

# The Strength of Parent–Adult Child Ties in Biological Families and Stepfamilies: Evidence From Time Diaries From Older Adults

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**ABSTRACT** We examine older partnered parents' time spent with adult children in biological and step families, treating time together as an indication of relationship strength. Using a unique national sample of U.S. time diaries from the Panel Study of Income Dynamics, we investigate time with all adult children combined and with each adult child. We find that time together depends on family structure and parent–adult child dyadic relationship type embedded in family structure. In analyses of all adult children combined, an older parent is more likely to spend time with adult children in biological families than in stepfamilies only when there is no shared biological child in the stepfamily. In dyadic analyses, a parent's tie with an adult child who is a biological child of both partners is stronger in stepfamilies than in biological families. Moreover, among stepfamilies, ties are not uniformly stronger with biological children relative to stepchildren; differences emerge only in more complex families when each partner has biological children from previous relationships. Our findings challenge the view that ties with older parents are always weaker with stepchildren in stepfamilies and point to the importance of considering parent–child relationships in the broader family context.

**KEYWORDS** Stepfamily • Time use • Stepchildren • Intergenerational relationships • Aging

## Introduction

Changes over the last half-century in fundamental demographic processes—including increased life expectancy (until recently), delayed marriage, increased cohabitation, high divorce and remarriage/repartnering rates, shifts in fertility and nonmarital child-bearing, and a rise in step relationships—have led to increases in the complexity of U.S. families (Agree 2018; Seltzer 2019). In particular, high rates of remarriage and repartnering mean that substantial percentages of families include stepfamily members acquired through formal remarriage, cohabitation, and serial noncoresidential relationships (Furstenberg 2014; Lin et al. 2017; Parker 2011; Wiemers et al. 2019;

Yahirun et al. 2018).<sup>1</sup> Studies have linked indicators of the strength of family ties—as measured by the frequency of exchanges, transfers, or contact—to family structure, with families that have step relationships (i.e., stepfamilies) having weaker ties than families in which parents are married and have only shared biological offspring (i.e., biological families). These studies have also found weaker dyadic ties between a parent and a stepchild than a biological child. In this study, we hypothesize that the strength of family ties depends on the structure of families as well as the nature of dyadic relationships between parents and adult children embedded in family structure. To test these hypotheses, we use an indicator of family solidarity that has not been used in past research: time spent together, as measured by time diaries. We present national estimates of older partnered parents' time spent with their adult children collectively, with a focus on differences by family structure. In addition, we examine time spent with each adult child to assess differences in a parent's time spent with a biological child versus a stepchild, by different types of family structures.

Older parents are of particular interest because they are much more likely than younger parents to have adult children. Also, when parents are older, time-related support (an important aspect of time together) generally flows from adult children to parents (Wiemers et al. 2019). Moreover, unlike time spent with minor children, decisions about time spent with adult children depend more on both the parent's and adult child's choices. This study contributes to the literature by (1) using unique, nationally representative data with information on the biological and step relationships of all adult children in the family to their parents; (2) placing the parent–child dyad in the family context; (3) including all older parents regardless of their care needs; and (4) introducing a previously unexamined dimension of intergenerational solidarity, time spent together, as measured in time diaries. We consider whether the strength of a parent–child relationship depends on the other relationships in the family and in doing so recognize important distinctions among types of stepfamilies—most importantly, whether current partners within stepfamilies share biological parenthood for at least one child.

## Background and Hypotheses

Relationships between stepparents and children have long been portrayed in literature and the media as fraught (Ganong and Coleman 2017). Although exaggerated, this portrayal is consistent with some research evidence. Research has found that relationships in stepfamilies are weaker than those in biological families and that within families, ties between stepparents and stepchildren are weaker than those between biological parents and children (Coleman and Ganong 2008; Eggebeen 1992; Fomby and Kravitz-Wirtz 2019; Kalmijn 2013; Patterson et al. 2022; Pezzin et al. 2008; Pezzin and Schone 1999; White 1994; Wiemers et al. 2019).

Interpretations of step–biological differences in parent–child ties differ in their emphasis on characteristics of a parent–child pair and characteristics of a family as a

<sup>1</sup> Multipartner fertility contributes to informal stepparent–child ties, even when the child's biological parent does not live with the new partner.

whole. Stepfamilies may include a combination of biological parent–child pairs and stepparent–child pairs. For instance, a partnered parent may have children with both current and former partners. At their most complex, stepfamilies may include children from each parent’s previous union(s) as well as children from the current union (joint). Our study contributes to a growing body of research accounting for both a dyadic parent–child relationship and whether a family includes step relationships (Ginther et al. 2022; Ginther and Pollak 2004; Kalmijn et al. 2019; Manning et al. 2014; Pezzin et al. 2008). Although some rationales described here apply to children of any age, our focus is on relationships between parents later in life and their adult children.

### Interpretations That Emphasize Family-Level Processes

A family systems approach points to several family-level processes in stepfamilies that may lead to weakened ties (Cox and Paley 1997; Hetherington 1992). First, uncertainty about obligations in stepfamilies may affect the family environment as a whole, not just the relationship between a stepparent and stepchild in that family. Ambiguity about the appropriate allocation of resources among family members with differing degrees of biological relatedness may increase strain and conflict in the family, thereby damaging the quality of biological parent–child and stepparent–child relationships.

Second, the biological parent and child bring a shared history to the new stepfamily (Cherlin and Furstenberg 1994; Kalmijn 2015). The lack of common history for all family members may lead to greater friction in their interactions. The quality of stepfamily ties also may suffer if experiencing parental divorce has damaged the relationship between the child and the biological parent who brought the stepparent into the family. The weaker ties in stepfamilies may be due to worse relationship skills among parents who separate and then repartner than among biological parents who remain together. Effects of divorce on children’s trust and ability to negotiate family interactions may also hinder close relationships in stepfamilies. Parents’ and children’s relationship skills affect interactions among all family members and between a parent and a specific child.

Among couples with stepchildren, the strength of family connections may depend on whether each or only one partner has stepchildren and whether the parents have joint biological children from their new partnership. Families in which both partners have children from past relationships may experience more boundary ambiguity and greater strains in balancing competing interests (Stewart 2005), perhaps weakening ties relative to stepfamilies in which only one partner has biological children. Stepfamilies that include a joint biological child may experience tension resulting from additional complexity when parents introduce a half sibling into the family. Alternatively, couples who have children together create family members with a shared history and common understanding of obligations and resources that may generate strong family-wide ties even in the presence of stepchildren.

### Interpretations That Emphasize Dyadic Relationships

Parents may invest less in a stepchild than a biological child for bioevolutionary reasons or because of sociocultural factors reinforcing the importance of a biological



Both types of measures offer respondents a specified window of time (e.g., in the last month or last 12 months), often with categorical answers (e.g., never, once a year, several times a year, several times a month, once a week, or more than once a week). The time-use literature classifies these types of measures as “stylized” measures. Such measures are prone to errors, including social desirability bias (in which people overreport or underreport activities thought to be desirable or undesirable), recall bias (especially for activities taking place irregularly), and reporting biases related to how clearly the activity type is defined for the respondent (National Research Council 2000). Time diaries provide an alternative method for ascertaining time use over a 24-hour period, including time spent with other family members. Time diary-based measures offer a snapshot of a randomly selected day. Although they are not able to detect variation in time together or frequency over a longer period, time diary measures are less susceptible to desirability, recall, and reporting biases (National Research Council 2000). In this study, we draw on 24-hour time diaries to create a measure of time together that reflects solidarity in family ties.

## Hypotheses

Our hypotheses address family-level differences related to family structure and parent-child dyad-level differences related to biological versus step relationships embedded in family structure. Motivated by prior research but also constrained by our data's sample size (described later), we distinguish among types of families as having (1) one or more joint biological children only; (2) one or more joint and one or more stepchildren; (3) no joint children and one or more biological children from each partner's past union(s); and (4) no joint children and one or more children from only one partner's past union(s). We also consider three types of parent-child relationships: (1) joint biological child; (2) biological child of the focal parent; and (3) stepchild of the focal parent.

We examine eight hypotheses, with the first three addressing differences by family structure.

*Hypothesis 1 (H1):* A parent is more likely to spend time and spends more time with children in families with only joint biological children than in families with any stepchildren.

*Hypothesis 2 (H2):* Among stepfamilies, a parent is more likely to spend time and spends more time with children if the couple has a joint child.

*Hypothesis 3 (H3):* Among stepfamilies without a joint child, a parent is more likely to spend time and spends more time with children if the couple has biological children from only one (vs. each) partner.

Five additional hypotheses relate to differences arising from the combination of family structure and child relationship type.

*Hypothesis 4 (H4):* A parent is more likely to spend time with a joint child in a biological family than in a stepfamily.

*Hypothesis 5 (H5):* In stepfamilies with joint children, a parent is more likely to spend time with their biological child if that child is a joint child with their current partner.

*Hypothesis 6 (H6):* In stepfamilies, a parent is more likely to spend time with a biological child than with a stepchild.

*Hypothesis 7 (H7):* In stepfamilies, a parent is more likely to spend time with a stepchild if there is no joint child in the family.

*Hypothesis 8 (H8):* In stepfamilies with no joint children, a parent is more likely to spend time with a stepchild if that parent does not also have a biological child—that is, if only one partner (vs. each partner) has a biological child.

## Data and Methods

### Data

We used data from the 2013 Panel Study of Income Dynamics (PSID), a national longitudinal survey that began with a sample of approximately 18,000 people in 5,000 U.S. households in 1968 (*PSID Main Interview User Manual 2019*). Individuals born to or adopted by someone in the PSID are recruited to become members of the PSID sample, and all individuals who live with them are represented in the PSID sample. The sample was augmented in 1997 to include individuals who immigrated to the United States between 1969 and 1997. Individuals were interviewed annually until 1997 and subsequently every other year. Wave-to-wave reinterview response rates are 93% to 96%. The 2013 sample includes 24,952 people in 9,063 households—a product of children growing up and forming new households, the addition of the immigrant refresher sample, and decisions to reduce the sample size in 1997. When weighted to adjust for sample selection and nonresponse, the data are nationally representative of U.S. adults.

Most of the measures we used were collected in the Rosters and Transfers (R&T) module included in the 2013 PSID main interview and the 2013 Disability and Use of Time Study (DUST 2013), a supplemental interview administered to a subset of PSID sample members. The R&T module asked questions about each living biological and adopted (henceforth, “biological”) child aged 18 or older of PSID reference persons and, if married/partnered, their spouses/partners (Schoeni et al. 2015). Because information on adult biological children was collected for both the reference person and their spouse/partner, the data identify adult stepchildren associated with *current* spouses/partners. Key characteristics of each adult child are also reported, including age, gender, employment status, marital status, education, and number of children. In the weeks following the main interview, single and married/partnered adults aged 60 or older in the 2013 PSID and their spouses/partners (regardless of age) participated in DUST 2013 (Freedman and Cornman 2015). Two time diary interviews were attempted by telephone for each participant: once about a randomly selected weekday and once about a randomly selected weekend day. The diaries were designed to be completed in 30–40 minutes. Among PSID households eligible for DUST 2013, 72% completed at least one diary. Spouses were asked about the same days (Freedman and Cornman 2015).

Our sample consists of married or cohabiting (henceforth, “partnered”) DUST 2013 respondents who completed at least one diary and had at least one adult biological child or stepchild identified in the R&T module. We excluded the 20

partnered parents who had coresident children under age 18 (less than 2% of all partnered parents) because time-use decisions regarding minor children are unique and too few respondents had both adult and minor children to support a separate analysis.<sup>2</sup> For analyses of time each parent spent with adult children collectively (henceforth, “all adult children combined”), the unit of analysis is the parent diary day, with each parent contributing up to two diaries. The data include 2,282 diary days for 1,156 parents representing 635 couples; 521 couples contributed data from both partners, and 114 contributed data from just one partner because the other partner was not interviewed in DUST 2013. Of the 2,282 diary days, 2,196 were from married parents. The remaining diaries ( $n=86$ ) were from cohabiting parents, defined in the PSID as living together for at least a year. Altogether, 782 parent diary days (34.3% unweighted) involved time spent with adult children.

For analyses of the time each parent spent with each adult child, the unit of analysis is the parent–child diary-day dyad. The data include 7,377 parent–child diary-day dyads, and 1,046 parent–child diary-day dyads (14.2% unweighted) involved some time together during the diary day. When two or more children were present for an activity, the time in that activity was assigned to each dyad.

### Measures of Family Structure and Child Type

Four family types and three parent–child relationship types are defined in [Table 1](#). The four family types are defined by the married or cohabiting couple’s relationships to their adult children. In a biological family, the couple shares biological parenthood for all children; only joint children are in the family (F1). We contrast these biological families with two broad types of stepfamilies: those with one or more joint children and those with no joint children. In a stepfamily with joint and stepchildren, the couple shares biological parenthood for only some children (F2). In stepfamilies without joint children, we distinguish those with biological children from each partner (F3) from those with biological children from only one partner (F4). Each adult child within a parent–child dyad is classified based on the child’s relationship to each member of the couple. A joint child is the biological child of both partners (C1). A biological child of the focal parent only is the stepchild of only the partner (C2). A stepchild of the focal parent only is the biological child of only the partner. The combination of family structure (F) and adult child relationship type (C) leads to eight categories (F–C) examined in dyad analyses.

### Measures of Time With Children

The time diary interview asked about all activities occurring on the previous day, beginning at 4 a.m. and continuing until 4 a.m. on the day of the interview. The activity questions in the time diary were modeled after the American Time Use Study (Bureau of Labor Statistics 2020). However, new items were developed for DUST

<sup>2</sup> Noncoresident minor children, who we did not explicitly exclude, are likely even less common.

**Table 1** Categories of family structure and adult child type

	Label	Definition
Family Structure (F)	F1. Biological family, joint children only	Couple shares biological parenthood for all children
	F2. Stepfamily, joint children and stepchildren	Couple shares biological parenthood for only some children
	F3. Stepfamily, no joint children, biological children from each partner	Couple does not share biological parenthood for any children (no joint), but each partner has biological children
	F4. Stepfamily, no joint children, biological children from one partner	Couple does not share biological parenthood for any children (no joint), and only one partner has biological children
Adult Child Type (C)	C1. Joint child	Biological child of both partners
	C2. Biological child of focal parent only	Biological child of focal parent and stepchild of focal parent's partner
	C3. Stepchild of focal parent	Stepchild of focal parent and biological child of focal parent's partner

2013 to distinguish time actively engaged in an activity with other individuals (“Who did that with you?”) from passive time spent together (“Who else was [at location] with you?”). For time together, each person was identified, including specific adult children. If more than one adult child was engaged in or present for an activity, the time in that activity was counted only once in the analyses of diary days but counted for each identified child in the parent–child dyad analyses. Time together includes time together that is not face-to-face or in person (e.g., on the phone), but that type of shared time represents just 2.8% of the time parents spent with adult children.

For analyses of diary days, we examined a dichotomous outcome indicating whether the parent observation had any minutes with adult children. We also examined total minutes for all parent observations with any minutes with adult children. For parent–child dyad analyses, we examined the dichotomous outcome of any minutes (vs. none). Small sample sizes prevented us from examining total minutes among dyads with any minutes.

### Control Variables

We created control variables reflecting parent-related demographic factors: parent’s age (in continuous years), gender, race (Black or other vs. White), completed years of education (13–15 or 16+ years vs. ≤12 years), whether the parent currently works for pay, whether the parent is in poor or fair health (vs. good or better), number of adult children (including joint children, biological children of the focal parent only, and stepchildren), and whether any of those adult children are daughters. Control variables reflecting parent characteristics had very low levels of missing information (<1%), so we assigned modal characteristics (for education by age and sex). We included indicators of whether the diary day was a weekday (vs. weekend day) and whether the diary day was a typical day. In sensitivity analyses, we considered indicators of coresidence with any adult child and having a nonresident child living



within 30 miles. We also considered the child's age when the current step relationship began; however, because this information is not available for all observations, we did not include it in the models.

For dyadic analyses, we created additional child-specific control variables: the child's gender, age (in continuous years), completed education, and work status; whether the adult child is married or cohabiting; and whether the adult child has any children. Levels of missing data for child characteristics were generally low (approximately 1% to 3%), but sample sizes were large enough to allow coding into separate missing categories in models. In sensitivity analyses, we also included indicators for whether the adult child lives with the focal parent and whether the child lives near (within 30 miles) but not with the focal parent.

### **Analytic Approach**

We conducted two sets of analyses. First, we examined family structure differences in time a parent spent with any adult child, summed across all adult children combined. For these analyses, we examined both any time and amount of time. Then we conducted dyadic analyses of parent–adult child pairs focusing on family structure–child type differences in whether a parent spent any time with the child in that dyad. All analyses were weighted (using the diary-level weights) and accounted for clustering of multiple diaries within families.

#### *Family Structure and Time With All Adult Children Combined*

We calculated descriptive statistics for family structure and for estimates of time a parent spent with all children by family structure. We report the percentage of diary days in which parents spent any time with any adult child and the average number of minutes across all children combined (conditional on positive minutes). The online appendix reports additional descriptive statistics for control variables, overall and by family structure.

Next, we estimated logistic regression models predicting whether the parent spent any time with adult children on the diary day and ordinary least-squares (OLS) models of the number of minutes spent with all adult children combined among observations with positive minutes. We present odds ratios (ORs) and coefficients for family structure indicators (with biological family as the reference group) from full models and standard errors for the coefficients. The online appendix provides unadjusted models, full models with covariates, and an expanded model that includes an indicator of coresidence with any adult child and having a nonresident child living within 30 miles. The decision to live together or nearby may reflect close family ties and the desire to spend time together. Because controlling for coresidence or distance would eliminate a source of shared time that may differ by family type, our preferred specification excludes these indicators. However, they are included in an expanded model in the online appendix to aid with interpretation, particularly regarding whether differences in distance account for differences in observed patterns of time together by family structure–adult child type.

**Table 2** Hypotheses and associated contrasts tested

	Categories <sup>a</sup> Contrasted
Family Structure Hypotheses: Time With All Adult Children Combined	
H1a–H1c. A parent is more likely to spend time and spends more time with children in families with only joint biological children than in families with any stepchildren.	F1 > F2 F1 > F3 F1 > F4
H2a–H2b. Among stepfamilies, a parent is more likely to spend time and spends more time with children if the couple has a joint child.	F2 > F3 F2 > F4
H3. Among stepfamilies without a joint child, a parent is more likely to spend time and spends more time with children if the couple has biological children from only one (vs. each) partner.	F4 > F3
Family Structure–Adult Child Type Hypotheses: Time With Each Adult Child	
H4. A parent is more likely to spend time with a joint child in a biological family than in a stepfamily.	F1–C1 > F2–C1
H5. In stepfamilies with joint children, a parent is more likely to spend time with their biological child if that child is a joint child with their current partner.	F2–C1 > F2–C2
H6a–H6c. In stepfamilies, a parent is more likely to spend time with a biological child than with a stepchild.	F2–C2 > F2–C3 F3–C2 > F3–C3 F4–C2 > F4–C3
H7a–H7b. In stepfamilies, a parent is more likely to spend time with a stepchild if there is no joint child in the family.	F3–C3 > F2–C3 F4–C3 > F2–C3
H8. In stepfamilies with no joint children, a parent is more likely to spend time with a stepchild if that parent does not also have a biological child—that is, if only one partner (vs. each partner) has a biological child.	F4–C3 > F3–C3

<sup>a</sup> Categories are defined in Table 1. See Table A5 (online appendix) for a summary of the findings.

Following Pezzin et al. (2008), we used the full model to calculate the predicted probability of spending time with any children and predicted minutes spent with all adult children combined (conditional on spending some time together) for alternative family structures. In these calculations, we set the family structure variables to values associated with each type while holding all other variables at their original values for the observation. We calculated predictions for each observation and averaged them across the sample. Differences in the predictions across family structures are the marginal effects of family structure. Baseline estimates hold variables at their original values, including family structure. To evaluate each of the three hypotheses about family structure, summarized in the top half of Table 2, we tested differences in predicted values using *t* tests.

### *Family Structure by Child Type and Time With Each Adult Child*

For time with each adult child, we first calculated the distribution of the dyadic sample across the combined family structure–adult child type categories. We then estimated the percentage that spent any time together. As noted earlier, we did not

examine average minutes because of small cell sizes for most of the stepfamily combinations. We also calculated descriptive characteristics of explanatory factors for the full dyadic sample and by each of the eight family structure–adult child type categories, which are shown in the online appendix.

We estimated logistic regression models predicting any time with each adult child on the diary day. We present ORs from full models for family structure by child type indicators (with biological family–joint child as the reference group). The online appendix shows unadjusted models, full models with covariates, and an additional expanded model that includes an indicator of whether the adult child was coresident with or living near (within 30 miles of) the focal parent. Finally, we calculated predicted probabilities of spending time with a given child on the diary day for alternative family structures–child types using the full logistic model. We calculated the probabilities using the same method as for family-level models but allowing family structure and child type (not just family structure) to vary. Hypotheses related to family structure and child type, summarized in the bottom half of [Table 2](#), were evaluated using *t* tests for differences in predicted values.

## Results

### Family Structure and Time With All Adult Children Combined

A substantial share of diary days, approximately one third, are from older partnered parents in stepfamilies ([Table 3](#)). Only 6.7% are from older partnered parents with a joint child with their current partner in addition to at least one stepchild. Another 17.4% are from parents who do not have a joint child with their current partner, but each partner has at least one biological child. An additional 10.7% are from parents in which partners do not have a joint child together and only one partner has at least one biological child.<sup>3</sup> There are also statistically significant differences by family structure in parent's age, race, education, and number of children and whether the parent has a daughter or coresident child (see [Table A1](#), online appendix).

There are large and statistically significant differences by family structure in a parent spending any time with an adult child (see [Table 3](#), column 2). The share spending any time together on a given day ranges from just 16.0% for parents without joint children and with biological children from only one partner to 47.2% for parents with both joint and stepchildren. Among parents with biological families, 35.4% spent time with an adult child—a figure higher than that for both stepfamily configurations with no joint children.

The average number of minutes among those who spent any time with adult children also varies by stepfamily structure, ranging from 159 minutes (nearly 3 hours) for parents without joint children and with biological children from only one partner to 308 minutes (approximately 5 hours) for parents with joint children and stepchildren

<sup>3</sup> These percentages mirror the weighted family structure distribution for parents in the sample: 66% are in biological families, 7% are in stepfamilies with joint children and stepchildren, 17% are in stepfamilies with no joint children in which each partner has at least one biological child, and 10% are in stepfamilies with no joint children in which only one partner has at least one biological child (not shown).





In contrast to our hypothesized differences, parents are not more likely to spend time and do not spend more time with children in biological families (probability = .370, minutes = 248) than in stepfamilies with joint children (probability = .488, minutes = 299; H1a,  $F1 > F2$ ). However, parents in biological families are more likely to spend time with children than parents in both types of stepfamilies without joint children (probability = .200 for biological children from each partner; probability = .162 for biological children from one partner; H1b,  $F1 > F3$ ; H1c,  $F1 > F4$ ). Parents in biological families also spend more time with children than parents in stepfamilies with no joint children, but only when just one partner has biological children (248 vs. 156 minutes; H1c,  $F1 > F4$ ).

The results support our second family hypothesis (H2): among stepfamilies, parents with joint children are more likely to spend time with children (probability = .488) and spend more time with them (299 minutes) among those with any time, compared with stepfamilies with no joint children (probability = .200, minutes = 194, for those with biological children from each partner; probability = .162, minutes = 156, for those with biological children from one partner; H2a,  $F2 > F3$ ; H2b,  $F2 > F4$ ).

For both outcomes, the results do not support H3 ( $F4 > F3$ ). We find no statistically significant differences in time with children for parents in families in which each has biological children from previous unions and those in which only one parent has biological children from a previous union, among those without any joint children.

### Family Structure–Adult Child Type and Time With Each Adult Child

The weighted distribution of parent–adult child dyads within family types shows that most diary-day dyads are from biological families with joint offspring, accounting for 55.5% of the sample (Table 5). The remaining 44.5% are in stepfamilies, with 8.3% from stepfamilies with joint children and 36.1% in stepfamilies without joint children. A substantial share of dyads in the latter group are from families that have biological children from each partner (14.2% of the sample are focal parent–biological child dyads, and 14.2% are focal parent–stepchild dyads). Other types of stepfamily–adult child combinations are rare, representing only 2.4% to 4.0% of diary-day dyads.<sup>4</sup> There are statistically significant differences by family structure–adult child type in parent’s age, race, education, and number of children; adult child’s gender, age, education, and marital/cohabitation status; and whether the adult child has a child, is coresident, and lives nearby (Table A3, online appendix).

The results in Table 5 show large, statistically significant differences in the percentage of parents spending time with an individual child by family structure–adult child type. Shared time is most common for a parent–child dyad for joint children in families that also have a stepchild: 30.1% spent some time together during the day. This share is greater than among parent–child dyads from biological families (17.5%). Five of the six other family structure–adult child type combinations are less

<sup>4</sup> These weighted percentages for diary-day dyads in Table 5 are very close to the weighted distribution in the sample of dyads (i.e., each dyad represented only once in the sample): 56% of dyads are in biological families with joint offspring, 8% are in stepfamilies with joint children, and the remaining 36% are in families without joint children. Among the latter, 14% are parent–biological child dyads, and 14% are parent–stepchild dyads. Other types of stepfamily–adult child combinations represent 2% to 4% of dyads.

**Table 5** Weighted percentage of diary days for parent–adult child dyads on which parent spent any minutes with each adult child, overall and by family structure and child type

Dyad Type	Family Structure	Adult Child Type	Parent–Adult Child Dyads		
			% With Family Structure and Adult Child Type	% With Any Minutes	Number of Dyads
—	Total	Total	100.0	13.5	7,377
F1–C1	Biological, joint children only	Joint	55.5	17.5	3,285
F2–C1	Stepfamily, joint children and stepchildren	Joint	3.5	30.1**	372
F2–C2	Stepfamily, joint children and stepchildren	Biological child of focal parent	2.4	4.9**	261
F2–C3	Stepfamily, joint children and stepchildren	Stepchild of focal parent	2.4	6.1	291
F3–C2	Stepfamily, no joint children, biological children from each partner	Biological child of focal parent	14.2	8.6**	1,223
F3–C3	Stepfamily, no joint children, biological children from each partner	Stepchild of focal parent	14.2	3.6**	1,222
F4–C2	Stepfamily, no joint children, biological children from one partner	Biological child of focal parent	4.0	10.6*	382
F4–C3	Stepfamily, no joint children, biological children from one partner	Stepchild of focal parent	3.7	7.2**	341

Notes: Percentages may not equal 100 because of rounding. The data include diary days from married and cohabiting parent–adult child dyads in which at least one partner is aged 60 or older.

Sources: The 2013 Panel Study of Income Dynamics and the 2013 Disability and Use of Time Supplement.

\* $p < .05$ ; \*\* $p < .01$  compared with biological family–joint child (F1–C1) based on the unadjusted model in Table A4 (online appendix)

likely to spend time together (ranging from 3.6% to 10.6%) than dyads from biological families.

The adjusted family structure–adult child type differences in whether the parent and adult child spent time together are reported in Table 6. The results show large and significant differences in dyads spending time together by family structure–adult child type in the contrasts based on the full logistic regression model. Consistent with the unadjusted differences, the adjusted differences show that H4 is rejected. Contrary to the hypothesized direction, a biological parent and joint child are *less* likely to spend time together if they are embedded in a biological family (prob. = .159) than in a stepfamily (prob. = .238): that is, F1–C1 < F2–C1 ( $p < .05$ ).

The table also shows support for H5 and partial support for H6. In stepfamilies with joint children, a parent is more likely to spend time with their biological child if that child is also their current partner’s biological child (prob. = .238) compared with a biological child with a prior partner (prob. = .059; H5, F2–C1 > F2–C2).

**Table 6** Adjusted odds ratios (ORs) from full models and predicted probability of spending any minutes with each adult child, by family structure and child type

Dyad Type	Family Structure	Adult Child Type	Any Minutes Spent With Adult Child (OR)	Predicted Probability of Any Minutes
—	Total	Total	—	.135
F1-C1	Biological, joint children only	Joint	Omitted	.159 <sup>a</sup>
F2-C1	Stepfamily, joint children and stepchildren	Joint	1.75* (0.49)	.238 <sup>b</sup>
F2-C2	Stepfamily, joint children and stepchildren	Biological child of focal parent	0.31* (0.14)	.059
F2-C3	Stepfamily, joint children and stepchildren	Stepchild of focal parent	0.37 (0.23)	.070
F3-C2	Stepfamily, no joint children, biological children from each partner	Biological child of focal parent	0.71 (0.14)	.122 <sup>cc</sup>
F3-C3	Stepfamily, no joint children, biological children from each partner	Stepchild of focal parent	0.26** (0.06)	.052
F4-C2	Stepfamily, no joint children, biological children from one partner	Biological child of focal parent	0.47** (0.12)	.087
F4-C3	Stepfamily, no joint children, biological children from one partner	Stepchild of focal parent	0.30** (0.11)	.058

*Notes:* The table presents ORs and predictions of any minutes for the family structure–adult child type hypotheses (shown in [Table 2](#)) based on the full model in [Table A4](#) (online appendix). The data include diary days from married and cohabiting parent–adult child dyads in which at least one partner is aged 60 or older. Standard errors are shown in parentheses.

*Sources:* The 2013 Panel Study of Income Dynamics and the 2013 Disability and Use of Time Supplement.

<sup>a</sup> H4: difference from stepfamily, joint children and stepchildren/joint child not significant in hypothesized direction (F1–C1 > F2–C1); however,  $p < .05$  for F1–C1 < F2–C1.

<sup>b</sup>  $p < .05$  for H5: difference from stepfamily, joint children and stepchildren/biological child of focal parent (F2–C1 > F2–C2).

<sup>cc</sup>  $p < .01$  for H6b: difference from stepfamily, no joint children, biological children from each partner/stepchild of focal parent (F3–C2 > F3–C3).

\* $p < .05$ ; \*\* $p < .01$  compared with biological family–joint child (F1–C1) based on the full model in [Table A4](#) (online appendix)



Moreover, in stepfamilies with no joint child, a parent is more likely to spend time with a biological child than with a stepchild, but only if there are biological children from each partner (H6b,  $F3-C2 > F3-C3$ ). The hypothesized stepchild–biological child differences do not reach the .05 significance level for other types of stepfamilies (H6a,  $F2-C2 > F2-C3$ ; H6c,  $F4-C2 > F4-C3$ ).

The parent–child dyad analyses do not support the hypothesis that parents in stepfamilies are more likely to spend time with a stepchild when there are no joint children in the family (H7a,  $F3-C3 > F2-C3$ ; H7b,  $F4-C3 > F2-C3$ ). Similarly, the results do not support our hypothesis that parents in stepfamilies without joint children are more likely to spend time with a stepchild if the stepparent does not also have a biological child (H8,  $F3-C3 > F4-C3$ ).

Control variables that are significant in the full model include parent's gender, education, and number of adult children; adult child's gender and age; whether the adult child was working for pay, was married/cohabiting, and was missing information about having children; and whether the diary day was a weekday (Table A4, column 2). Controlling for dyad differences in coresidence and distance reduces the differences between biological parent–child dyads in biological families and other family structure–child types, as expected (Table A4, column 3). In this supplemental model, differences between dyads from biological families and stepfamilies in any time spent with a joint child ( $F1-C1$  vs.  $F2-C1$ ) are no longer statistically significant. In addition, parent–joint biological child dyads in biological families ( $F1-C1$ ) are more likely to spend time together than parent–stepchild dyads in stepfamilies only when those stepfamilies do not have joint children ( $F3-C3$  and  $F4-C3$ ).

## Discussion

Our findings challenge the view that parent–adult child ties are stronger in biological families than in all types of stepfamilies or in all dyadic biological relationships than in step relationships. As measured by the time parents and adult children choose to spend together, family ties are stronger in biological families than in stepfamilies only when the partners in the stepfamily do not share biological parenthood for at least one child—that is, only when there are no joint children. Furthermore, a parent's tie with an adult child who is a biological child of both partners is stronger in stepfamilies than in biological families, in which all dyadic relationships are biological. Our supplemental analyses suggest that this family structure difference in dyadic ties is linked to a higher percentage of biological offspring who live with their parents in stepfamilies with at least one joint child (24%) than in biological families (10%). Parents' and children's decisions to live together or near one another may be partly the result of closer relationships and the desire to spend time together.

In addition, ties in stepfamilies are not uniformly stronger with biological children relative to stepchildren. The likelihood of spending time together does not differ for a stepchild and biological child if there are joint children in the family or if only one parent has biological children. Instead, the predicted probabilities show that differences emerge only in complex stepfamilies in which each partner has biological children from previous unions. That stepfamilies with joint children seem to

have stronger ties between parents and adult children raises the important question of whether bringing a joint child into the family binds family members together by creating a shared focus or whether the decision to have a child together reflects preexisting, unmeasured differences in family commitment between couples who eventually have a child together and those who do not. Evidence against this selection interpretation comes from Guzzo's (2017) research on younger stepfamilies, which suggests that remarried couples do not have a child together to cement their partnership. However, some evidence suggests that having a half sibling may enhance contact between stepchildren and stepparents after childhood (Ganong and Coleman 2017).

Regardless of the underlying explanation for the apparently stronger parent-child bonds in stepfamilies with joint children, our conclusions about stepfamily variation are tempered by the fact that the types of stepfamilies and dyads with the strongest ties are not the most common. Just 7% of older parents have stepfamilies that include a joint biological child—the family type with the strongest ties—whereas more than 25% have other types of stepfamilies with weaker ties. Similarly, the dyads in stepfamilies that have by far the strongest ties—children who are biological offspring of both partners—are uncommon (representing less than 4% of all dyads). It will be important to monitor the distribution of types of stepfamilies for subsequent cohorts of older adults. Also unclear is whether the types of stepfamilies with stronger ties will become more or less common over time. Projections of family structure are needed that build upon those by Wachter (1997) and Verdery and Margolis (2017) and incorporate the family structures and child types found here to differ significantly in relationship strength.

This study has limitations. We examined only two randomly selected diary days. Although these data are nationally representative, using the two diary days limits our conclusions about contact over a longer time frame. Moreover, time together does not necessarily reflect the quality of time together, which is an important indicator of solidarity across generations. In addition, although the PSID contains extensive family histories, the survey design limited our ability to account for the role of marital history or other parents of the adult child in conjunction with family structure and child type. For instance, consider a daughter who is the biological daughter of the husband and stepdaughter of the wife. The amount of time the daughter spends with her biological father may depend on whether her biological mother is still alive, whether her biological parents ever lived together, and how the parents' relationship ended (e.g., separation vs. widowhood).

We also could not examine unpartnered adults with these data because stepchildren from past relationships were not identified. Studies of unpartnered adults are especially important for understanding the implications of family structure-adult child type for care provided to aging parents because these parents do not have partners to meet their care needs (Wolff et al. 2018). Furthermore, we did not assess the impact of the amount of time the parent-child dyad spent living together during the child's formative childhood years or the duration of the step relationships. Prior research suggests that both past coresidence and duration may reduce the stepfamily disadvantage (Fomby and Kravitz-Wirtz 2019; Kalmijn et al. 2019). However, in our supplemental analyses of a subsample with more complete family history data (not shown), we found that controlling for the child's age when the parent married the current partner had little impact on the estimated differences in time spent together by

family structure–adult child type. Finally, although we controlled for the parent’s and child’s gender in this study, gender interactions have not yet been fully considered. Future research should also consider passive versus active time together, whether both members of the couple or other children were present when the parent and child spent time together, the reason for time together (social vs. instrumental), and other indicators of tie strength.

The extent to which our findings will apply to future cohorts of older adults and their adult children is also unclear. The generations studied here, which include the leading edge of the baby boom generation (born in 1946–1952) and earlier cohorts (born before 1946), may differ from future cohorts in their family structure and norms about family relationships (Fingerman et al. 2012; Ryan et al. 2012). One study from the Netherlands suggests that older parents have become more likely to include a stepchild in their social network (Suanet et al. 2013), suggesting that stepfamily boundaries may be changing. To our knowledge, the type of data analyzed in our study is not available on a national scale for younger cohorts. Future research should pair detailed family information with the collection of time diary data from more recent cohorts to determine whether our findings hold across a broader set of cohorts.

Despite these limitations, our study has implications for understanding intergenerational exchanges with an older adult. Strong intergenerational ties within families are revealed in adulthood through, for example, care provided to aging parents, childcare given by grandparents, regular or episodic financial assistance, socioemotional support, and shared housing. Building on the work of Pezzin et al. (2008), who studied transfers to older parents with disabilities, as well as our findings on shared time, future research should examine whether differences in family support by family structure–child type mirror the differences in the amount of time spent together uncovered here. ■

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