Parent-child Discrepancies in Reporting Children's Mental Health: Do Physical Custody Arrangements in Post-separation Families Matter?

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Abstract
Most analyses of children's well-being in separated families are based on reports provided by parents. Thus, the question arises whether discrepancies between parents' proxy reports and children's self-reports exist and whether they impact explanatory models of children's well-being. Since a family's physical custody arrangement could systematically affect parents' ratings of their children's mental health, and this association has not been examined before, this study investigates parent-child discrepancies in reporting children's mental health problems in separated families with different physical custody arrangements. Drawing on data from the German Family Panel (pairfam), multinomial logistic regression and multilevel mixed-effects models were estimated for 786 parent-child dyads nested in 622 families with children between the ages of 9 and 17. To measure children's mental health, we used two subscales (emotional and conduct problems) of the Strengths and Difficulties Questionnaire (SDQ). The findings suggested that the relationship between physical custody arrangements and children's mental health differs depending on whether the children's or the parents' data are used. Physical custody arrangements and informant discrepancies were not associated. Parents' mental health and the quality of parent-child relationships appear more relevant in understanding informant discrepancies than physical custody arrangements.

Keywords Multiple Informants · Child Mental Health · Informant Discrepancies · Joint Physical Custody · Physical Custody Arrangements · Sole Physical Custody

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1 Introduction

In recent decades, marital and non-marital relationships have become less stable (Mortelmans, 2021). Previous research has found that children of divorced or separated parents demonstrate worse outcomes in important life domains (e.g., social and emotional well-being) than those living with their biological parents (Härkönen et al., 2017). In Western countries, most children grow up in their mother's household after their parents' divorce or separation (*mother sole physical custody*, SPC). There is, however, a growing tendency among separated parents to adopt more equal parenting practices (Spruijt & Duindam, 2010), as fathers are increasingly involved in their children's lives following separation (Amato et al., 2009). This trend is reflected in the emergence of a relatively new care arrangement: *joint physical custody* (JPC). In a JPC arrangement, children live in each parent's household for at least 30% of the time (Steinbach & Augustijn, 2021), and research suggests that children could benefit from growing up in this type of physical custody arrangement in terms of well-being (see, for example, Baude et al., 2019; Steinbach, 2019).

Most studies on children's well-being are based on proxy reports provided by the parents (Müller, 2019) since including children as a separate group of survey participants is complicated and costly. Even if a multi-actor design is applied in surveys, children may be too young to provide valid self-reports, or their parents may not agree to have their children interviewed (gatekeeping). However, relying on proxy informants could yield less accurate information (Cobb, 2018). Depending on the context and degree of observability, uncertainty remains regarding the quality of information obtained this way (Sakshaug, 2014). Furthermore, researchers commonly observe discrepancies in reports provided by multiple informants (Achenbach et al., 1987; De Los Reyes et al., 2015); the correspondence between information reported by different informants is low to moderate. Researchers and clinicians must then consider which informant or set of informants they should rely upon (De Los Reyes et al., 2013; Kraemer et al., 2003).

Researchers have pointed out that discrepancies among informants are not merely measurement errors or informant biases (De Los Reyes, 2011) but can provide relevant information. Initially, *situational specificity* was suggested to explain discrepancies as each informant (e.g., parents or teachers) has a unique perspective on a child's situation and can observe a child in different contexts (Achenbach et al., 1987). Research has since focused on identifying and examining factors related to informant discrepancies (Youngstrom et al., 2000) or factors that moderate the association between other characteristics and observed discrepancies in reports of children's well-being (Duhig et al., 2000). These *informant characteristics* can be classified into child, parent, and family characteristics (De Los Reyes & Kazdin, 2005). However, few studies have focused on the relevance of family characteristics despite the family system's importance as a factor influencing child development (Peverill et al., 2021).

Several studies have shown that parental separation is associated with various challenges such as mental health problems among family members, parental stress, and family conflicts (e.g., Bauserman, 2012; Fritzell et al., 2020). It is, however, crucial to acknowledge that these associations represent tendencies rather than absolute outcomes, as there is substantial heterogeneity in the experiences and outcomes

observed across different families. Simultaneously, research has identified these characteristics as potential factors influencing informant discrepancies (Ehrlich et al., 2016; Lohaus et al., 2020). To our knowledge, no existing studies have focused on the relationship between physical custody arrangements in separated families and discrepancies between parents' and children's reports of children's well-being.

Our study aims to close this research gap by examining data from the German Family Panel (pairfam) to investigate informant discrepancies in a random sample of 786 parent-child dyads nested in 622 post-separation families. To identify potential differences between various types of post-separation families, we differentiate between three physical custody arrangements: children living only with one parent, children living mainly with one parent, and children living equally with both parents. Our analytical sample consists of children between the ages of 9 and 17, which means that it is comprised of child participants in different stages of childhood and adolescence. The age span between six and eleven can be defined as middle childhood; a time during which children develop social skills and attitudes towards social institutions (e.g., school) (Coll & Szalacha, 2004; Howie et al., 2010). Adolescence can be divided into early adolescence (11–13 years) and middle adolescence (13–17 years) (Salmela-Aro, 2011). During these years, relevant changes take place, which affect not only adolescents' biological but social and emotional domains (Coll & Szalacha, 2004; Salmela-Aro, 2011).

With our analysis, we aim to contribute to the literature by answering two questions:

(1) Is the physical custody arrangement in post-separation families associated with parent-child discrepancies in assessing children's mental health problems?
(2) To what extent are research (model) outcomes influenced by data provided by parents or children?

2 Background

A physical custody arrangement refers to how children grow up in the event of parental separation or divorce. In Western countries, SPC is the most common physical custody arrangement, and in this arrangement, children live primarily or exclusively in one parent's household, with mothers providing primary child care following separation in most cases (Steinbach, 2019). JPC is a relatively new physical custody arrangement increasingly practiced in several Western societies (Steinbach et al., 2021). Children growing up in a JPC arrangement live with their resident and nonresident parent approximately equally. Depending on the definition, the lower threshold for the time distribution between parents is 30% (e.g., a child lives 30% of the time with one parent and 70% with the other). However, time with parents can also be distributed more symmetrically, up to a 50:50 arrangement (Steinbach & Augustijn, 2021). The prevalence of JPC exhibits notable variations across Western countries, with comparatively high numbers of JPC families in Scandinavian countries, Belgium, and the Netherlands (Steinbach, 2019). In contrast, JPC is a much less common physical custody arrangement in Germany. However, the existence of diverse thresholds in defining JPC across studies presents challenges when attempt-

ing to generalize findings. Despite this restriction, meta-analyses indicated that living in a JPC arrangement is associated with slightly positive outcomes for children in terms of well-being (see Baude et al., 2016; Bauserman, 2002).

In previous studies, parents have been the primary informants about their children's well-being (Müller, 2019). However, in many research contexts, it is unclear whether children and parents provide consistent information. In a meta-analysis evaluating 341 studies on cross-informant correspondence (pairs of parents, teachers, or children) in reporting children's mental health, De Los Reyes et al. (2015) reported a rather low agreement between different types of informants, with a cross-informant correlation of $r=.28$. The authors noted that agreement was lower for internalizing problems than it was for externalizing problems, which are more easily observed ($r=.25$ vs. $r=.30$). Also, informants reporting in the same context (i.e., mother and father) had a higher concordance than informants from different contexts (situational specificity). Despite its relevance for researchers and clinicians, compared to other areas of clinical research in child development, there is a notable lack of overarching theories that adequately explain observed informant discrepancies (De Los Reyes & Kazdin, 2005). Some researchers have interpreted informant discrepancies as measurement error (Roberts & Caspi, 2001). Conversely, others have pointed out that discrepancies provide valuable information about when and how individuals express particular behaviors (De Los Reyes et al., 2013). Children may exhibit mental health problems only in specific contexts, for example, at home or school (Dirks et al., 2012). Additionally, the case for situational specificity is supported by higher correlations between informants reporting in the same context (De Los Reyes et al., 2015). Recently, researchers have emphasized that informant discrepancies can be used to gain deeper insights into informants' relationships, for example, family functioning and the quality of parent-child relationships (De Los Reyes et al., 2019). Different interpretations of the quality of parent-child relationships could, for example, indicate future family conflict (Mastrotheodoros et al., 2020).

2.1 Informant Characteristics

In addition to situational specificity, much existing research has focused on the characteristics of the individual reporting on the child's mental health. A helpful distinction by De Los Reyes and Kazdin (2005) categorizes these attributes into child, parent, and family characteristics. While parent and child characteristics focus on the informants, family characteristics primarily consider the structural aspects in which the informants are embedded. These attributes include family size, the parents' marital status, and personal relationships between family members (e.g., relationship quality, conflicts, and interactions). As all three types of characteristics are interrelated, the state of research on informant characteristics is briefly outlined before examining whether and how the physical custody arrangement represents another family characteristic associated with informant discrepancies.

2.1.1 Child Characteristics

Since children are generally the group of interest in research on discrepancies in mental health reports, their characteristics have received much attention in the literature (De Los Reyes & Kazdin, 2005). Children's characteristics include age, gender, and problem type (Duhig et al., 2000). Compared to adolescents, Achenbach et al. (1987) found reports on younger children's behavior to be more consistent across situations. However, a more recent meta-analysis was inconsistent with these results and found non-significant effects of child age on informant discrepancies (De Los Reyes et al., 2015). The authors suggested an increase in the use of children's self-reports as a possible explanation. Furthermore, research has demonstrated that a child's gender is not associated with informant discrepancies (Achenbach et al., 1987; De Los Reyes & Kazdin, 2005). Generally, correspondence between informants is stronger when children exhibit more readily observable problems, such as externalizing behavior (De Los Reyes et al., 2015).

2.1.2 Parent Characteristics

Parents' gender is associated with informant discrepancies (Duhig et al., 2000). Mothers are considered more knowledgeable as informants on child psychopathology than fathers (Phares, 1997). Accordingly, they are more likely to be asked about their children's well-being (Treutler & Epkins, 2003). Mothers also report more behavioral problems in their children (Christensen et al., 1992). Duhig et al. (2000) offer two explanations: First, as mothers tend to spend more time with their children than fathers do (Biller, 1993), they can also observe children's behavior in more detail. Second, children could behave differently toward their parents depending on their parent's gender, with the parents perceiving their children's behavior accurately. Several studies have found children to be more obedient in their father's presence (e.g., Patterson & Maccoby, 1980). Yet, studies of separated families can rarely comment reliably on fathers, who are not sufficiently represented in survey samples. Since most children grow up in their mother's household after a separation, mothers are usually the primary informant. Therefore, the explanations discussed above could have a stronger impact in the case of separated families. One meta-analysis reported a negative relationship between socioeconomic status (SES) and agreement between mothers and fathers reporting their children's internalizing and externalizing problems; levels of agreement between parents are generally less in low SES families than in medium SES families (Duhig et al., 2000).

Since mental disorders influence cognitive processes, research has examined informants' psychological symptoms as a characteristic associated with informant discrepancies (Baranne & Falissard, 2018; Treutler & Epkins, 2003). The *depression-distortion hypothesis* states that a parent's depression negatively distorts or inflates perceptions of children's problems (Richters, 1992). Several studies have found that depressed mothers report more negative child behavior (see Ehrlich et al., 2016; Müller et al., 2011), although other studies have not confirmed this finding. As in depression, most research on parental anxiety has focused on mothers (De Los Reyes & Kazdin, 2005), and studies have revealed a positive relationship between maternal

anxiety and informant discrepancies regarding children's internalizing and externalizing problems (Briggs-Gowan et al., 1996; Engel et al., 1994). However, comorbidities between anxiety and depressive disorders are common (Kalin, 2020). In one study, the association between informant discrepancies and anxiety disappeared when controlling for maternal depression (Krain & Kendall, 2000). Thus, contrary to Briggs-Gowan et al.'s (1996) findings, informant discrepancies could be attributable to depression rather than anxiety. Finally, parental stress is associated with parent-teacher and parent-child discrepancies in reporting internalizing and externalizing problems (Youngstrom et al., 2000). However, the role of stress alongside other psychopathological factors remains unclear (De Los Reyes & Kazdin, 2005). Parent-child conflict (Ehrlich et al., 2016), professional workload (Offer, 2014), and the family's economic situation (Xiao, 2013) contribute to parents' perceived stress. Therefore, the context of the family system must be considered.

2.1.3 Family Characteristics

Separation or divorce is a significant stressor affecting all family members (Mortelmans, 2021). However, few studies have explicitly addressed the effect of parental separation on parent-child discrepancies in reporting the child's well-being. A study by Jensen et al. (1988), which included families that had experienced a divorce, found that mothers' reports of children's internalizing and externalizing problems revealed more discrepancies with the children's reports than teachers' reports, implying that mothers underestimate specific stressors on their children. For example, children can withhold their feelings, and mothers can be concerned with their own thoughts about the separation and thus have more difficulty perceiving the child's problems (Jensen et al., 1988). In line with these findings, Tein et al. (1994) argued that informant correspondence depends on the number of stressors a family faces; informants (parent-child) in families with few risk factors demonstrate greater concordance.

Separation and divorce also seem to be related to conflicting reports between parents and adolescents. Pelton and Forehand (2001) found significantly higher informant discrepancies concerning the relationship quality between parents and children in divorced than in intact families. The authors suggested that mothers and children may be less attentive to their relationship when faced with family stressors. These diverging views on the parent-child relationship can lead to an "environment of misunderstanding and frustration" (Pelton & Forehand, 2001, p. 12), potentially fostering new conflict via poor parenting practices or rebellious adolescent behavior. However, studies on these topics cannot be generalized as they are based on relatively small sample sizes and selective sampling procedures (Jensen et al., 1988; Pelton & Forehand, 2001).

2.2 Physical Custody Arrangements and Informant Discrepancies

Considering the previously discussed informant characteristics, it seems plausible that physical custody arrangements after separation also systematically affect parents' ratings of their children's mental health. Following Tein et al.'s (1994) observation of higher discrepancies in families facing more stressors, there are several

reasons why informant discrepancies can vary between physical custody arrangements (i.e., SPC and JPC). Some of these arguments were previously proposed by Fritzell et al. (2020) as possible stressors for single parents: Since mothers are most often the resident parent and typically have the sole responsibility for the child after separation or divorce, they must manage childcare tasks alone, leading to parenting stress (Liang et al., 2019; Steinbach, 2019). Additionally, they could have less contact with friends or relatives and thus suffer from a lack of social support (Cairney et al., 2003). For example, friendships can dissolve after a separation, as people commonly maintain contact with only one of the separated partners (Botterman et al., 2015; Gerstel, 1988).

Gainful employment poses another challenge for single mothers. Mothers of very young children can face the financial burden of professional child care or be limited to working part-time, reducing income (Bakker & Karsten, 2013; Mortelmans, 2020). Single mothers who do not work are particularly vulnerable to mental health problems (Harkness, 2016). These stressors can also increase conflict with adolescents, exacerbating the relationship and thus contributing to informant discrepancies (Mastrotheodoros et al., 2020). In contrast, nonresident parents can suffer from the loss of contact with their children and their previous role as a parent (Waldvogel & Ehlert, 2016). Since they cannot contribute resources (e.g., emotional and social support), their relationship with their children can deteriorate, or they could lose contact altogether (Sobolewski & Amato, 2007; Steinbach, 2019). In the latter case, the absent parent cannot actively participate in parenting. Therefore, they cannot observe their child and contribute their perspective on the child's mental health problems. However, studies have associated better parent-child relationships with greater correspondence in parent-child reports (Ehrlich et al., 2011, 2016). Thus, open communication, facilitated by a warm relationship between parent and child, could decrease discrepancies.

Sharing child care through joint physical custody can serve as a buffer for several of the abovementioned stressors. When fathers share the burden of child care, mothers can spend their time differently and thus decrease their stressors. For example, they could have the opportunity to work full-time, improving their financial situation (Mortelmans, 2020). Mothers could also spend more time on recreational activities with friends, gain social support (Botterman et al., 2015), and have more opportunities for repartnering (Schnor et al., 2017). Less overburdened mothers can engage in better relationships with their children. Following Pelton and Forehand's (2001) argument, we expect the discrepancies in mother-child reports to decrease with fewer stressors.

For fathers, spending more time with their child creates opportunities to observe the child's behavior in various situations and can increase the quality of the father-child relationship. Although the amount of time spent with parents does not necessarily contribute to better parent-child relationships (Adamsons & Johnson, 2013; Amato & Gilbreth, 1999), it is often a prerequisite for establishing high-quality relationships (Adamsons, 2018). Children who feel safer, with less family conflict, are less likely to hide their feelings from their parents and more likely to discuss them openly. Kolko and Kazdin (1993) observed that agreement on children's emotional and behavioral problems between parent and child informants was higher when fam-

ily stress was reduced and children felt more accepted by their parents. Thus, JPC could facilitate fewer parent-child discrepancies in reporting children's mental health problems, as children spend time with both parents and have opportunities to build intimate relationships.

2.3 The Impacts of Differences in Informants' Responses on Research Outcomes

In family research, it is essential to know whether models based on data collected from parents and children yield the same results. If there are differences, it is vital to understand how significant they are. However, little is known about if and how informant choice leads to different research outcomes. As Aquilino (1999, p. 859) noted, "the few empirical studies of multiple family informants do not yield a clear picture of differences in response tendencies … and provide conflicting evidence of the impact of the informant on research outcomes." For example, Rossi and Rossi (1990) used informant perspectives from multiple generations to determine whether predictive models differ as a function of informant perspective. The authors found that parents assessed past family relationships more positively than their children did.

However, several other studies of family relationships came to a different conclusion and obtained similar results between informants. Barber et al. (1992) replicated the results from models of children's data with models based on parent-reported data. Aquilino (1999) was also able to fit models yielding similar results using children's and parents' data. A recent study by Steinbach et al. (2019) reported comparable results in models using data from parent and child informants. Aquilino (1999) suggested that variable results could depend more on the research context and model variables and less on the choice of informant. However, this assumption cannot be transferred to different research topics and subpopulations but should be tested empirically. No differences in the results for distinct informants suggests the potential for significant cost savings, as only one informant's data need to be collected. Furthermore, the quality of proxy information can also be better assessed in specific research contexts.

3 Materials and Methods

3.1 Data

This study used data from the German Family Panel (pairfam), a longitudinal study focusing on partnerships, family dynamics, and child development (Brüderl et al., 2021). A detailed description of the study can be found in Huinink et al. (2011). Data collection began in 2008 with a random sample of about 12,000 respondents (*anchors*); the target population consists of German-speaking individuals living in private households in Germany. Data for pairfam's 12th wave was collected in 2019/2020. Pairfam was designed as a multi-actor study in which different groups of respondents received a tailored questionnaire that simultaneously allowed for comparisons between the groups. The present study used data from the anchor interview, the parenting survey, and the child interview. The anchor data provide information

about the parent's and child's socio-demographic characteristics, the parent's health, and the child's physical custody arrangement. The parenting survey includes information about the child's mental health problems and the parent-child relationship from the parent's perspective. The child data offer insights into the child's mental health problems and the parent-child relationship, as perceived by the child.

Statistical analyses are based on waves 3 to 12 of pairfam release 12.0 (Brüderl et al., 2021; Brüderl, Garrett, Brüderl et al., 2021a, b). The combined anchor data for these ten survey waves included 11,284 observations of 1,820 individual parents living in a post-separation family with at least one biological child under the age of 18 (for individual children, $n=2,829$). Combining the anchor data with the parenting and child data, excluding all post-separation families in which the child was not living exclusively with the parents ($n=4$), and deleting all nonresident parents ($n=37$), reduced the sample to 2,367 observations of 633 parents and 800 children. Next, all missing values for the dependent variables ($n=34$) and all cases in which the parents were still enrolled in education ($n=37$) were deleted from the sample. Missing values for the control variables were imputed using median or modal imputation ($n=28$). Thus, the final analytical sample consisted of 2,296 observations of 622 resident parents and 786 children between the ages of 9 and 17. Younger children were not included in the analytical sample due to age restrictions on the child interviews. In wave 2 of the pairfam panel, one child per household between the ages of 8 and 15 was interviewed (Brüderl, Garrett, Brüderl et al., 2021a, b); starting with wave 3, several children per household of the same age group were considered. Due to the selection of birth cohorts in pairfam, which did not allow for an exact delimitation of the children's age, the sample also partially contains children aged 16 and 17 (Thönnissen & Walper, 2020).

3.2 Measures

3.2.1 Dependent Variables

The three dependent variables are the child's self-assessment of their mental health problems, the parent's assessment of their child's mental health problems, and the discrepancy between the parent's and child's ratings. Pairfam measured children's mental health problems using the Strengths and Difficulties Questionnaire (SDQ), which consists of five subscales: conduct problems, emotional symptoms, hyperactivity, peer problems, and prosocial behavior (Goodman, 1997). However, since pairfam's parenting survey only captures children's emotional and conduct problems, the analysis was limited to these two subscales. The ten items measuring emotional symptoms and conduct problems had three response categories: 0 = "not true," 1 = "somewhat true," and 2 = "certainly true." Children's and parents' responses were summed up to a score ranging between 0 and 20; higher values on the SDQ suggest more mental health problems (Cronbach's α for children=0.68; Cronbach's α for parents=0.74).

To determine potential discrepancies between the child's and parent's assessments of the child's mental health, we subtracted the child's assessment from that of the parent. Cases in which the parent's and child's SDQ scores were identical or differed by

only one scale point were categorized as 1 = "same assessment." Cases in which the parent's assessment of the child's SDQ score was at least two points lower than that of their child were categorized as 0 = "parent underestimates child's mental health problems." In contrast, cases in which the parent's SDQ score was at least two points higher than that of their child were categorized as 2 = "parent overestimates child's mental health problems." This categorization was employed given that a difference of 2 or more points on the 20-point total score indicated a significant deviation.

3.2.2 Independent Variables

The independent variable is the child's physical custody arrangement. Information on a child's place of residence and levels of parent-child contact were used to determine physical custody arrangements (see also Augustijn, 2023). Children were divided into five categories according to their place of residence: 1 = "only with the respondent," 2 = "with the respondent but also with the other parent, mostly with the respondent," 3 = "with the respondent but also with the other parent and equally with both," 4 = "with the respondent but also with the other parent and mostly with the other parent," or 5 = "only with the other parent." By adding two questions about parent-child contact, this measurement could be refined: "How often do you see [name child]?" and "How often does the other parent see [name child]?" The response categories of these items were as follows:1 = "daily," 2 = "several times per week," 3 = once per week," 4 = "1–3 times per month," 5 = "several times per year," 6 = "less often," 7 = "other parent is deceased," 8 = "contact broken off," and 9 = "contact never established." Since this study focused on parent-child dyads in which the parent was the child's resident parent, the sample was divided into three types of physical custody arrangements:

- Only with the parent (0 the child lives only with the anchor respondent);
- Mostly with the parent (1(a) the child lives primarily with the anchor respondent but also with the other parent, or 1(b) the child lives only with the anchor respondent but has contact with the other parent several times per week); and
- Equally with both parents (2(a) the child lives equally with both parents, or 2(b) the child lives only with one parent but has daily contact with the other parent).

3.2.3 Control Variables

Child and parent gender were either 0 = "male" or 1 = "female." The children's ages ranged from 9 to 17 years, and the parents were between 27 and 49 years old. The CASMIN educational attainment classification (Comparative Analysis of Social Mobility in Industrial Nations), which is based on educational certificates, was used to determine the parent's educational level (Brauns & Steinmann, 1999). This classification was used to assign parents to one of the following groups: 0 = "low educational level" (categories 1a–1c), 1 = "medium educational level" (categories 2a–2b), and 2 = "high educational level" (categories 2c–3b). The number of children in the parent's household varied between 1 and 10. To determine whether the parent had a

(new) partner, respondents were assigned into one of two groups: 0 = "no partner" and 1 = "partner." To account for parents' weekly working hours, respondents were categorized into one of the following groups: 0 = "0 hours," 1 = "1–20 hours," 2 = "21–37 hours," and 3 = "more than 37 hours." This study drew on the State-Trait Depression Scales (Guillot-Valdés et al., 2020; Spaderna et al., 2002) to measure the parent's level of depressiveness. These scales measure positive and negative moods with five items each, such as "My mood is melancholy", or "I enjoy life" (Thönnissen et al., 2021; Spaderna et al., 2002). Each item has response categories ranging from 1 = "almost never" to 4 = "almost always." The items were combined into a mean scale, with higher scores indicating a higher level of depressiveness (Cronbach's $\alpha = 0.92$). One positive and one negative indicator was used to assess the quality of the parent-child relationship by drawing on the "intimacy" and "conflict" dimensions of the Network of Relationship Inventory (NRI) (Furman & Buhrmester, 1985). Each dimension was covered by two respective items in the parenting and child questionnaires, thus comprising both the parent's and the child's assessments. The two items measuring parent-child intimacy were combined into a mean scale in which higher scores indicated higher levels of intimacy (Cronbach's α for children$=0.79$; Cronbach's α for parents$=0.83$). Similarly, the two items measuring parent-child conflict were combined into a mean scale in which higher scores indicated greater levels of conflict (Cronbach's α for children$=0.70$; Cronbach's α for parents$=0.78$). The variables' descriptive statistics can be found in Table 1.

3.3 Analytical Strategy

We estimated multinomial logistic regression models (relative-risk ratios) to analyze informant discrepancies between children and parents. Since the analytical sample consisted of 786 parent-child dyads nested in 622 families, and observations are not necessarily independent within groups, we clustered the data at the family level (for the analysis of hierarchical data, see, for example, Rabe-Hesketh and Skrondal (2022)). To investigate whether using children's or parents' assessments of children's SDQ scores yields different results, we computed clustered multilevel mixed-effects linear regression models, with parents at the first level and children at the second level. In addition, we conducted a paired t-test to examine differences in the SDQ scores reported by parents and children. Since the SDQ scores in the parents' data deviated slightly from a normal distribution, we also conducted a Wilcoxon signed-rank test as a non-parametric alternative for comparison. Modeling was implemented using Stata 17.

4 Results

The descriptive statistics in Table 1 reveal that children reported slightly more mental health problems than parents reported about their children. Overall agreement between the parents' and children's reports of the children's mental health was moderate ($r_{overall} = 0.46$). However, the correspondence between the mothers' and children's reports was slightly higher ($r=.46$) than between the fathers' and children's

Table 1 Descriptive Sample Statistics – Percentages or Means (Standard Deviations)

Variables	All separated families	Only with parent	Mostly with parent	Equally with both parents
Child's assessment: SDQ score (0–20)	4.6 (2.9)	4.7 (2.9)	4.1 (2.8)	4.5 (2.9)
Parent's assessment: SDQ score (0–20)	4.3 (3.1)	4.5 (3.2)	3.4 (2.9)	3.8 (2.9)
Parent-child discrepancies				
Parent underestimates mental health problems	32.6			
Same assessment	42.1			
Parent overestimates mental health problems	25.3			
Physical custody arrangement		76.9	11.7	11.4
Child's gender				
Male	50.0	49.6	53.0	49.6
Female	50.0	50.4	47.0	50.4
Child's age (9–17)	12.5 (2.2)	12.5 (2.2)	12.4 (2.2)	12.2 (2.1)
Parent's gender				
Male	7.9	6.3	7.1	19.5
Female	92.1	93.7	92.9	80.5
Parent's age (27–49)	39.3 (5.0)	39.1 (5.0)	40.0 (4.9)	40.2 (4.9)
Parent's educational level				
Low educational level	25.4	27.0	17.5	22.5
Medium educational level	45.6	47.3	38.1	41.2
High educational level	29.1	25.7	44.4	36.3
Number of children in parent's household (1–10)	2.0 (0.9)	2.0 (1.0)	2.0 (0.8)	2.1 (0.7)
Parent's partnership status				
No partner	40.3	40.8	49.3	28.2
Partner	59.7	59.2	50.7	71.8
Parent's weekly working hours				
0 h	23.7	24.6	18.3	23.3
1–20 h	17.1	16.9	20.1	15.3
21–37 h	30.0	29.8	34.3	26.7
More than 37 h	29.2	28.7	27.2	34.7
Parent's level of depressiveness (1–4)	1.9 (0.6)	1.9 (0.6)	1.8 (0.5)	1.8(0.6)
Parent-child intimacy (1.5-5)	3.8 (0.8)	3.7 (0.8)	3.8 (0.7)	3.9 (0.8)
Parent-child conflict (1–5)	2.4 (0.7)	2.4 (0.7)	2.4 (0.6)	2.3 (0.7)
N (observations)	2296	1766	268	262

Note: German Family Panel (pairfam) waves 3–12; release 12.0.; unweighted data

reports ($r=.39$). 42% of the parents in our sample gave the same assessment of their children's mental health problems as their children, whereas one-third (33%) underestimated and one quarter (25%) overestimated their children's mental health problems compared to the children's self-reports.

For the multinomial logistic regression models displayed in Table 2, we used "same assessment" of the child's mental health as a reference category and differentiated between the two categories "parent underestimates child's mental health problems" and "parent overestimates child's mental health problems." When considering only the physical custody arrangement as a predictor of parent-child discrepancies, no statistically significant associations were found for parents underestimating children's mental health problems compared to parents who gave the same assessment as their

Table 2 Multinomial Regression Models Predicting Over- or Underestimation of Child's Mental Health Problems by Parent

Variables	Parent underestimates child's mental health problems		Parent overestimates child's mental health problems	
	RRR	CI	RRR	CI
Without covariates				
Physical custody arrangement (ref.: only with parent)				
Mostly with parent	0.92	0.67, 1.26	0.59*	0.39, 0.90
Equally with both parents	1.10	0.8, 1.53	0.81	0.56, 1.18
With covariates				
Physical custody arrangement (ref.: only with parent)				
Mostly with parent	0.91	0.66, 1.26	0.69	0.45, 1.07
Equally with both parents	1.00	0.71, 1.41	1.04	0.71, 1.52
Controls				
Child is female (ref.: male)	1.04	0.82, 1.31	1.01	0.79, 1.28
Child's age	0.96	0.91, 1.01	0.99	0.93, 1.04
Parent is female (ref.: male)	0.81	0.53, 1.24	1.31	0.84, 2.06
Parent's age	0.99	0.96, 1.01	0.99	0.97, 1.02
Parent's educational level (ref.: low educational level)				
Medium educational level	1.17	0.86, 1.60	0.80	0.59, 1.09
High educational level	1.36	0.96, 1.93	0.75	0.52, 1.09
Number of children in household	0.97	0.85, 1.11	1.10	0.92, 1.32
Parent has a partner (ref.: no partner)	1.09	0.87, 1.36	0.93	0.73, 1.18
Parent's weekly working hours (ref.: 0 h)				
1–20 h	0.92	0.65, 1.28	0.84	0.59, 1.22
21–37 h	0.81	0.58, 1.15	1.32	0.96, 1.81
More than 37 h	1.12	0.81, 1.55	1.18	0.81, 1.73
Parent's level of depressiveness	1.06	0.86, 1.31	1.70***	1.39, 2.08
Parent-child intimacy	1.14	0.98, 1.34	0.78**	0.66, 0.93
Parent-child conflict	0.91	0.76, 1.09	1.97***	1.62, 2.40
Constant	1.56	0.35, 6.94	0.12**	0.02, 0.58
McFadden's Pseudo-R^2		0.05		
N (observations)		2296		
N (children)		786		
N (parents)		622		

Note: German Family Panel (pairfam) waves 3–12; release 12.0.; unweighted data; base outcome=same assessment (no discrepancy); *** $p<.001$, ** $p<.01$, * $p<.05$

children. However, for parents overestimating their children's mental health problems, we found a statistically significant relationship between informant discrepancies and children living primarily with one parent (RRR=0.59, 95% CI [RRR=0.39, 0.90], $p=.014$). This finding indicates that the anchor is less likely to overestimate the child's mental health problems when the child lives with them predominantly rather than exclusively. For the multivariate model, we added the following variables to the regression: the parent's and child's genders, the parent's educational level, the number of children in the household, the parent's partnership status, the parent's working hours, the parent's depressiveness, and the levels of intimacy and conflict between the parent and the child. No statistically significant associations were

observed between physical custody arrangements and parent-child discrepancies in assessing the children's mental health problems.

Regarding the control variables, for the category "parent underestimates child's mental health problems," no statistically significant associations were found between these variables and parent-child discrepancies in assessing the child's mental health problems. However, for the category "parent overestimates child's mental health problems," informant discrepancies were positively associated with parent-child conflict (RRR=1.97, 95% CI [RRR=1.62, 2.34], $p<.001$), and the parent's depressiveness (RRR=1.70, 95% CI [RRR=1.39, 2.08], $p<.001$). As the levels of parent-child conflict and parent's depressiveness increased, the likelihood of the parent overestimating the child's mental health problems increased compared to the reference group ("same assessment"). In contrast, parent-child intimacy was negatively associated with the dependent variable (RRR=0.78, 95% CI [RRR=0.66, 0.93], $p=.005$); that is, with increased intimacy between parent and child, the likelihood of the parent overestimating the child's mental health problems decreased.

Concerning the study question of whether research outcomes vary depending on which informant's assessment is used (i.e., the child's or parent's assessments of the child's mental health problems), a paired t-test was conducted to compare the mean SDQ scores reported by the child and the parent. The results indicate a small but statistically significant difference between reports by children ($M=4.6$, $SD=2.91$) and parents ($M=4.3$, $SD=3.13$; $t(2295)=4.44$, $p<.001$, $d=0.09$). As the SDQ scores for the parents deviate slightly from a normal distribution, we repeated the analysis using the Wilcoxon signed-rank test as a non-parametric alternative. Again, the results indicate a small but statistically significant difference between the children's and parents' scores ($z = -5.018$, $p<.001$).

In the next step, we investigated whether statistical analyses using the parents' assessment of their children's mental health problems yielded different results than analyses using the children's self-assessment (Table 3). Estimating multilevel mixed-effects linear models based on information provided by the children and using only the physical custody arrangement as a predictor, we found no statistically significant associations between physical custody arrangements and SDQ scores. However, repeating the same analysis with the information provided by the parents, the regression model yielded different results. According to the parents' assessments, children living primarily with one parent ($B = -0.63$, $p<.01$) and children living equally with both parents ($B = -0.40$, $p<.05$) had significantly fewer mental health problems than children living with one parent. We found similar differences in the respective multivariate regression models. The multivariate model based on information provided by the children revealed that physical custody arrangements were not associated with SDQ scores. According to the parents' assessment, living mostly with one parent ($B = -0.44$, $p<.05$) was negatively associated with SDQ scores, even though living equally with both parents ceased to be statistically significant. Based on these findings, our analysis provides evidence that informant selection is essential for assessing the relationship between physical custody arrangements and children's mental health problems.

When examining the relationships between the control variables and children's mental health, we found statistically significant associations that were comparable

Table 3 Multilevel Mixed-Effects Linear Regression of Parent's and Child's SDQ Scores – Unstandardized Coefficients and Standard Errors (SE)

Variables	Model 1 (child)	Model 2 (parent)	Model 3 (child)	Model 4 (parent)
Physical custody arrangement (ref.: only with parent)				
Mostly with parent	-0.24 (0.20)	-0.63** (0.20)	-0.09 (0.19)	-0.44* (0.18)
Equally with both parents	-0.07 (0.20)	-0.40* (0.20)	0.02 (0.19)	-0.17 (0.18)
Controls				
Child is female (ref.: male)			0.23 (0.16)	0.17 (0.16)
Child's age			-0.17*** (0.03)	-0.10** (0.03)
Parent is female (ref.: male)			-0.59 (0.31)	-0.08 (0.31)
Parent's age			-0.07*** (0.02)	-0.06** (0.02)
Parent's educational level (ref.: low educational level)				
Medium educational level			-0.41 (0.22)	-0.43 (0.22)
High educational level			-0.75** (0.24)	-0.91*** (0.25)
Number of children in parent's household			-0.05 (0.09)	-0.00 (0.09)
Parent has a partner (ref.: no partner)			0.18 (0.13)	0.10 (0.12)
Parent's weekly working hours (ref.: 0 h)				
1–20 h			-0.02 (0.18)	0.23 (0.17)
21–37 h			-0.30 (0.17)	0.24 (0.16)
More than 37 h			-0.02 (0.18)	-0.13 (0.18)
Parent's level of depressiveness			0.41*** (0.11)	0.84*** (0.11)
Parent-child intimacy			-0.15* (0.06)	-0.58*** (0.08)
Parent-child conflict			0.98*** (0.08)	1.28*** (0.08)
Constant			7.94*** (0.85)	5.87*** (0.88)
McFadden's Pseudo-R^2	0.00	0.00	0.03	0.02
AIC	10854.65	10858.73	10609.30	10454.99
N (observations)			2296	
N (children)			622	
N (parents)			786	

Note: German Family Panel (pairfam) waves 3–12; release 12.0.; unweighted data

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

between the models that were based on the children's self-assessment and those that were based on the parent's assessment. Higher levels of parental depressiveness (child models: $B=0.41$, $p<.001$; parent models: $B=0.84$, $p<.001$) and parent-child conflict (child models: $B=0.98$, $p<.001$; parent models: $B=1.28$, $p<.001$) were related to higher levels of children's mental health problems, respectively. On the other hand, we found negative associations between children's mental health problems and their

age (child models: $B = -0.17, p < .001$; parent models: $B = -0.10, p < .01$) and their parent's age (child models: $B = -0.07, p < .001$; parent models: $B = -0.06, p < .01$), respectively. In addition, children with parents who had a high educational level showed fewer mental health problems than those whose parents had a low educational level (child models: $B = -0.75, p < .01$; parent models: $B = -0.91, p < .001$). Higher levels of parent-child intimacy were similarly associated with fewer mental health problems for the children (child models: $B = -0.15, p < .05$; parent models: $B = -0.58, p < .001$).

5 Discussion

The findings of studies on children's well-being are primarily based on information provided by parents. However, while more economical, proxy information can be biased, depending on the research topic and the type of informant interviewed. Considering expensive multi-actor surveys as an alternative to proxy interviews, whether information from parents and children yields the same results is relevant from a cost perspective and for interpreting the results of empirical studies. If data provided by parents do not reflect the reality of children's well-being, findings based on these data are unlikely to be accurate. However, due to existing discrepancies between informants' reports, researchers must decide which informant to use for assessment (Kraemer et al., 2003; Kuhn et al., 2017).

Although previous research has examined several informant characteristics that help explain observed correlation between informants' reports, the relevance of family characteristics has rarely been examined. Furthermore, existing studies on this topic have used relatively small samples and date back several decades. In addition, to our knowledge, children's physical custody arrangements as a possible associated factor for informant discrepancies have not been considered in the literature to date. Therefore, this study used pairfam data to explore informant discrepancies in a random sample of 786 parent-child dyads nested in 622 separated families, in which children lived only with one parent, mostly with one parent, or equally with both parents. We aimed to answer two research questions: (1) Is the physical custody arrangement in post-separation families associated with parent-child discrepancies in assessing children's mental health problems? (2) To what extent are research (model) outcomes influenced by data provided by parents or children?

As expected, we found a moderate correspondence between parents' and children's reports on children's mental health problems, with mother-child discrepancies slightly smaller than father-child discrepancies. Multinomial logistic regression models revealed no systematic differences in physical custody arrangements, only a bivariate difference, which disappeared in the multivariate models. When controlling for informant characteristics, the multinomial logistic regression models demonstrated no statistically significant associations between physical custody arrangements and differences in parents' and children's assessments of the children's mental health. However, parent-child conflict and a parent's depressiveness were positively associated with parents' overestimation of children's mental health problems. Hence, our results are consistent with several studies finding that conflict strains the parent-child relationship and is associated with different interpretations by informants (De Los

Reyes & Kazdin, 2006; Ehrlich et al., 2016). Furthermore, our results corroborate the depression-distortion hypothesis, as a parent's mental illness leads to a more pessimistic interpretation of the child's situation or behavior (Müller et al., 2011). Parent-child intimacy was negatively associated with parents' overestimation of the children's mental health problems. This finding is consistent with the literature associating a healthier parent-child relationship with fewer informant discrepancies (Kolko & Kazdin, 1993; Treutler & Epkins, 2003).

When comparing the results of the multilevel mixed-effects linear regression models using the parents' and children's reports on the children's SDQ scores, with one major exception regarding the physical custody arrangement in the parents' model, the same associations and direction of effects were identified. We found a statistically significant bivariate relationship between physical custody arrangements and SDQ scores in models based on the parents' data, suggesting lower SDQ scores or better mental health in children living predominantly with one parent or equally with both parents. In contrast, no such relationship was observed in the models based on the children's data. Furthermore, in the parents' model, the association between the SDQ scores and children living equally with both parents disappeared when controlling for informant characteristics. However, one remaining difference between the informants' models was the statistically significant association between living primarily with the parent and the SDQ scores in the parent's model. Hence, using the parents' data to model SDQ scores led to a different result (i.e., associations were not revealed by modeling the scores based on the children's data). Since the physical custody arrangement and children's mental health problems were of primary interest in our study, this difference is significant. This result implies that for a more detailed perspective of child well-being in post-separation families, one should also consider interviewing the children to achieve as complete a picture as possible. Since most studies on children's well-being in separated families are based on information provided by parents, this finding is important. Furthermore, it aligns with the results of Rossi and Rossi (1990), who observed differences between models based on parents' and children's assessments. Although our models did not yield comparable results for both informants, as in Steinbach et al. (2019) and Aquilino (1999), our findings add weight to the conclusion that the informant's impact on the study outcomes is empirically conflicting.

5.1 Study strengths and limitations

This study has several strengths. First, in contrast to previous studies of family characteristics that used relatively small samples and sampling procedures that do not allow generalization, we used a relatively large random sample of families to investigate our research questions. Our study also included fathers, enabling us to examine correlations among mother-child dyads and father-child dyads, and to control for parent's gender in multinomial regression models. However, a still larger sample size of fathers would be helpful to conduct more in-depth analyses with sufficient statistical power to detect effects. Second, the association between physical custody arrangements and informant discrepancies has not been investigated to date; thus, our study adds to the body of literature. Third, we controlled for several characteristics identi-

fied in previous research as associated with informant discrepancies (e.g., parental depression and parent-child conflict), which not all previous studies have been able to do. Fourth, the instruments used in pairfam for measuring children's mental health problems (i.e., the SDQ) were very similar in the child and the parent questionnaires, facilitating comparison.

The study's limitations include the operationalization of the physical custody arrangement. We could not measure physical custody arrangements with absolute certainty because pairfam did not employ instruments such as a residential calendar (see Sodermans et al., 2014; Steinbach & Augustijn, 2021). As a result, we were unable to differentiate clearly between SPC and JPC. However, we distinguished between children living only with one parent, mostly with one parent, or equally with both parents, and refined measurements by combining data on a child's place of residence with information on parent-child contact, adding precision to our measurement of physical custody arrangements. Another limitation is that the sample could comprise a positive selection of families regarding children's participation in the survey. Systematic differences could exist in families who did not allow their children's participation in this survey. For example, Havermans et al. (2015) reported that parental refusal of child participation is more likely in the case of less frequent open communication with the child. Finally, values for the reported pseudo-R^2 in the estimated models are low, suggesting a rather modest goodness-of-fit. However, it should be noted that pseudo-R^2 should be interpreted cautiously as a single metric and the different measures of pseudo-R^2 are discussed critically in the literature (e.g., Long & Freese, 2014). It is possible that there are other predictors beyond those used in our models that can make a greater contribution for explaining children's mental health problems. However, these predictors need to be theoretically justified, which is certainly another starting point for further research.

6 Conclusion

We did not find an association between physical custody arrangements and informant discrepancies. Nevertheless, focusing on the parent-child relationship to better understand informant discrepancies seems promising. Parent-child intimacy and conflict are central to our models of informant discrepancies in assessing children's mental health problems. As our study demonstrates, research could yield different results in models of children's mental health depending on whether one uses the parent's or child's data. Such differences exist in other research contexts, such as parent-child conflict (Havermans et al., 2015). Thus, it is possible that using one type of respondent is only practicable when investigating specific topics. Sakshaug (2014) noted that parent-child agreement is lower concerning more subjective topics. Therefore, similar analyses should be conducted with study populations from other countries and research contexts, as different effects could be observed.

Our findings are also of interest for survey research, as the reliability of proxy information in different contexts remains unclear (Cobb, 2018) yet offers the possibility of substantial cost savings in data collection. If, for example, it is impossible to interview two or more informants due to a lack of resources, the data from only one

person could be sufficient for several research questions. Although focusing on one respondent would simplify survey designs (Steinbach et al., 2019), collecting data from several family members could provide better insight into the family dynamics and provide further opportunities to study informant discrepancies in greater detail. As argued by Rognli et al. (2021), the study of informant discrepancies is worthwhile in itself since they are linked to adjustment in children and adolescents (Ohannessian et al., 2016). Despite the increased cost and complexity, our study's results indicate the relevance and usefulness of the multi-informant approach.

Declarations

Informed Consent Not applicable.

Ethical Approval Pairfam was approved by the ethics committee of the Faculty of Management, Economics and Social Sciences of the University of Cologne (https://www.pairfam.de/en/study/ethic-approval/).

Research Involving Human Participants and/or Animals Not applicable.

Competing Interests The authors have no competing interests to declare that are relevant to the content of this article.

References

Achenbach, T. M., McConaughy, S. H., & Howell, C. T. (1987). Child/adolescent behavioral and emotional problems: Implications of cross-informant correlations for situational specificity. *Psychological Bulletin*, *101*(2), 213–232. https://doi.org/10.1037/0033-2909.101.2.213.

Adamsons, K. (2018). Quantity versus quality of nonresident father involvement: Deconstructing the argument that quantity doesn't matter. *Journal of Child Custody*, *15*(1), 26–34. https://doi.org/10.1080/15379418.2018.1437002.

Adamsons, K., & Johnson, S. K. (2013). An updated and expanded meta-analysis of nonresident fathering and child well-being. *Journal of Family Psychology*, *27*(4), 589–599. https://doi.org/10.1037/a0033786.

Amato, P. R., & Gilbreth, J. G. (1999). Nonresident fathers and children's well-being: A meta-analysis. *Journal of Marriage and Family*, *61*(3), 557–573. https://doi.org/10.2307/353560.

Amato, P. R., Meyers, C. E., & Emery, R. E. (2009). Changes in nonresident father-child contact from 1976 to 2002. *Family Relations*, *58*(1), 41–53. https://doi.org/10.1111/j.1741-3729.2008.00533.x.

Aquilino, W. S. (1999). Two views of one relationship: Comparing parents' and young adult children's reports of the quality of intergenerational relations. *Journal of Marriage and Family*, *61*(4), 858–870. https://doi.org/10.2307/354008.

Augustijn, L. (2023). Physical custody arrangements and fathers' post-separation well-being. *Journal of Family Studies*, *29*(5), 2008–2024. https://doi.org/10.1080/13229400.2022.2108720.

Bakker, W., & Karsten, L. (2013). Balancing paid work, care and leisure in post-separation households: A comparison of single parents with co-parents. *Acta Sociologica*, *56*(2), 173–187. https://doi.org/10.1177/0001699312466178.

Baranne, M. L., & Falissard, B. (2018). Global burden of mental disorders among children aged 5–14 years. *Child and Adolescent Psychiatry and Mental Health*, *12*(1), https://doi.org/10.1186/s13034-018-0225-4.

Barber, B. K., Chadwick, B. A., & Oerter, R. (1992). Parental behaviors and adolescent self-esteem in the United States and Germany. *Journal of Marriage and Family*, *54*(1), 128–141. https://doi.org/10.2307/353281.

Baude, A., Pearson, J., & Drapeau, S. (2016). Child adjustment in joint physical custody versus sole custody: A meta-analytic review. *Journal of Divorce & Remarriage*, *57*(5), 338–360. https://doi.org/10.1080/10502556.2016.1185203.

Baude, A., Drapeau, S., Lachance, V., & Ivers, H. (2019). Adjustment of children in joint custody and associated variables: A systematic review. *Journal of Child Custody*, *16*(4), 313–338. https://doi.org/10.1080/15379418.2019.1691106.

Bauserman, R. (2002). Child adjustment in joint-custody versus sole-custody arrangements: A meta-analytic review. *Journal of Family Psychology*, *16*(1), 91–102. https://doi.org/10.1037/0893-3200.16.1.91.

Bauserman, R. (2012). A meta-analysis of parental satisfaction, adjustment, and conflict in joint custody and sole custody following divorce. *Journal of Divorce & Remarriage*, *53*(6), 464–488. https://doi.org/10.1080/10502556.2012.682901.

Biller, H. B. (1993). *Fathers and families: Paternal factors in child development*. Auburn House.

Botterman, S., Sodermans, A. K., & Matthijs, K. (2015). The social life of divorced parents. Do custody arrangements make a difference in divorced parents' social participation and contacts? *Leisure Studies*, *34*(4), 487–500. https://doi.org/10.1080/02614367.2014.938768.

Brauns, H., & Steinmann, S. (1999). Educational reform in France, West-Germany and the United Kingdom: Updating the CASMIN educational classification. *ZUMA Nachrichten*, *23*(44), 7–44.

Briggs-Gowan, M. J., Carter, A. S., & Schwab-Stone, M. (1996). Discrepancies among mother, child, and teacher reports: Examining the contributions of maternal depression and anxiety. *Journal of Abnormal Child Psychology*, *24*(6), 749–765. https://doi.org/10.1007/BF01664738.

Brüderl, J., Drobnič, S., Hank, K., Neyer, F. J., Walper, S., Alt, P., Borschel, E., Bozoyan, C., Garrett, M., Geissler, S., Avilés, G., Gröpler, T., Hajek, N., Herzig, K., Huyer-May, M., Lenke, B., Lorenz, R., Lutz, R., Minkus, K., Peter, L., Phan, T., Preetz, T., Reim, R., Sawatzki, J., Schmiedeberg, B., Schütze, C., Schumann, P., Thönnissen, N., Timmermann, C., K., & Wetzel, M. (2021a). *The German Family Panel (pairfam)* (ZA5678; Version Data file Version 12.0.0) Gesis Data Archive. https://doi.org/10.4232/pairfam.5678.12.0.0.

Brüderl, J., Garrett, M., Hajek, K., Herzig, M., Lenke, R., Lorenz, R., Lutz, K., Phan, T., Schütze, P., & Schumann, N. (2021b). *pairfam Data Manual. Release 12.0*. LMU Munich: Technical Report. GESIS Data Archive, Cologne. ZA5678 Data File Version 12.0.0. https://doi.org/10.4232/pairfam.5678.12.0.0.

Cairney, J., Boyle, M., Offord, D. R., & Racine, Y. (2003). Stress, social support and depression in single and married mothers. *Social Psychiatry and Psychiatric Epidemiology*, *38*(8), 442–449. https://doi.org/10.1007/s00127-003-0661-0.

Christensen, A., Margolin, G., & Sullaway, M. (1992). Interparental agreement on child behavior problems. *Psychological Assessment*, *4*(4), 419–425. https://doi.org/10.1037/1040-3590.4.4.419.

Cobb, C. (2018). Answering for someone else: Proxy reports in survey research. In D. L. Vannette & J. A. Krosnick (Eds.), *The palgrave handbook of survey research* (pp. 87–93). Palgrave Macmillan. https://doi.org/10.1007/978-3-319-54395-6_12.

Coll, C. G., & Szalacha, L. A. (2004). The multiple contexts of middle childhood. *The Future of Children*, *14*(2), 80–97. https://doi.org/10.2307/1602795.

De Los Reyes, A. (2011). Introduction to the special section: More than measurement error: Discovering meaning behind informant discrepancies in clinical assessments of children and adolescents. *Journal of Clinical Child & Adolescent Psychology*, *40*(1), 1–9. https://doi.org/10.1080/15374416.2011.533405.

De Los Reyes, A., & Kazdin, A. E. (2005). Informant discrepancies in the assessment of childhood psychopathology: A critical review, theoretical framework, and recommendations for further study. *Psychological Bulletin*, *131*(4), 483–509. https://doi.org/10.1037/0033-2909.131.4.483.

De Los Reyes, A., & Kazdin, A. E. (2006). Informant discrepancies in assessing child dysfunction relate to dysfunction within mother-child interactions. *Journal of Child and Family Studies*, *15*(5), 643–661. https://doi.org/10.1007/s10826-006-9031-3.

De Los Reyes, A., Thomas, S. A., Goodman, K. L., & Kundey, S. M. A. (2013). Principles underlying the use of multiple informants' reports. *Annual Review of Clinical Psychology*, *9*(1), 123–149. https://doi.org/10.1146/annurev-clinpsy-050212-185617.

De Los Reyes, A., Augenstein, T. M., Wang, M., Thomas, S. A., Drabick, D. A. G., Burgers, D. E., & Rabinowitz, J. (2015). The validity of the multi-informant approach to assessing child and adolescent mental health. *Psychological Bulletin*, *141*(4), 858–900. https://doi.org/10.1037/a0038498.

De Los Reyes, A., Ohannessian, C. M., & Racz, S. J. (2019). Discrepancies between adolescent and parent reports about family relationships. *Child Development Perspectives*, *13*(1), 53–58. https://doi.org/10.1111/cdep.12306.

Dirks, M. A., De Los Reyes, A., Briggs-Gowan, M., Cella, D., & Wakschlag, L. S. (2012). Annual research review: Embracing not erasing contextual variability in children's behavior - theory and utility in the selection and use of methods and informants in developmental psychopathology. *Journal of Child Psychology and Psychiatry*, *53*(5), 558–574. https://doi.org/10.1111/j.1469-7610.2012.02537.x.

Duhig, A. M., Renk, K., Epstein, M. K., & Phares, V. (2000). Interparental agreement on internalizing, externalizing, and total behavior problems: A meta-analysis. *Clinical Psychology: Science and Practice*, *7*(4), 435–453. https://doi.org/10.1093/clipsy.7.4.435.

Ehrlich, K. B., Cassidy, J., & Dykas, M. J. (2011). Reporter discrepancies among parents, adolescents, and peers: Adolescent attachment and informant depressive symptoms as explanatory factors. *Child Development*, *82*(3), 999–1012. https://doi.org/10.1111/j.1467-8624.2010.01530.x.

Ehrlich, K. B., Richards, J. M., Lejuez, C. W., & Cassidy, J. (2016). When parents and adolescents disagree about disagreeing: Observed parent-adolescent communication predicts informant discrepancies about conflict. *Journal of Research on Adolescence*, *26*(3), 380–389. https://doi.org/10.1111/jora.12197.

Engel, N. A., Rodrigue, J. R., & Geffken, G. R. (1994). Parent-child agreement on ratings of anxiety in children. *Psychological Reports*, *75*(3), 1251–1260. https://doi.org/10.2466/pr0.1994.75.3.1251.

Fritzell, S., Gähler, M., & Fransson, E. (2020). Child living arrangements following separation and mental health of parents in Sweden. *SSM - Population Health*, *10*, https://doi.org/10.1016/j.ssmph.2019.100511.

Furman, W., & Buhrmester, D. (1985). Children's perceptions of the personal relationships in their social networks. *Developmental Psychology*, *21*(6), 1016–1024. https://doi.org/10.1037/0012-1649.21.6.1016.

Gerstel, N. (1988). Divorce, gender, and social integration. *Gender & Society*, *2*(3), 343–367. https://doi.org/10.1177/089124388002003007.

Goodman, R. (1997). The strengths and difficulties Questionnaire: A research note. *Journal of Child Psychology and Psychiatry*, *38*(5), 581–586. https://doi.org/10.1111/j.1469-7610.1997.tb01545.x.

Guillot-Valdés, M., Guillén-Riquelme, A., & Buela-Casal, G. (2020). A meta-analysis of the generalization of the reliability of State/Trait Depression Inventory scores. *Psicothema*, *32*(4), 476–489. https://doi.org/10.7334/psicothema2020.106.

Harkness, S. (2016). The effect of employment on the mental health of lone mothers in the UK before and after new labour's welfare reforms. *Social Indicators Research*, *128*(2), 763–791. https://doi.org/10.1007/s11205-015-1056-9.

Härkönen, J., Bernardi, F., & Boertien, D. (2017). Family dynamics and child outcomes: An overview of research and open questions. *European Journal of Population*, *33*(2), 163–184. https://doi.org/10.1007/s10680-017-9424-6.

Havermans, N., Vanassche, S., & Matthijs, K. (2015). Methodological challenges of including children in family research: Measurement equivalence, selection bias and social desirability. *Child Indicators Research*, *8*(4), 975–997. https://doi.org/10.1007/s12187-014-9275-1.

Howie, L. D., Lukacs, S. L., Pastor, P. N., Reuben, C. A., & Mendola, P. (2010). Participation in activities outside of school hours in relation to problem behavior and social skills in middle childhood. *Journal of School Health*, *80*(3), 119–125. https://doi.org/10.1111/j.1746-1561.2009.00475.x.

Huinink, J., Brüderl, J., Nauck, B., Walper, S., Castiglioni, L., & Feldhaus, M. (2011). Panel Analysis of Intimate Relationships and Family Dynamics (pairfam): Conceptual framework and design. *Journal of Family Research*, *23*(1), 77–101. https://doi.org/10.20377/jfr-235.

Jensen, P. S., Xenakis, S. N., Davis, H., & Degroot, J. (1988). Child psychopathology rating scales and interrater agreement: II. Child and family characteristics. *Journal of the American Academy of Child & Adolescent Psychiatry*, *27*(4), 451–461. https://doi.org/10.1097/00004583-198807000-00013.

Kalin, N. H. (2020). The critical relationship between anxiety and depression. *American Journal of Psychiatry*, *177*(5), 365–367. https://doi.org/10.1176/appi.ajp.2020.20030305.

Kolko, D. J., & Kazdin, A. E. (1993). Emotional/behavioral problems in clinic and nonclinic children: Correspondence among child, parent and teacher reports. *Journal of Child Psychology and Psychiatry*, *34*(6), 991–1006. https://doi.org/10.1111/j.1469-7610.1993.tb01103.x.

Kraemer, H. C., Measelle, J. R., Ablow, J. C., Essex, M. J., Boyce, W. T., & Kupfer, D. J. (2003). A new approach to integrating data from multiple informants in psychiatric assessment and research: Mixing and matching contexts and perspectives. *American Journal of Psychiatry*, *160*(9), 1566–1577. https://doi.org/10.1176/appi.ajp.160.9.1566.

Krain, A. L., & Kendall, P. C. (2000). The role of parental emotional distress in parent report of child anxiety. *Journal of Clinical Child Psychology*, *29*(3), 328–335. https://doi.org/10.1207/S15374424JCCP2903_4.

Kuhn, C., Aebi, M., Jakobsen, H., Banaschewski, T., Poustka, L., Grimmer, Y., Goodman, R., & Steinhausen, H. C. (2017). Effective mental health screening in adolescents: Should we collect data from youth, parents or both? *Child Psychiatry & Human Development*, *48*(3), 385–392. https://doi.org/10.1007/s10578-016-0665-0.

Liang, L. A., Berger, U., & Brand, C. (2019). Psychosocial factors associated with symptoms of depression, anxiety and stress among single mothers with young children: A population-based study. *Journal of Affective Disorders*, *242*, 255–264. https://doi.org/10.1016/j.jad.2018.08.013.

Lohaus, A., Rueth, J. E., & Vierhaus, M. (2020). Cross-informant discrepancies and their association with maternal depression, maternal parenting stress, and mother-child relationship. *Journal of Child and Family Studies*, *29*(3), 867–879. https://doi.org/10.1007/s10826-019-01625-z.

Long, J. S., & Freese, J. (2014). *Regression models for categorical dependent variables using Stata* (3rd ed.). Stata Press.

Mastrotheodoros, S., van der Graaff, J., Deković, M., Meeus, W. H. J., & Branje, S. (2020). Parent–adolescent conflict across adolescence: Trajectories of informant discrepancies and associations with personality types. *Journal of Youth and Adolescence*, *49*(1), 119–135. https://doi.org/10.1007/s10964-019-01054-7.

Mortelmans, D. (2020). Economic consequences of divorce: A review. In M. Kreyenfeld & H. Trappe (Eds.), *Parental life courses after separation and divorce in Europe* (pp. 23–41). Springer. https://doi.org/10.1007/978-3-030-44575-1_2.

Mortelmans, D. (2021). Causes and consequences of family dissolution in Europe and post-divorce families. In N. F. Schneider & M. Kreyenfeld (Eds.), *Research handbook on the sociology of the family* (pp. 232–247). Edward Elgar Publishing. https://doi.org/10.4337/9781788975544.00024.

Müller, B. (2019). Capturing multiple perspectives in a multi-actor survey: The impact of parental presence during child interviews on reporting discrepancies. *Survey Research Methods*, *13*(2), 137–151. https://doi.org/10.18148/SRM/2019.V13I2.7419.

Müller, J. M., Achtergarde, S., & Furniss, T. (2011). The influence of maternal psychopathology on ratings of child psychiatric symptoms: An SEM analysis on cross-informant agreement. *European Child & Adolescent Psychiatry*, *20*(5), 241–252. https://doi.org/10.1007/s00787-011-0168-2.

Offer, S. (2014). The costs of thinking about work and family: Mental labor, work–family spillover, and gender inequality among parents in dual-earner families. *Sociological Forum*, *29*(4), 916–936. https://doi.org/10.1111/socf.12126.

Ohannessian, C. M., Laird, R., & De Los Reyes, A. (2016). Discrepancies in adolescents' and mothers' perceptions of the family and mothers' psychological symptomatology. *Journal of Youth and Adolescence*, *45*(10), 2011–2021. https://doi.org/10.1007/s10964-016-0477-3.

Patterson, G. R., & Maccoby, E. E. (1980). Mothers: The unacknowledged victims. *Monographs of the Society for Research in Child Development*, *45*(5), 1–64. https://doi.org/10.2307/1165841.

Pelton, J., & Forehand, R. (2001). Discrepancy between mother and child perceptions of their relationship: I. Consequences for adolescents considered within the context of parental divorce. *Journal of Family Violence*, *16*(1), 1–15. https://doi.org/10.1023/A:1026527008239.

Peverill, M., Dirks, M. A., Narvaja, T., Herts, K. L., Comer, J. S., & McLaughlin, K. A. (2021). Socioeconomic status and child psychopathology in the United States: A meta-analysis of population-based studies. *Clinical Psychology Review*, 83. https://doi.org/10.1016/j.cpr.2020.101933.

Phares, V. (1997). Accuracy of informants: Do parents think that mother knows best? *Journal of Abnormal Child Psychology*, *25*(2), 165–171. https://doi.org/10.1023/a:1025787613984.

Rabe-Hesketh, S., & Skrondal, A. (2022). *Multilevel and longitudinal modeling using Stata* (4th ed.). Stata Press.

Richters, J. E. (1992). Depressed mothers as informants about their children: A critical review of the evidence for distortion. *Psychological Bulletin*, *112*(3), 485–499. https://doi.org/10.1037/0033-2909.112.3.485.

Roberts, B. W., & Caspi, A. (2001). Personality development and the person-situation debate: It's déjà vu all over again. *Psychological Inquiry*, *12*(2), 104–109. https://doi.org/10.1207/S15327965PLI1202_04.

Rognli, E. W., Aalberg, M., & Czajkowski, N. O. (2021). Using informant discrepancies in report of parent–adolescent conflict to predict hopelessness in adolescent depression. *Clinical Child Psychology and Psychiatry*, *26*(1), 96–109. https://doi.org/10.1177/1359104520969761.

Rossi, A. S., & Rossi, P. H. (1990). *Of human bonding. Parent-child relations across the life course*. Aldine de Gruyter.

Sakshaug, J. W. (2014). Proxy reporting in health surveys. In T. P. Johnson (Ed.), *Health survey methods* (pp. 367–381). Wiley. https://doi.org/10.1002/9781118594629.ch14.

Salmela-Aro, K. (2011). Stages of adolescence. In B. B. Brown & M. J. Prinstein (Eds.), Encyclopedia of Adolescence (pp. 360–368). Academic Press. https://doi.org/10.1016/B978-0-12-373951-3.00043-0.

Schnor, C., Pasteels, I., & van Bavel, J. (2017). Sole physical custody and mother's repartnering after divorce. *Journal of Marriage and Family*, *79*(3), 879–890. https://doi.org/10.1111/jomf.12389.

Sobolewski, J. M., & Amato, P. R. (2007). Parents' discord and divorce, parent-child relationships and subjective well-being in early adulthood: Is feeling close to two parents always better than feeling close to one? *Social Forces*, *85*(3), 1105–1124. https://doi.org/10.1353/sof.2007.0056.

Sodermans, A. K., Vanassche, S., Matthijs, K., & Swicegood, G. (2014). Measuring postdivorce living arrangements: Theoretical and empirical validation of the residential calendar. *Journal of Family Issues*, *35*(1), 125–145. https://doi.org/10.1177/0192513X12464947.

Spaderna, H., Schmukle, S. C., & Krohne, H. W. (2002). Bericht über die deutsche Adaptation Der State-Trait Depression scales (STDS). *Diagnostica*, *48*(2), 80–89. https://doi.org/10.1026//0012-1924.48.2.80.

Spruijt, E., & Duindam, V. (2010). Joint physical custody in the Netherlands and the well-being of children. *Journal of Divorce & Remarriage*, *51*(1), 65–82. https://doi.org/10.1080/10502550903423362.

Steinbach, A. (2019). Children's and parents' well-being in joint physical custody: A literature review. *Family Process*, *58*(2), 353–369. https://doi.org/10.1111/famp.12372.

Steinbach, A., & Augustijn, L. (2021). Post-separation parenting time schedules in joint physical custody arrangements. *Journal of Marriage and Family*, *83*(2), 595–607. https://doi.org/10.1111/jomf.12746.

Steinbach, A., Kopp, J., & Lazarevic, P. (2019). Divergent perceptions of intergenerational relationships: What implications, if any? *Journal of Family Studies*, *25*(4), 368–384. https://doi.org/10.1080/13229400.2016.1269659.

Steinbach, A., Augustijn, L., & Corkadi, G. (2021). Joint physical custody and adolescents' life satisfaction in 37 north American and European countries. *Family Process*, *60*(1), 145–158. https://doi.org/10.1111/famp.12536.

Tein, J. Y., Roosa, M. W., & Michaels, M. (1994). Agreement between parent and child reports on parental behaviors. *Journal of Marriage and Family*, *56*(2), 341–355. https://doi.org/10.2307/353104.

Thönnissen, C., & Walper, S. (2020). Die Befragung der Kinder im deutschen Beziehungs- und Familien-panel pairfam: Sampling, Stichprobe und Erhebungsinstrumente. pairfam Technical Paper No. 11. https://doi.org/10.5282/UBM/EPUB.91993.

Thönnissen, C., Sawatzki, B., Alt, P., Reim, J., Geissler, S., & Walper, S. (2021). pairfam Scales and Instruments Manual, Release 12.0. LMU Munich: Technical Report. GESIS Data Archive, Cologne. ZA5678 Data File Version 12.0.0, https://doi.org/10.4232/pairfam.5678.12.0.0.

Treutler, C. M., & Epkins, C. C. (2003). Are discrepancies among child, mother, and father reports on children's behavior related to parents' psychological symptoms and aspects of parent-child relationships? *Journal of Abnormal Child Psychology*, *31*(1), 13–27. https://doi.org/10.1023/A:1021765114434.

Waldvogel, P., & Ehlert, U. (2016). Contemporary fatherhood and its consequences for paternal psychological well-being – a cross-sectional study of fathers in Central Europe. *Frontiers in Public Health*, *4*, https://doi.org/10.3389/fpubh.2016.00199.

Xiao, J. J. (2013). Family economic well-being. In G. W. Peterson & K. R. Bush (Eds.), *Handbook of marriage and the family* (pp. 573–611). Springer. https://doi.org/10.1007/978-1-4614-3987-5_24.

Youngstrom, E., Loeber, R., & Stouthamer-Loeber, M. (2000). Patterns and correlates of agreement between parent, teacher, and male adolescent ratings of externalizing and internalizing problems. *Journal of Consulting and Clinical Psychology*, *68*(6), 1038–1050. https://doi.org/10.1037/0022-006X.68.6.1038.