



Gender inequality in intergenerational contact after parental separation in the digital era

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Funding information

Ministry of University and Research (MUR) and NextGenerationEU, Grant/Award Number: PRIN2022PNRR P2022XX9AF

Edited by: Spencer Olmstead

Abstract

Objective: The goal of this brief report is to analyze parent–adult child contact frequency in intact and non-intact families by focusing on parent and child gender and the type of contact.

Background: Parental separation increases gender differences in parent–child relationships, with separated fathers having less frequent contact with their adult children compared to separated mothers. We investigate whether the father–mother gap in post-separation contact varies according to parent–child gender mismatch and the type of contact, that is, face-to-face, phone, or digital (e.g., via video calls).

Method: We use data on Italian families from the Family and Social Subjects survey to examine parent–child contact frequency among 6770 adult children aged 30–55 (11,041 parent–child dyads). We estimate random and fixed effects models on the probability of having frequent contact with biological parents in intact and non-intact families (parental separation before age 18).

Results: Fathers' reduced contact frequency compared to mothers is particularly evident with daughters, more pronounced in face-to-face and phone contact than in digital contact, and greater among younger daughters at the time of separation. Gender differences in phone and digital contact are larger for fathers who have also less frequent face-to-face contact compared to mothers.

Conclusion: We interpret these findings by focusing on the centrality of mother–daughter ties and the loyalty that children have with the same-gender parent. We also suggest that different types of contact reinforce gender differences between parents and may lead to a polarization of older parents with “strong” and “weak” family ties.

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KEYWORDS

aging, divorce, family interaction, gender, intergenerational relationships, parent–child relationships

INTRODUCTION

Parental separation has become increasingly common in modern society, with a significant proportion of children growing up in households with single parents, step-parents, and half-siblings. Increases in family instability have altered the nature and strength of intergenerational family ties, with potential consequences for social cohesion and gender inequalities (Kalmijn et al., 2019; Lin & Seltzer, 2023). Research has consistently shown that parental union dissolution has negative effects on parental involvement during childhood (Cano & Gracia, 2022), as well as on parent–child ties in adulthood, including lower quality relationships, decreased contact frequency, and less supportive exchanges between parents and their adult children (Albertini & Garriga, 2011; Amato & Booth, 1996; Arranz Becker & Hank, 2022; De Graaf & Fokkema, 2007; Spaan et al., 2022; Tosi, 2018). These effects are strongly gendered, with separated fathers having less frequent contact and support exchanges with their adult children compared to separated mothers (Kalmijn, 2007; Van Spijker et al., 2022). However, less is known about whether these gender differences between parents vary according to child gender and the type of contact.

To our knowledge, only a few studies specifically focus on gender mismatch in post-separation parent–adult child relationships, reporting mixed findings across different parent–child gender combinations (Booth & Amato, 1994; Cooney, 1994; Kaufman & Uhlenberg, 1998). We contribute to this literature by distinguishing between different types of contact, that is, face-to-face, phone, and digital contact, and focusing on the Italian context.

Gender (mis)match in parent–child contact

Most previous studies on post-separation family relationships focus on gender differences between separated parents, indicating that fathers tend to have less frequent contact with their adult children compared to mothers (Van Spijker et al., 2022). However, gender differences between separated parents may vary according to gender (mis)match within parent–child dyads. Previous studies on parent–child gender combinations emphasize the emotional closeness of mother–daughter ties, involving more frequent contacts than father–son or opposite-gender dyads (Fingerman et al., 2020b; Rossi & Rossi, 1990). Mothers tend to play a more central role in transmitting filial obligations and socializing their daughters to serve as kin-keepers who foster contact and intra-family exchanges of resources and care (Arendell, 2000; Hwang et al., 2022; Kalmijn, 2007). Therefore, mother–daughter ties may be especially resilient to parental separation (Booth & Amato, 1994).

Some studies suggest that children of separated parents tend to experience loyalty conflicts and feelings of being caught in the middle (Amato & Afifi, 2006; Kalmijn, 2013a). These children may resolve feelings of loyalty conflicts by taking the side of one parent against the other (Amato & Booth, 1997). As the social learning theory suggests, parents tend to be more involved with the same-gender children, particularly in companionship and achievement-related activities, as well as in teaching gender-typed behaviors and providing a same-gender role model for healthy emotional development (Lundberg et al., 2007; Videon, 2002). When parents separate, fathers, more often than mothers, reduce their involvement in children's lives, and this happens more strongly with daughters than with sons (Grätz, 2017). If these gender differences

persist into adulthood, the negative consequences of parental separation on intergenerational contact may be weaker in same-gender than in opposite-gender dyads. Thus, we hypothesize that in non-intact families, gender differences between parents are smaller in their contact with sons than in their contact with daughters (*gender mismatch hypothesis*).

Type of contact

The nature of intergenerational contact has changed in recent years, as digital communications, via video calls, instant messaging apps, and social media, have increased in popularity (Arpino et al., 2021; Hwang et al., 2023). Recently, the notion of digital solidarity has been introduced (Peng et al., 2018) to account for solidarity interchanged via digital tools that may complement or substitute more traditional forms of communication (Arpino et al., 2022; Danielsbacka et al., 2023; Fingermaan et al., 2020a). These alternative forms of interaction, such as conversations via instant text messaging apps or video calls, can be less intense and intrusive, which may help separated parents remain in contact with their adult children by avoiding heated arguments and requiring less time and effort (Peng et al., 2018; Stein et al., 2016). Emotional safety provided by digital communication may be particularly beneficial for non-custodial parents, usually fathers, who typically invest less in their relationships with adult children. We hypothesize that in non-intact families, gender differences between parents are smaller in digital contact than in other types of contact (*digital contact hypothesis*).

In their scoping review, Baude et al. (2023) highlight that separated parents, particularly fathers who have little face-to-face contact with their children, enjoy the opportunity to play a role in their children's everyday lives via digital communication. In non-intact families where fathers may have less frequent face-to-face contact with their children due to past custodial arrangements or physical distance, remote communication (via phone calls or digital tools) enables them to stay involved in children's lives and strengthen their relationships (Arpino et al., 2022; Tammissalo et al., 2024). Particularly adult children who have more frequent in-person interactions with their mothers than with their fathers may use phone or digital tools to maintain contact with fathers, thereby reducing the time-cost of meeting both parents on separate occasions. Hence, we hypothesize that in non-intact families, the gender gap in phone and digital contact decreases as fathers experience less frequent face-to-face contact compared to mothers (*compensation hypothesis*). Alternatively, the notion of "favoritism" suggests that adult children may favor one of the two parents regardless of interaction type (Kalmijn, 2013a), potentially reinforcing gender differences in post-separation contact. Studies on different types of contact have often found accumulation among face-to-face and remote contact, rather than compensation (Arpino & Failli, 2024; Danielsbacka et al., 2023). Thus, as a competing hypothesis to the *compensation hypothesis*, we postulate that fathers who have less frequent face-to-face contact compared to mothers also have less frequent phone and digital contact (*accumulation hypothesis*).

The Italian case

Research on post-separation parent-adult child relationships has mostly focused on countries, such as the United States and the Netherlands, characterized by an earlier and wider diffusion of divorce. We analyze data on Italy, a latecomer in the divorce revolution, where the diffusion of divorce/separation accelerated after 2015 due to the introduction of a new law called "fast divorce" (Law 55/2015) that reduced the time interval between legal separation and divorce (Lesthaeghe, 2020). Italy is also considered a "strong" family system, characterized by prolonged co-residence, close proximity, and frequent face-to-face contact between family

generations (Hank, 2007; Tosi, 2017). Strong family ties are coupled with traditional gender roles, which helps explain the more pronounced gendered effect of parental divorce on inter-generational relationships compared to gender-egalitarian countries (Kalmijn, 2008).

Historically, relationships between separated parents and children have been considerably affected by the prevalent judicial practice of assigning child custody exclusively to the mother, who was considered to be the “custodian” par excellence (Lavadera et al., 2013). This has changed in 2006 thanks to a reform that made joint custody the default option for separating couples, with the explicit policy goal of increasing fathers’ involvement in childrearing. In the pre-reform period, which is the time frame of the present study, few Italian divorced fathers obtained the physical custody of their children (9% in 2005) and had little or no contact with their non-residential children (ISTAT, 2014; Tosi & Guetto, 2024). Thus, child age at union dissolution strongly overlaps with the duration of father–child co-residence, which may influence solidarity in later father–child relationships (Kalmijn et al., 2019; Tosi, 2018). Therefore, we hypothesize that the father–mother gap in contact frequency is smaller, the higher is children’s age at parental separation (*child age hypothesis*).

DATA AND METHODS

Data and sample

Data are drawn from the ‘Families, Social Subjects and life cycle’ (FSS) survey conducted by the Italian National Statistical Office (ISTAT) in 2014. The FSS is a cross-sectional survey representative of the Italian population and contains information on 24,753 households selected from the Register of Population. One family respondent for each household was randomly selected to answer questions on a range of demographic and socio-economic characteristics, including retrospective information on parental separation and current information on parent–child relationships. The response rate is ~80% (ISTAT, 2016).

Frequency of contact between children and biological parents is not collected for co-resident dyads. Therefore, the sample selected for this study includes non-co-resident adult children aged 30–55 who had at least one parent alive. The bottom age limit is chosen to cover a wide range of relations between older parents and their adult children living independently, while considering the late transition out of the parental home in Italy (Tosi, 2017). The choice of the upper age limit is driven by the fact that parental separation is more exceptional among older cohorts. From an overall sample of 9382 adult children, we exclude those still living with at least one parent ($N = 1672$) and those with missing information on contact frequency or other relevant variables ($N = 28$). We also exclude children whose parents separate after age 17 ($N = 283$), thus focusing on parental separations that occurred at least 12 years before the time of the interview. Additionally, we exclude children and/or parents with migration backgrounds because their interactions may strongly differ from those of natives, and the sample size did not allow to account for heterogeneities related to country of origin ($N = 827$) (Albertini & Mantovani, 2022). Given that information on parents is collected for biological mothers and fathers separately, the analysis is carried out on the parent–child dyads as the unit of analysis. The final sample includes 6770 adult children, corresponding to 11,041 parent–child dyads. In our sample, parents are aged between 55 and 91 (mean = 72).

Contact frequency

We analyze three types of parent–child contact, that is, face-to-face, telephone, and digital interactions. In our data, adult children (i.e., respondents) were asked about the frequency of face-to-face, phone, and digital contact with their non-resident (biological) mothers and fathers.

Face-to-face contact refers to the frequency of in-person meetings that adult children have with their parents. Phone contact measures the frequency of voice calls between parents and their adult children also through smartphones but excludes explicitly video calls. With regard to digital contact, respondents were asked about the frequency with which they keep connected with their parents, via internet-based video calls (i.e., Skype, FaceTime, etc.) or via messages (i.e., SMS, WhatsApp, email, social network, etc.). The original answer categories, ranging from “never” to “daily,” are categorized in two groups: frequent (including “a few times a week” and “daily”) and not frequent (including “never,” “a few times a year,” “a few times a month,” and “once a week”) contact. In our data, relatively few adult children have weekly or less face-to-face (31%) and phone (25%) contacts with their parents, whereas 80% of them have infrequent digital contact with parents (Table 1). This is due to the characteristics of Italian families, whose members live close and frequently interact with each other through in-person contact, and to the technological skills that are required by older parents to maintain digital contact with their children.

Parental separation and gender (mis-)match

The main independent variable is a dummy indicating whether the respondent experienced the separation of parental union, from either cohabitation or marriage. The original question refers to de-facto parental separation, asking whether the parents of the respondents stopped living together because of separation or divorce. We focus on adult children whose biological parents separated during childhood or adolescence, thus excluding cases where separation occurred after age 17 (mean age of respondents at parental separation equal to 10.1). Respondents were also asked whether their biological parents ever got married; however, we do not distinguish between separation and divorce because of the small proportion of unmarried parents who broke up (6% of non-intact families). In our sample, 5% of adult children experienced parental separation (Table 1). Within the group of separated parents, we distinguish between those living with a new partner (“re-partnered parent”) and those living alone. Heterogeneity in the effect of parental separation on parent–child contact frequency is studied according to parental gender (father or mother) and children’s gender (son or daughter). The effect of parent–child gender (mis-)match is measured through the interaction between parents’ and children’s gender. We also analyze the moderating effect of the timing of parental separation by distinguishing between children aged 0–7 and those aged 8–17 at the time of separation. This threshold is chosen to ensure a sufficiently large and balanced cell size in all sub-groups.

Control variables

We use a set of control variables, including both parents’ and children’s characteristics that may influence parental separation and/or parent–child contact. Parental characteristics include age, education (tertiary, upper secondary, and lower than upper secondary), being widowed, having one or more limitations in daily activities, and employment status when the child was 14 (working vs. not working). Children’s characteristics are age, number of siblings (0–3+), and region of residence (North, Centre, South). We chose to control for geographical proximity between adult children and their parents, even though it can be considered a mediator of the total effect of parental separation. In a robustness check, we remove geographical proximity from the set of control variables and obtain similar results (see Figure S1A in the Supplementary Material). We create four categories of geographical proximity including <1 km, 1–16 km, 16–50 km, and more than 50 km from mothers’ and fathers’ home. While in random effects models all these variables are included, in fixed effects analysis only the coefficients of variables at the dyad level can be estimated (see Section 2.5).

TABLE 1 Sample characteristics.

	Sons	Daughters	Total
	<i>N</i> (% or mean)	<i>N</i> (% or mean)	<i>N</i> (% or mean)
<i>Outcomes (dyad level)</i>			
Face-to-face contact			
Frequent	3506 (66.5)	4081 (70.7)	7587 (68.7)
Phone contact			
Frequent	3692 (70.2)	4581 (79.5)	8273 (75.1)
Digital contact			
Frequent	920 (17.6)	1273 (22.1)	2193 (20.0)
<i>Parents' characteristics (dyad level)</i>			
Father	2319 (42.9)	2558 (43.2)	4877 (43.0)
Parental separation (<i>individual level</i>)	244 (4.6)	282 (5.0)	526 (4.8)
Timing of separation (<i>individual level</i>)			
Child 0–7	133 (2.5)	132 (2.3)	265 (2.4)
Child 8–17	111 (2.1)	150 (2.6)	261 (2.4)
Re-partnered parent	55 (1.0)	73 (1.2)	126 (1.2)
Parental education			
Tertiary	238 (4.5)	289 (5.0)	527 (4.8)
Upper secondary	989 (18.8)	1125 (19.5)	2114 (19.1)
Lower than upper secondary	4044 (76.7)	4358 (75.5)	8400 (76.1)
Widowed parent	1208 (22.9)	1212 (21.0)	2420 (21.9)
Parental age (mean)	72.1	71.8	71.9
Parent with health limitations	1668 (31.6)	1892 (32.8)	3560 (32.2)
Employment at age 14			
Not working	1922 (36.4)	1956 (33.9)	3878 (35.1)
Geographical proximity			
<1 km	2033 (38.6)	2148 (37.2)	4181 (37.9)
1–16 km	1128 (21.4)	1232 (21.3)	2360 (21.4)
16–50 km	1313 (24.9)	1613 (27.9)	2926 (26.5)
>50 km	797 (15.1)	777 (13.5)	1574 (14.3)
<i>Child characteristics (individual level)</i>			
Age (mean)	43.1 (6.7)	42.7 (6.7)	42.9 (6.7)
N. of sibling (mean)	1.6	1.6	1.6
Region of residence			
North	2388 (45.3)	2586 (44.8)	4972 (45.0)
Centre	889 (16.9)	997 (16.9)	1866 (16.9)
South	1994 (37.8)	2209 (38.3)	4203 (38.1)
N. of dyads	5271	5770	11,041

Analytical strategy

Our analytical strategy consists of a set of random and fixed effects linear probability models on the likelihood of having frequent contact with older parents. We, first, present predicted

probabilities of having frequent face-to-face, phone, and digital contact with parents estimated from random effects models to describe parent–child contact in intact and non-intact families (Figure 1). We, then, estimate child fixed effects linear probability models to account for observed and unobserved characteristics that may differ between intact and non-intact families, such as children’s personality, behavioral problems, and conflict between parents (Kalmijn, 2013b; Kalmijn et al., 2019; Van Houdt et al., 2018). The estimates are based on the comparison between the relationships that the child (respondent) has with the mother and the father and serve to test our hypotheses that the gap between fathers and mothers is smaller among sons than among daughters (*gender mismatch hypothesis*) and is larger in phone and face-to-face than digital contact (*digital contact hypothesis*). The main parameter of interest is the three-way interaction between parental separation, and parent’s and child’s gender, which is presented in terms of average marginal effects (AMEs) of being fathers versus mother in intact and non-intact families (Figure 2). To test the *compensation* and *accumulation hypotheses* that gender differences in phone and digital contact after separation are smaller or larger, respectively, when fathers have less frequent face-to-face contact compared to mothers, we add four-way interactions between parental separation, parents’ and children’s gender, and a dummy variable indicating whether respondents have frequent face-to-face contact with their mothers and infrequent meetings with their fathers (Figure 3). Finally, we test the *child age hypothesis*, which suggests smaller gender differences in contact frequency among parents who separate when the child is older, by distinguishing between separations occurring at age 0–7 and those occurring at age 8–17 (Figure 4). The small cell sizes in the multiple interactions, ranging from 35 to 111 parent–child dyads (see Tables S3A and S4A in the Supplementary Materials), increase uncertainty around the estimates and reduced the power of the tests. Despite the small cell sizes, our analysis reveals significant interactions, which we interpret in terms of gender differences rather than focusing on the precise quantification of each point estimate.

RESULTS

Contact frequency in intact and non-intact families

Figure 1 presents the results from random effects models on the probability of having frequent face-to-face, phone and digital contact with parents among sons and daughters in intact and non-intact families (full estimates in Table S1A in the Supplementary Materials). In intact families, for both sons and daughters the predicted probability of frequent (more than once a week) face-to-face contact with their mothers and fathers is about 70%; thereby gender differences between married parents are close to zero. The probability of having frequent face-to-face contact is lower in non-intact than in intact families. 56% of adult sons (C.I. = 50, 62) and 70% of adult daughters (C.I. = 69, 72) have frequent meetings with their separated mothers, while 50% of sons (C.I. = 44, 57) and 43% of daughters (C.I. = 37, 48) meet their separated fathers more than once a week. In terms of AMEs, sons’ probability of having frequent face-to-face contact with their fathers and mothers is 16 percentage points (i.e., p.p.) (C.I. = –22, –9) and 12 p.p. (C.I. = –18, –5) lower in non-intact than in intact families. Daughters are less likely to have frequent meetings with their separated fathers (AME of non-intact vs. intact = –27 p.p.; C.I. = –34, –9) but not with their separated mothers (AME of non-intact vs. intact = –2 p.p.; C.I. = –7, 4). Similarly, 81% (C.I. = 80, 83) and 82% (C.I. = 75, 88) of adult daughters have frequent phone calls with their mothers in intact and non-intact families, respectively, while the share of daughters with frequent phone calls with their fathers is 77% (C.I. = 76, 79) in intact families and 44% (C.I. = 37, 51) in non-intact families. Among sons, the probability of having frequent phone calls is 72% (C.I. = 70, 73) for partnered mothers and 61% (C.I. = 54, 69) for separated mothers, and 70% (C.I. = 69, 72) for partnered fathers and 40% (C.I. = 32, 47) for separated fathers. Consistent with the kin-keeper argument, mother–daughter ties are particularly

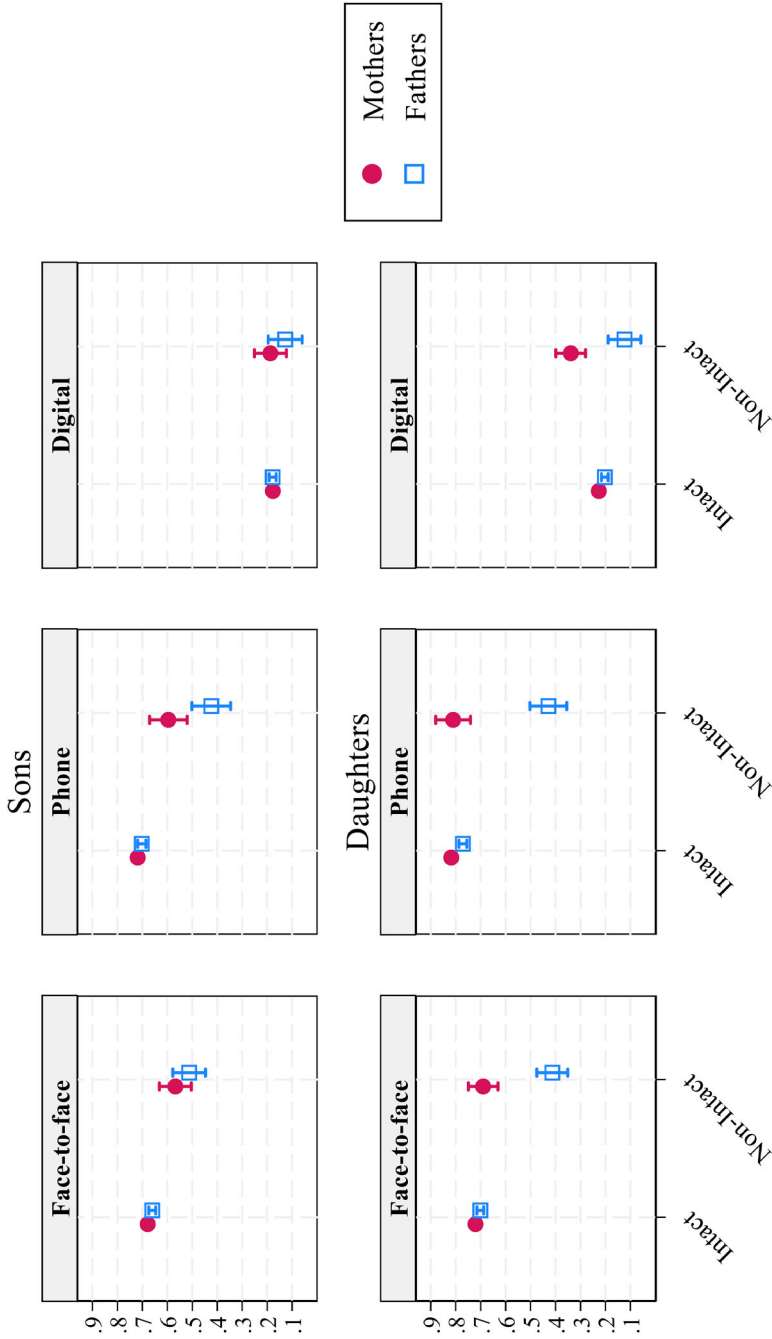


FIGURE 1 Predicted probabilities of having frequent contact with mothers and fathers in intact and non-intact families (random effects models). [Color figure can be viewed at wileyonlinelibrary.com]

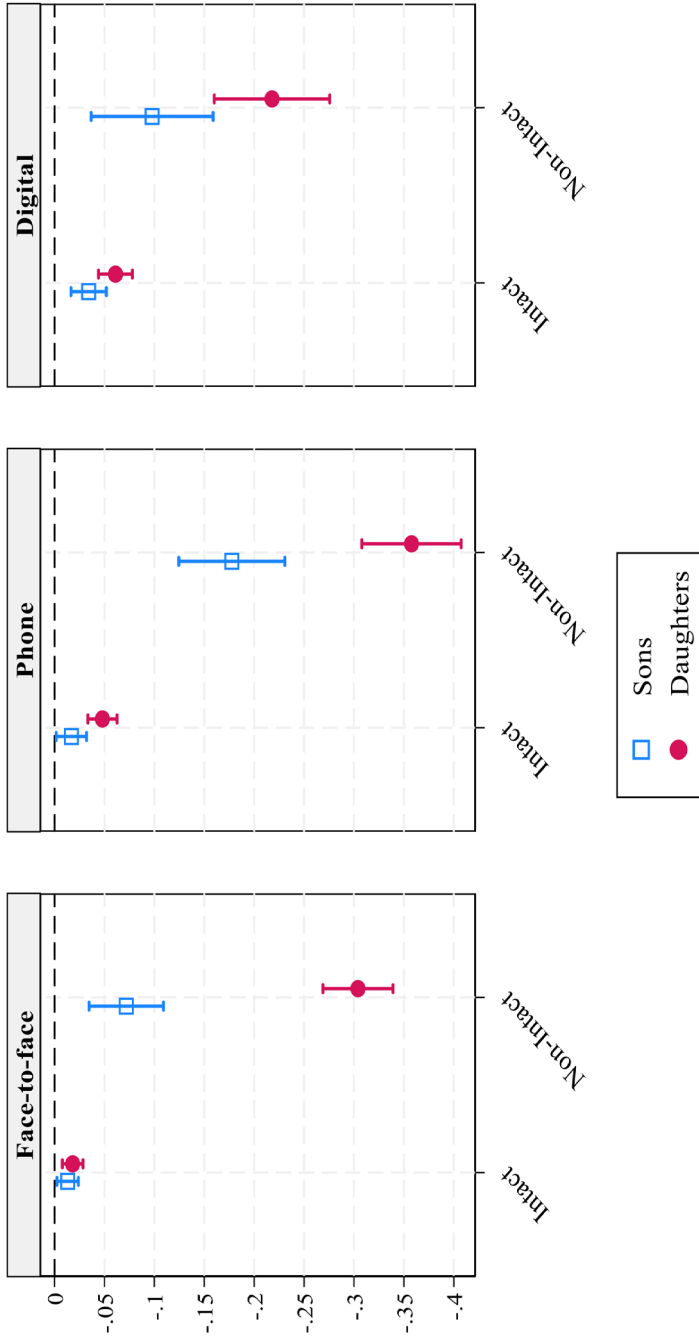


FIGURE 2 Average marginal effects of being father versus mother on the probability of having frequent face-to-face, phone and digital contact with parents (fixed effects models). [Color figure can be viewed at wileyonlinelibrary.com]

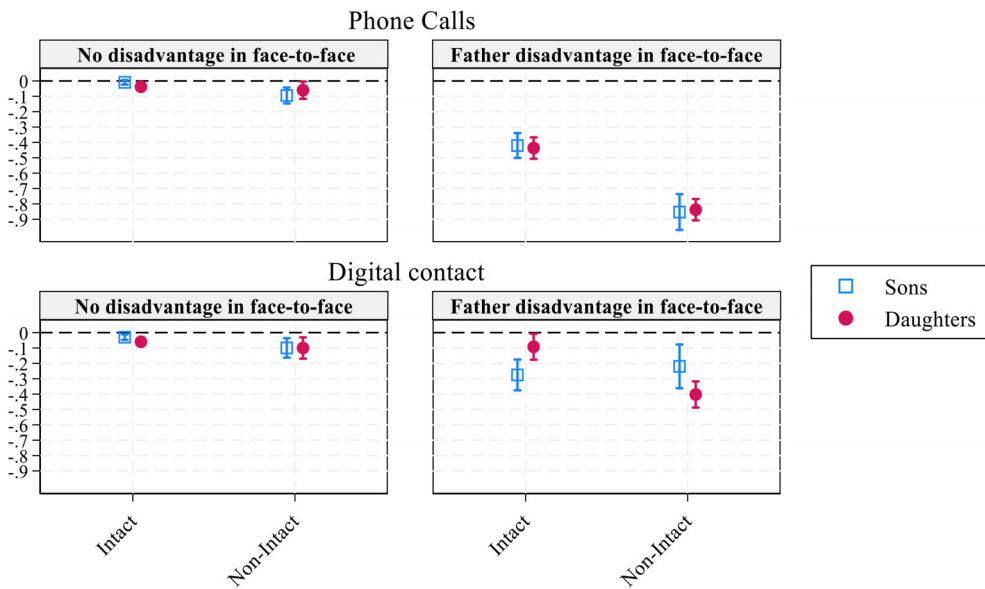


FIGURE 3 Average marginal effects of being father versus mother on the probability of having frequent phone and digital contact with parents according to father disadvantage in face-to-face contact (fixed effects models). [Color figure can be viewed at wileyonlinelibrary.com]

resilient to parental separation, and the frequency of their face-to-face and phone contact does not vary significantly in intact and non-intact families. Interestingly, daughters of separated parents are more likely to have frequent digital contact with their separated mothers (35%, C.I. = 29, 41) compared to partnered mothers (23%, C.I. = 21, 25). Daughters' probability of having frequent digital contacts with their fathers is equal to 20% (C.I. = 18, 22) in intact families and 14% (C.I. = 8, 20) in non-intact families. Among sons, there are no significant associations between parental separation and digital contact with parents: 18% (C.I. = 16, 19) and 20% (C.I. = 14, 26) of sons have frequent digital contact with partnered and separated mothers; 18% (C.I. = 17, 19) and 13% (C.I. = 6, 19) of sons with frequent meetings with partnered and separated fathers.

Gender mismatch and digital contact hypotheses

Figure 2 presents the results from child fixed-effects linear probability models estimating gender differences between parents in having frequent face-to-face, phone, and digital contact (see Table S2A in the Supplementary Materials). As noted in Figure 1, separated fathers have a lower probability of having frequent contact with their children compared to mothers. The gap between fathers and mothers is larger among daughters than among sons, with AMEs of being a separated father versus mother equal to -6 p.p. (C.I. = $-10, -2$) on face-to-face contact with sons and -29 p.p. (C.I. = $-33, -26$) on face-to-face contact with daughters, equal to -17 p.p. (C.I. = $-22, -12$) on phone contact with sons and -35 p.p. (C.I. = $-39, -30$) on phone contact with daughters, and equal to -9 p.p. ($-15, -3$) on digital contact with sons and -21 p.p. (C.I. = $-27, -15$) on digital contact with daughters. This is consistent with the *gender mismatch hypothesis* indicating that adult daughters tend to increase gender differences in the relationships that they have with their separated fathers and mothers, compared to sons. Additionally, Figure 2 shows the gender differences between separated parents are greater in face-to-face (-29 p.p., C.I. = $-33, -26$) and phone contact (-35 p.p., C.I. = $-39, -30$) with

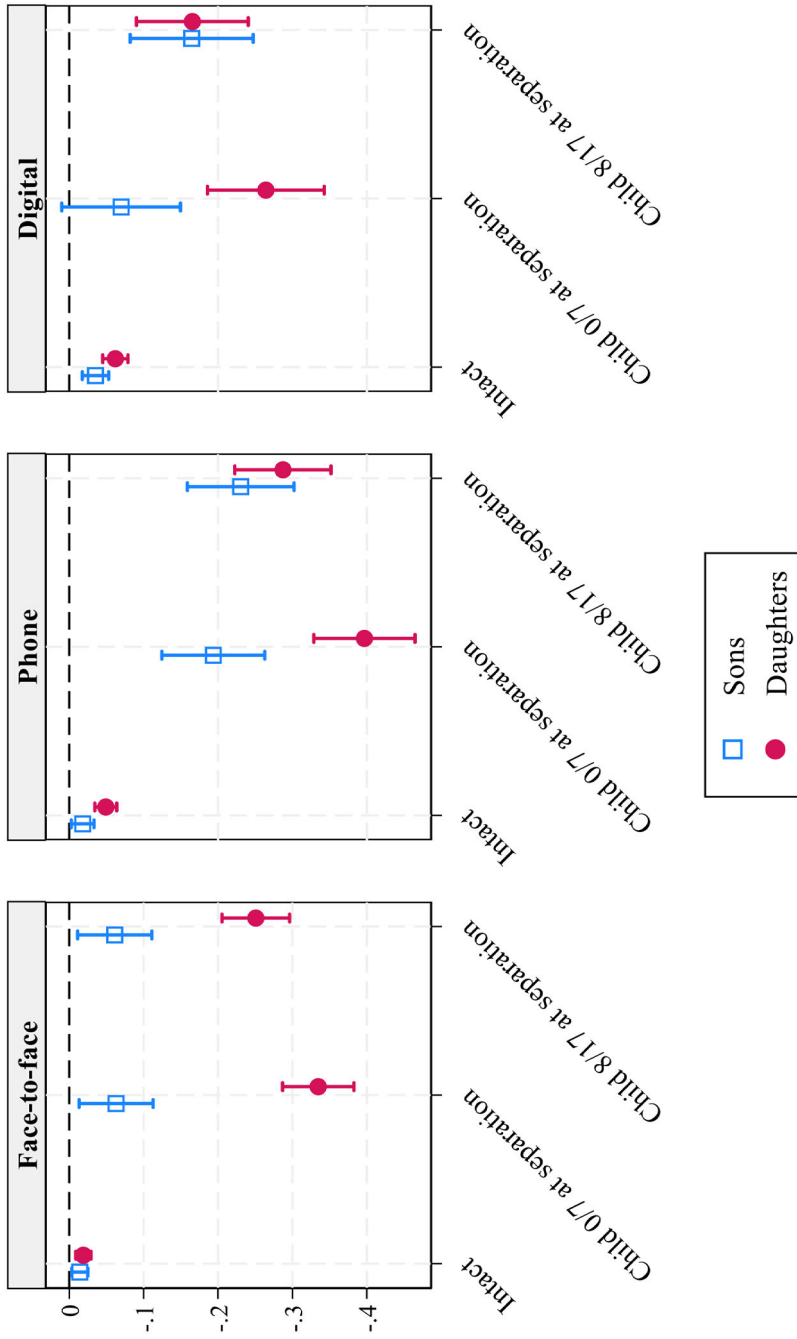


FIGURE 4 Average marginal effects of being father versus mother on the probability of having frequent phone and digital contact with parents according to child age at parental separation (fixed effects models). [Color figure can be viewed at wileyonlinelibrary.com]

daughters than in digital contact with daughters -21 p.p. (C.I. = $-26, -16$). This provides evidence in support to the *digital contact hypothesis* suggesting that in non-intact families, the father–mother gap is less marked in digital than in other forms of contact. However, the *digital contact hypothesis* is supported for daughters but not for sons, given that the gap between separated fathers and mothers is similar in face-to-face and digital contact with sons.

Compensation and accumulation hypotheses

In Figure 3, we test two competing hypotheses predicting compensation and accumulation effects for fathers who have less frequent face-to-face contact compared to mothers (“father disadvantage”). Contrary to our *compensation hypothesis*, gender differences between parents in phone calls are more pronounced among children who have more frequent face-to-face contact with their mothers. Among non-intact families, the AMEs of being father versus mother are equal to -9 p.p. (C.I. = $-15, -4$) in phone calls with sons when fathers and mothers have similar levels of face-to-face contact, whereas it is equal to -85 p.p. (C.I. = $-96, -73$) when fathers have less frequent face-to-face contact compared to mothers. Similarly, the AMEs of being father versus mother are equal to -6 p.p. (C.I. = $-11, -1$) in phone contact with daughters when fathers and mothers have similar levels of face-to-face contact, while it is equal to -84 p.p. (C.I. = $-91, -77$) when these gender differences are marked also in face-to-face contact frequency. With regard to digital contact, the gap between separated fathers and mothers is about -10 p.p. among both sons and daughters who have similar levels of face-to-face contact with their fathers and mothers. Conversely, the AMEs of being separated father versus mother are equal to -22 p.p. (C.I. = $-36, -8$) among daughters and to -40 p.p. (C.I. = $-49, -32$) among sons who have frequent face-to-face contact with their mothers but not with their fathers. Consistent with the *accumulation hypothesis*, the results suggest an accumulation of disadvantages for separated fathers who are less likely to have frequent face-to-face, phone, and digital contact with their children compared to mothers.

Child age hypothesis

Figure 4 shows the results on the moderating effect of child age at parental separation (see Table S4A in the Supplementary Materials). Gender differences in face-to-face, phone, and digital contact between separated parents and their adult sons do not vary significantly according to the time of parental separation. Adult sons aged 0–7 at parental separation are 6 p.p. (C.I. = $-11, -1$) less likely to see their separated fathers compared to their mothers, and the AME of being separated fathers versus mothers is -6 p.p. (C.I. = $-11, -1$) also for sons who were older at the time of separation. Conversely, among daughters, the AME of being fathers versus mothers is -33 p.p. (C.I. = $-38, -29$) in face-to-face contact for those aged 0–7 at separation while reduces to -25 p.p. (C.I. = $-29, -20$) for older daughters at parental union dissolution. This declining gender gap in contact with daughters is consistent across different types of contact, with a reduction of 11 p.p. (C.I. = $1, 20$) and 10 p.p. (C.I. = $0, 21$) in phone and digital contact according to daughters’ age at parental separation. This suggests that older daughters at parental separation tend to reduce the gap in the relationships that they have between separated parents.

CONCLUSION

The focus in this brief report has been on examining contact frequency between adult children and their parents according to parental separation and gender mismatch in parent–child dyads.

In line with previous studies, we find that children of separated parents are much less likely to remain in contact with their fathers, while contact with mothers is affected less strongly (Amato & Booth, 1997; Kalmijn et al., 2019). The current study makes several contributions to the existing research. First, according to the *gender mismatch hypothesis*, our findings show that daughters are more likely than sons to differentiate their relationships with separated parents, increasing gender differences between parents in contact frequency. Conversely, adult sons tend to attenuate gender differences in the relationships that they have with separated parents. This finding contrasts with Kaufman and Uhlenberg (1998) while partly aligning with Cooney (1994) who shows that in the US young adult daughters—but not sons—experience less intimacy in their relationships with their fathers in non-intact families compared to intact families. Our results are also consistent with Booth and Amato (1994), suggesting that the mother–daughter tie is especially resilient to parental separation, whereas the father–daughter tie is especially vulnerable. According to the social learning theory, children may identify more strongly with the parent of the same gender and may find it easier to share activities and interests with that parent (Amato & Booth, 1997). Amato and Afifi (2006) suggest that children take the side of the same-gender parent against the other, and daughters feel more under pressure than sons to take sides in parental disputes. Thus, separated fathers' reduced contact frequency compared to mothers is smaller, although still significant, among sons than among daughters.

Second, the type of contact matters. In line with the *digital contact hypothesis*, adult daughters are less likely to have frequent contact with their separated fathers than with mothers, but the gap between parents is smaller in digital than in face-to-face and phone contact with daughters. Less intrusive forms of contact may provide new channels of communication through which fathers and their daughters can interact with less investment of time and energy, avoiding immediate reactions and potential disputes (Peng et al., 2018; Stein et al., 2016). Digital communication not only reduces the opportunity-cost of having contact, like other forms of remote interaction (traditional phone calls), but also provides individuals some degree of control over their responses (Danielsbacka et al., 2023; Stein et al., 2016). However, this reasoning does not apply to contact between separated fathers and their sons who are less affected by the type of contact. Additionally, digital technology does not seem to provide separated parents who have few or no face-to-face contact the opportunity to compensate for their loss of in-person contact and to reinforce their relationships with children. In fact, the findings show that separated fathers who have less frequent face-to-face contact with children compared to mothers are also more likely to have infrequent phone and digital interactions with them, yielding evidence for the *accumulation hypothesis*. Consistent with Danielsbacka et al. (2023) and Arpino and Failli (2024), digital and traditional remote (e.g., via phone) contact add to rather than substitute in-person interactions between kin, particularly between separated parents and their adult children.

Third, our results show that differences between separated fathers and mothers in having frequent contact with their daughters decrease as daughters are older at the time of separation. This can be interpreted in terms of either the time since parental separation or the duration of co-residence before separation. Previous studies suggest that the long-term effects of divorce on father–child relationships are, in part, due to a difference in the length of shared residence (Kalmijn, 2013b; Kalmijn et al., 2019; Tosi, 2018). While increases in shared physical custody over the last decades may have boosted fathers' involvement in the United States (Meyer et al., 2022), significant gender differences in the long-term effects of parental separation remain evident in Italy, where gender equality is still low (Naldini & Saraceno, 2022; Tosi & Guetto, 2024) and living with single mothers is the most common post-separation arrangement for the sample we studied. Recent changes in divorce legislation and child custody may lead to an increase in separated fathers' involvement in children's lives, and our study provides an important baseline for future studies that may address the effects of policy changes

in post-separation living arrangements on parent–adult child communication and the wellbeing of both generations involved.

When interpreting the results of this study, three main limitations should be acknowledged. First, the proportion of older parents aged 55 or over having digital contact with children is small, due to the still high share of older Italians that do not use the Internet. Given that parental separation is relatively uncommon among these generations, our analysis on the compensation and accumulation effects is based on a restricted sample. Younger parents are much more likely to divorce or separate and to use the Internet and digital technologies in general. Thus, future studies may find higher rates of digital communication between older parents and children, and this may potentially help parents to compensate for the loss of in-person contact due to separation. Second, we use the age at parental separation as an indicator of shared residence between children and their fathers, although it can also capture the time since separation. We tested the robustness of our results by including interaction terms between parent and child gender and the number of years since separation. Our analysis revealed no clear patterns in the effects of separation (see [Figure S2A](#) in the Supplementary Materials). Third, although fixed effects models allow us to account for family characteristics that are shared by parents, such as family climate during parental separation, other types of confounders that differ between fathers and mothers may play a role in explaining gender differences after union dissolution. Using cross-sectional data, we cannot exclude the possibility of bias due to residual confounders, such as pre-separation conflicts between the child and one of the two parents.

Our empirical findings have implications for understanding the complexity of parent–child relationships in the context of increasing diffusion of separations, rapid advances in digitalization, and population aging. Parental separation increases gender inequality in parent–child contact, with separated older fathers being at greater risk of family estrangement (Arranz Becker & Hank, 2022). In fact, our results show that parental separation is associated with an increasing proportion of older fathers having infrequent contact with their children, which may lead to a polarization between partnered fathers with frequent family interactions and separated fathers with few or no contact with their adult children. Adult daughters have lower contact with their separated fathers which may signal greater difficulties than sons to remain in contact with their separated fathers. This, in turn, may increase gender disparities in the chance that parents have to receive emotional and practical support in later life, given that daughters often take care of family and caring responsibility (Rossi & Rossi, 1990). On the children’s side, gender differences in father involvement may be relevant not only for the development during early childhood but also for the chance of receiving financial support during the adulthood transition and the support that parents give in childcare. Although these inequalities are less marked in digital contact that offer the opportunity to keep in touch without strong investment in the relationship, remote forms of contact seem to reinforce, rather than compensate for, the disadvantage that separated fathers have in interactions. In fact, adult children who prioritize contact with their separated mother over their father also tend to have few phone calls and digital contact with their fathers. This pattern can potentially increase the polarization of parents with “strong” and “weak” family ties.

ACKNOWLEDGMENTS

Support from the Ministry of University and Research (MUR) and the NextGenerationEU (PRIN2022PNRR P2022XX9AF Beyond the nuclear family: Extended kinship and mental health in Italy—KinHealth) is gratefully acknowledged. Open access publishing facilitated by Università degli Studi di Padova, as part of the Wiley - CRUI-CARE agreement.

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

How to cite this article: Tosi, M., & Arpino, B. (2024). Gender inequality in intergenerational contact after parental separation in the digital era. *Journal of Marriage and Family*, 1–16. <https://doi.org/10.1111/jomf.13037>