status, indicating that just the practical demands caused by the existence of a grandchild do not explain our results.

The shared reproductive interest that is created through a grandchild among kin lineages provides new reasons for grandparents to influence and interfere in the lives of other family members, which in turn may be reflected in conflict-proneness. In our findings, conflicts were related to higher contact frequencies, suggesting, as could be expected, that the existence of a grandchild increases interaction with in-laws (see also Chong et al., 2017). However, because associations between conflict proneness and parenthood remained after taking contact frequency into account, the change parenthood brings to kin relations is apparently not explained only by increased interaction.

Overall, both men and women were more likely to report conflicts with their own parents than with their parents-in-law. This finding is similar to recent studies of the effect of genetic relatedness on conflict proneness between siblings (Salmon and Hehman, 2015; Tanskanen et al., 2016a, 2016b), showing more conflicts among full as compared to half siblings. Accumulating evidence now indicates that genetically close relations are not less conflict-prone than others, although they are

typically emotionally close and quite altruistic (for siblicide and other within-family conflicts, see Daly and Wilson, 1988). The term “kinship premium” has been used to describe the effect of genetic relatedness on helping behavior – we help our closest kin because we are emotionally close to them, but additionally simply because they are kin (Burton-Chellew and Dunbar, 2011). In a similar way, we here found evidence for a “kinship penalty”, so that conflict occurrence is also higher among persons perceived as close kin.

To our knowledge, no previous study has compared parenthood status and conflicts of spouses towards both their own parents and their parents-in-law using large data. Among the limitations of our study are its cross-sectional nature and focus on the perceptions of only one family generation. The relationship between children-in-law and parents-in-law vary with both time and the source of the reports, but we could not grasp such change across time and different life situations. For example, in a study of Israeli daughters-in-law and mothers-in-law (Linn and Breslerman, 1996), the younger women estimated that the relationship toward mother-in-law either improved or was stable over time, whereas their mothers-in-law estimated that the relationship improved or deteriorated over time. Moreover, the daughters-in-law thought the improvement occurred as a function of detachment (they did not see each other as much as in the beginning of the relationship), whereas the mothers-in-law viewed the improvement as a function of attachment (the daughters-in-law had grown to like them more). There is a need for longitudinal studies that analyse how in-law relations vary over the life course and investigate in-law conflicts from the perspectives of both parties involved. It would also be useful to have data on the couple’s relationship quality and duration. The longer a couple has been together, the more likely they are to have children and the longer history they are likely to share with their parents-in-law, which can affect conflict occurrence through the habituation effect (Volland and Beise, 2005).

Although parents of small children, in general, have a lower probability to divorce than childless couples (Kulu, 2014; Lyngstad and Jalovaara, 2010), relationship dynamics between spouses change with the transition to parenthood (Mitnick et al., 2009). Our results may partly tap into the stress parenthood can cause between spouses, creating a tension that may then also reflect on relations to parents-in-law. However, this explanation cannot account for why more conflicts were reported with own parents than with parents-in-law. Due to lack of data in the survey used, we could not here further explore the associations between spousal relationship quality and in-law relations, which remains an interesting topic for future research.

Another limitation of the current study is that we do not know what kind of conflicts the respondent had in mind. Conflicts may be more severe between in-laws than between biological kin, or vice versa, and their sources may differ by e.g., parenthood status. While we did investigate contact frequency, we could not take into account the length of each contact with parents and in-laws, which is likely to depend on parenthood status. Couples with children may spend longer periods together every time they are in contact, creating more opportunities for conflicts to occur.

According to a previous US-American study, conflicts between older parents and adult children consist of six conflict themes: communication and interaction style; habits and lifestyle choices; child-rearing practices and values; politics, religion and ideology; work habits and orientations, and household standards or maintenance (Clarke et al., 1999). Future studies need to investigate the proximate reasons for conflicts within cross-generational relationships.

The concept of inverse relatedness, created between affines by shared reproductive interest in a common descendant (Hughes 1988), is likely to yield many other insights into kin and spousal dynamics in relation to fertility, provided access to appropriately detailed human family data. A previous study using the same data as this study did, showed that the perceived emotional closeness

of parents to their parents-in-law was similar (for mothers) or higher (for fathers) compared to childless spouses (Danielsbacka et al., 2015). Combined with the results presented here, we have shown with large data that parenthood appears to alter relations within the extended family. It seems that a child creates a rapprochement between kin lineages that consists of both closeness and conflicts. Relational dynamics between in-laws become more 'kin-like' with the arrival of a new young family generation.

Conflict of interest statement

On behalf of all authors, the corresponding author states that there is no conflict of interest.

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Tables

Table 1. Descriptive statistics: Respondent characteristics (%/mean).

	Women %/mean n=752	Men %/mean n=450
Has children (%)		
No	23.5	31.0
Yes	76.5	69.0
Year of birth, mean	1975.3	1975.1
Education (%)		
Elementary school or less	1.9	4.0
Baccalaureate	4.8	9.6
Vocational school or other vocational degree	15.2	25.3
Vocational college-level training	16.1	12.2
University of applied science or other lower university degree	31.7	23.8
Master's degree	27.0	22.0
Licentiate or doctoral degree	3.5	3.1
Respondent's health (%)		
Very good	28.6	28.7
Good	61.0	55.1
Reasonable	10.0	14.9
Poor	0.4	1.3

Table 2. Descriptive statistics: Reported conflicts between own parents and parents-in-law and other parent and parent-in-law variables (%/mean). Dyadic analyses include only respondents with the concerned relative alive.

	Women				Men			
	Mother %/mean n=718	Father %/mean n=642	Mother- in-law %/mean n=630	Father- in-law %/mean n=539	Mother %/mean n=420	Father %/mean n=383	Mother- in-law %/mean n=386	Father- in-law %/mean n=328
Have had conflicts (%)								
Never	15.5	24.6	47.8	59.6	19.2	17.1	56.6	66.1
Rarely	55.0	53.1	37.7	30.4	62.2	62.2	33.0	28.2
Occasionally	23.7	19.1	11.7	7.8	15.9	17.4	8.8	4.9
Often	5.7	3.3	2.9	2.4	2.6	3.4	1.6	0.9
Emotional closeness (%)								
Other	14.3	26.6	50.8	67.2	16.2	26.6	57.3	61.0
Close or very close	85.7	73.4	49.2	32.8	83.8	73.4	42.8	39.0
Parent's/in-law's year of birth, mean	1948.5	1946.9	1947.1	1945.3	1948.4	1946.5	1949.5	1948.2
Geographical distance (km), mean	133.1	154.1	215	239.8	145.8	153.3	229.2	225.7
Contact frequency, mean	3.3	2.6	2.3	2	2.8	2.7	2.2	2
Parent's/in-law's health (%)								
Very good	7.2	4.7	7.2	4.1	4.3	6.2	6.2	7.6
Good	48.5	43.8	45.5	39.0	47.9	37.0	47.3	40.5
Reasonable	35.1	39.8	33.5	40.1	40.3	44.7	34.6	41.1
Poor	7.4	10.3	11.0	13.3	6.4	10.3	10.3	8.8
Very poor	1.8	1.6	2.7	3.5	1.2	1.8	1.6	2.1

Table 3. Association between reported conflicts between self and mother, father, mother-in-law and father-in-law taking into account emotional closeness and parenthood and their interactions, by sex (odds ratios of logistic regression models).

	Women n=2,535			Men n= 1,532		
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Conflict with						
Mother (ref.)						
Father	0.57***	0.15***	0.63*	1.16	1.92	1.40
Mother-in-law	0.18***	0.04***	0.09***	0.19***	0.19***	0.08***
Father-in-law	0.11***	0.03***	0.07***	0.12***	0.11***	0.06***
Emotional closeness						
Other (ref.)						
Close or very close	0.68**	0.16***	0.66***	0.72	0.73	0.68
Respondent is a parent						
No (ref.)						
Yes	1.70***	1.71***	1.16	1.29	1.27	0.72*
Contact frequency	1.15*	1.17*	1.16*	1.32**	1.33***	1.32***
Parent/in-law*emotional closeness						
Mother*close (ref.)						
Father*close		4.24**			0.53	
Mother-in-law*close		5.05**			0.98	
Father-in-law*close		4.74**			1.35	
Parent/in-law*parenthood status						
Mother*have children (ref.)						
Father*have children			0.88			0.77
Mother-in-law*have children			2.64**			3.33***
Father-in-law*have children			1.73			2.78**

* p < .05, ** p < .01, *** p < .001

Note: Every model additionally controls for the following variables: Respondent's year of birth, respondent's health, respondent's education, parent's/in-laws' year of birth, parent's/in-laws' health, geographical distance.

Table 4. The association between women’s and men’s conflicts with mother, father, mother-in-law and father-in-law by emotional closeness and parenthood status: Calculations based on interactions presented in Table 3 (odds ratios).

	Women, conflicts with				Men, conflicts with			
	Mother	Father	Mother-in-law	Father-in-law	Mother	Father	Mother-in-law	Father-in-law
Emotional closeness								
Close or very close	0.16***	0.67	0.79	0.75	0.73	0.38**	0.72	0.99
Parenthood status								
Children	1.16	1.02	3.07***	2.02**	0.72	0.56	2.40***	2.01*

* p < .05, ** p < .01, *** p < .001

Table 5. Women's conflicts with parent/parent-in-law by childcare received and control variables: ordered logistic regression analyses (Coeff.): Only respondents with children.

	Mother n=521 Coeff.	Father n=452 Coeff.	Mother- in-law n=453 Coeff.	Father- in-law n=384 Coeff.
Childcare received	-0.07	0.01	0.21*	-0.005
Year of birth of youngest child	0.04	0.05	-0.07*	-0.05
Number of grandparents	-0.14	-0.03	-0.01	0.27
Respondent year of birth	0.03	0.01	0.04	-0.04
Respondent education	-0.04	-0.01	0.14	-0.07
Respondent reported health	0.25	0.24	0.38*	0.06
Parent's/in-law's year of birth	-0.03	0.02	0.002	0.05**
Parent's/in-law's health (reported by the respondent)	0.17	0.18	0.12	0.07
Geographical distance (km)	0.0003	0.0002	0.0002	0.0002
Contact frequency	0.07	0.01	-0.11	0.40**
Emotional closeness				
Other (ref.)				
Close or Very close	-1.04***	-0.84**	-0.62**	-0.80**

* p < .05, ** p < .01, *** p < .001

Table 6. Men's conflicts with parent/parent-in-law by childcare received and control variables: ordered logistic regression analyses (Coeff.): Only respondents with children.

	Mother n=276 Coeff.	Father n=239 Coeff.	Mother-in- law n=248 Coeff.	Father-in- law n=210 Coeff.
Childcare received	0.18	0.03	0.09	0.09
Birth year of youngest child	-0.04	0.02	-0.02	-0.11*
Number of grandparents	-0.42	-0.02	-0.26	0.63
Respondent year of birth	0.09*	-0.03	-0.01	-0.03
Respondent education	-0.04	-0.11	-0.11	0.12
Respondent reported health	0.07	0.08	0.18	0.32
Parent's/in-law's year of birth	0.01	0.05	0.03	0.04
Parent's/in-law's health (reported by the respondent)	0.22	0.48**	0.11	0.16
Geographical distance (km)	-0.0003	-0.001	-0.0003	-0.0004
Contact frequency	-0.16	0.07	0.07	0.33
Emotional closeness				
Other (ref.)				
Close or very close	-1.41***	-0.74*	-0.75**	-0.39

* p < .05, ** p < .01, *** p < .001

Figures

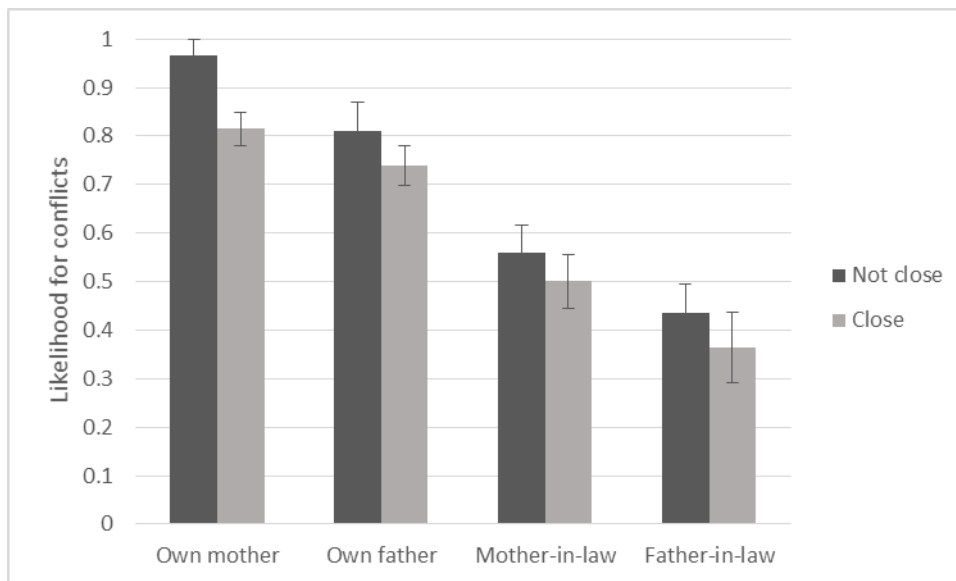


Figure 1. Women’s reported conflicts between self and mother, father, mother-in-law and father-in-law by perceived emotional closeness (regression-based predicted probabilities and 95% confidence intervals). Adjusted variables: age, education, and health of the respondent, age of the parent/in-law, geographical distance, contacts with parent/in-law, parenthood status of the respondent, and health of parent/in-law.

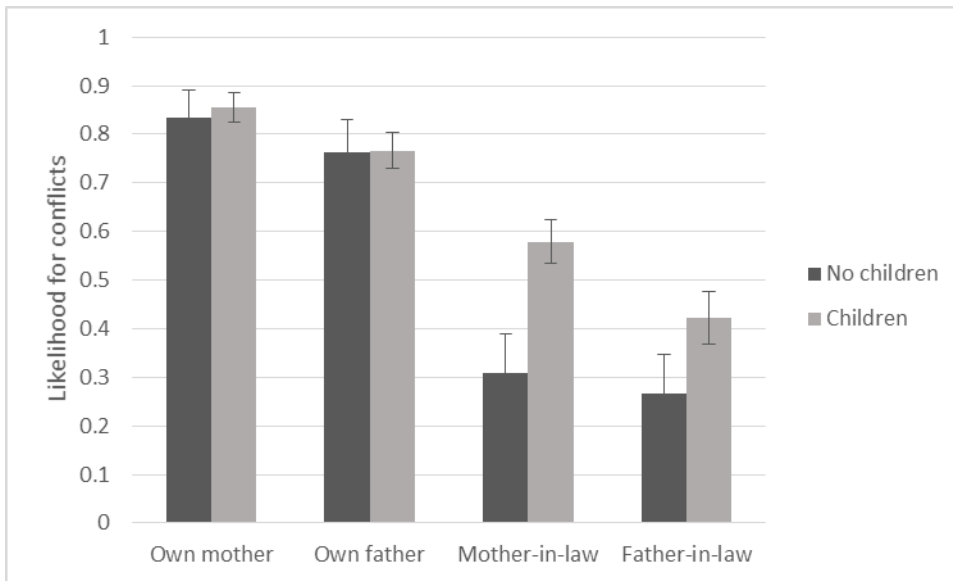


Figure 2. Women’s reported conflicts between self and mother, father, mother-in-law and father-in-law by parenthood status (regression-based predicted probabilities and 95% confidence intervals). Adjusted variables: age, education, and health of the respondent, age of the parent/in-law, geographical distance, contacts with parent/in-law, emotional closeness, and health of parent/in-law.

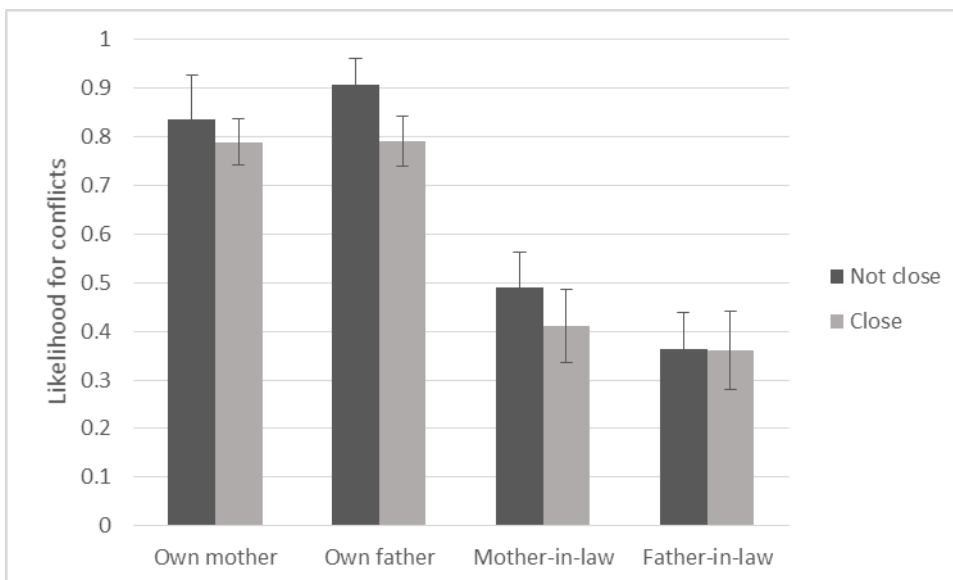


Figure 3. Men’s reported conflicts between self and mother, father, mother-in-law and father-in-law by perceived emotional closeness (regression-based predicted probabilities and 95% confidence intervals). Adjusted: age of the respondent, education, health, age of the parent/in-law, geographical

distance, contacts with parent/in-law, parenthood status of the respondent, and health of parent/in-law.

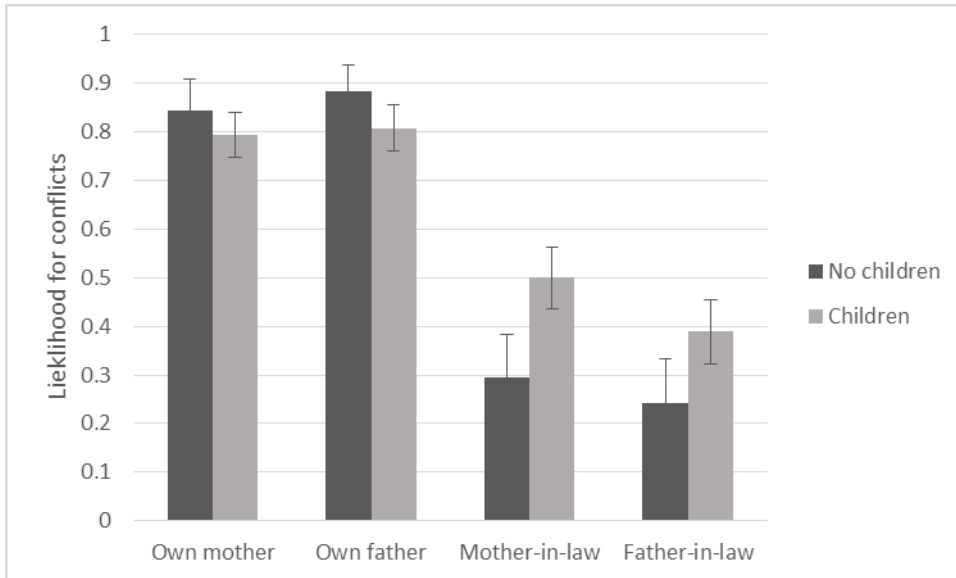


Figure 4. Men’s reported conflicts between self and mother, father, mother-in-law and father-in-law by parenthood status (regression-based predicted probabilities and 95% confidence intervals). Adjusted: age of the respondent, education, health, age of the parent/in-law, geographical distance, contacts with parent/in-law, emotional closeness, and health of parent/in-law