Survey Research Methods (2019)
Vol. 13, No. 2, pp. 137-151
doi:10.18148/srm/2019.v13i2.7419

ISSN 1864-3361
http://www.surveymethods.org

Capturing Multiple Perspectives in a Multi-actor Survey: The Impact of Parental Presence During Child Interviews on Reporting Discrepancies

Bettina Müller
Institute for Employment Research (IAB)
Nuremberg, Germany

Third-party presence is considered a potential threat to the quality of sensitive information gathered in face-to-face interviews. Issues arising from interference and reduced privacy due to bystander presence appear particularly pressing in child surveys: Parental presence is quite common and likely more pervasive as compared to other interviewee-bystander constellations. Focusing on surveys designed to capture multiple perspectives on the same issues, a key question is whether child interviews – in addition to parent information – can provide an independent opinion if parents are present during the interview. Using longitudinal multi-actor data from the German Family Panel (pairfam), the present study evaluates the impact of parental presence on child-parent discrepancies in survey reports on children's problem behaviors and difficulties in the parent-child relationship. The longitudinal analysis of child-parent dyads allows for a more extensive consideration of selection processes of parental presence as compared to cross-sectional approaches. While descriptive results suggest that parent and child reports are more similar when parents are present, fixed-effects regression analyses do not find any effects of changes in parental presence on reporting discrepancies within child-parent dyads.

Keywords: Measurement error; sensitive questions; bystander presence; fixed-effects regression; panel surveys

1 Introduction

While information on children has mainly relied on proxy reports provided by parents for many years, children themselves are increasingly included in sample surveys, for instance, to study their well-being from their own perspective (Busse & Backeberg, 2018; Scott, 2008). As one example of designs involving children in family research, multi-actor studies gather information from multiple family members, attributing value to each actors' perspectives and attitudes (Huinink et al., 2011; Kalmijn & Liefbroer, 2011). Despite this growing acknowledgment in the realm of standardized surveys, research on best practices of surveying children and data quality is still fragmented (see Franc et al., 2018).

Existing studies on interview modes and questionnaire design set a special focus on children being more suggestible and sensitive to the social context of the interview (e.g., Bell, 2007; De Leeuw, Borgers, & Smits, 2004; Scott, 2008). Although interviewer presence is not ideal in the case of an increased risk of suggestibility, surveying children in person – particularly younger ones – facilitates assistance and can improve data quality. Generally, face-to-face interviews should be conducted in private to reduce measurement error in responses to sensitive questions. However, survey organizations have limited control over the presence of third parties. Surveying minors thereby constitutes a special case in that the presence of parents can be regarded as their supervisory duty and is therefore quite likely, occurring in more than 50 percent of interviews in some studies (Moskowitz, 2004; Ogan, Karakuş, & Kurşun, 2013). When considering that children's survey reports might be more easily influenced, it thus appears crucial to assess whether their perspective can be adequately captured if their parents are present during the interview.

The present study evaluates the impact of parental presence during face-to-face child interviews, using data from the German Family Panel pairfam (Panel Analysis of Intimate Relationships and Family Dynamics). The pairfam study implements a multi-actor design, including main respondent's partners, parents, and children aged 8 to 15, thereby seeking to gather different perspectives. Given this specific aim, it is of central importance to assess whether differing views are actually expressed in non-private interview settings. Applying an identical set of survey questions for parents and children, the multi-actor design yields an interesting data base

Contact information: Bettina Müller, Institute for Employment Research (IAB), Regensburger Str. 104, 90478 Nuremberg, Germany (E-mail: Bettina.Mueller2@iab.de)

for studying the effects of parental presence. Responses can be evaluated at a dyadic level, providing insight as to whether parents' interview presence is associated with higher levels of consistency in parent's and children's survey reports. The focus of this analysis is on questions about children's problem behaviors, as well as conflicts and negative communication within the parent-child relationship, as these are thought to be particularly prone to bystander influence. Effects of changes in parental presence on reporting discrepancies regarding these topics are evaluated longitudinally within child-parent dyads using fixed-effects regression. In this way, the non-randomness of parental presence can be captured more adequately than with cross-sectional designs, providing a stronger basis for conclusions about third-party effects on data quality.

2 Background

2.1 Effects of Parental Presence

Misreporting on Sensitive Questions. Third-party presence in face-to-face interviews distorts the standardized interview setting by reducing privacy and has thus been identified as one factor that increases the risk of measurement error in responses to sensitive questions (e.g., Krumpal, 2013; Tourangeau & Yan, 2007). When surveying adults, various meanings of "sensitivity" are commonly discussed. Social desirability refers to survey questions eliciting answers that deviate from "true" scores in that they are more in line with social norms. Sensitivity further encompasses answers that promote an expectation of unpleasant or severe consequences in the case of disclosure (Tourangeau & Yan, 2007).[1] Third-party presence is thought to engender or enhance such tendencies of misreporting, depending on bystanders' involvement in the survey topics and their prior knowledge of the information requested, as well as whether respondents expect any negative consequences from the disclosure of sensitive information (Aquilino, 1997). Correspondingly, the occurrence and magnitude of bystander effects have been found to be linked to the specific relationship of the interviewee to the bystander (Aquilino, 1997; Aquilino, Wright, & Supple, 2000; Tourangeau & Yan, 2007).

Focusing on child respondents, it is unclear at what stage of their social and cognitive development common concepts of sensitivity can be applied, if at all. Thus, identifying questions that are prone to measurement error as well as determining effects of third-party presence is not straightforward. In particular, conformity with social norms as defined from an adult's perspective cannot be unequivocally identified as a reaction to sensitive questions among children (see Scott, 2008). At the most, we can assume that young children have a tendency to please others, which could in a similar sense result in reporting more "appropriate" behavior as one aspect of suggestibility (De Leeuw et al., 2004). In contrast to social desirability, reluctance to disclose information subject to disapproval or sanctions is an aspect of question sensitivity that can clearly be applied to children as well. In fact, the few existing studies addressing bystander effects in child interviews mainly focused on questions that are likely to provoke parental sanctions, namely on delinquent and risky behavior among adolescents (Aquilino et al., 2000; Herrera, Benjet, Méndez, Casanova, & Medina-Mora, 2017; Moskowitz, 2004; Ogan et al., 2013).[2] Not surprisingly, a consistent finding of this research is that less of such behavior is reported in the presence of parents.[3] Havermans, Vanassche, and Matthijs (2015) also assume an increased risk of negative consequences for the disclosure of family relations and find weak evidence for more favorable child reports regarding open communication with parents and parental conflicts when parents are present.

Considering Bystander's Relationship to the Respondent. While third-party presence is likely to cause underreporting for questions concerning undesired behavior, for other topics prone to influence, the direction of bias is less clear. In these cases, including bystanders' perspectives is crucial to gaining insight into response error. Setting a specific focus on the interviewee-bystander relationship, Zipp and Toth (2002) argue that for couples, it is more important to present a unified stance on a given issue – whatever form this may take – than to be consistent with social norms. The authors thereby suggest a more comprehensive test for measurement error, not only focusing on bias, but also considering whether spousal presence increases consistency in survey reports. Evaluating the mutual influence of spousal presence on their partner's responses (e.g., regarding class identification and party affiliation), they find higher levels of agreement on various items, but no evidence for answering in one particular direction (Zipp & Toth, 2002).

Among interviewee-bystander constellations, the parent-child relationship can be considered a special case in several regards: First, parents' presence at interviews with minors

[1] Question contents perceived by respondents as a threat to their privacy (e.g., questions about income) represent a further sensitivity dimension. Intrusiveness arising from such questions, however, is thought to be independent of the interview context and the specific responses (see Tourangeau & Yan, 2007) and therefore less relevant for issues related to interview privacy.

[2] Herrera et al. (2017) evaluate the effects of parental presence in a clinical setting, focusing on questions regarding mental health conditions and substance use among adolescents.

[3] Aquilino et al. (2000) and Moskowitz (2004) address bystander effects as a supplement to contrasting different interview modes. Aquilino et al. (2000) evaluate effects of parental presence for paper-and-pencil and computer-assisted self-administered modes, and Moskowitz (2004) for computer-assisted telephone modes with and without self-administration. Effects were (also) found for self-administered modes, suggesting that the mere presence of parents, regardless of interference, may inhibit information disclosure.

reflects their responsibility to oversee the interview as well as the aim to provide support, and is therefore likely to be quite common. Furthermore, parents commonly believe that children's development, at least to a certain degree, lies within their own sphere of influence and that child-rearing efforts can be effective in promoting children's competences and well-being (see Coleman & Karraker, 1998; Holden, 1995). Thus, all information requested from children in survey interviews, in a broader sense, concerns parenting outcomes and is likely to be considered by parents as their personal matter. Parents' interest in their children's answers, as well as their motivation to interfere if children deviate from their own assessment of a given issue is therefore likely to be higher than with other interviewee-bystander relationships.

Focusing on the parent-child relationship from an 8 to 15 year-old child's view, it is important to consider age disparities. Acknowledging that clear age delineations are difficult, key stages in children's cognitive development have been used as a guideline to treat middle childhood (around age 7 to 11) and adolescence (around age 12 to 18) as distinct groups in the context of survey interviews (e.g., Borgers, De Leeuw, & Hox, 2000; De Leeuw et al., 2004; Scott, 2008). When applying such distinctions to issues of parental presence and focusing on preadolescent children, dependence on parents as well as exposure and deference to parental knowledge and attitudes (see Baumrind & Thompson, 2002; Maccoby, 1992) represent main differences to other respondent-bystander relationships. In survey interviews, these aspects come into play in that children's views are formed to a large degree by their parents, and in that they tend to consider their parents' opinion superior to their own. Children's orientation toward parent perspectives might be enhanced if parents are present during the child interview, possibly encouraging a greater reluctance to express their own view, regardless of whether their parents actively interfere.

In contrast to middle childhood, adolescence is characterized by a more equal parent-child relationship with higher levels of autonomy (e.g., De Goede, Branje, & Meeus, 2009; Wray-Lake, Crouter, & McHale, 2010). Identity formation and role-taking as further developmental steps involve developing independent viewpoints as well as identifying and considering other's perspectives (Cooper, Grotevant, & Condon, 1983). As such aspects entail a greater resistance to parental influence, adolescents are thought to be more likely to maintain their view in the presence of their parents as compared to young children. With increasing age, social and cognitive development, and independence, parental presence may also represent a means for children to express autonomy by exaggerating differing views concerning the parent-child relationship and negative parent behavior.

In summary, given the specific nature of the relationship, parents have a strong personal interest in their children's survey responses and young children are thought to be particularly prone to parental influence, with their norms of appropriate behavior mainly defined by parents. Parental presence during interviews with young children may therefore result in survey reports that are more in line with the parents' views, compromising the goal of capturing independent perspectives. This influence is thought to become smaller with increasing age and independence from parents, and adolescents may also emphasize detachment by providing more extreme responses in the presence of their parents, resulting in reports of more discrepant views.

2.2 Selectivity of Parental Presence

A straightforward approach for assessing the effect of parents' interview presence on survey responses would be to compare answers from interviews with and without parents present. However, there is ample evidence that bystander presence does not occur at random (e.g., Aquilino, 1993, 1997; Aquilino et al., 2000; Diop, Le, & Traugott, 2015). If child-parent dyads with and without parental presence differ in characteristics that also affect reporting discrepancies, differences in survey outcomes between the two groups would at least partly reflect selection into parental presence.

When considering this specific interviewee-bystander constellation (Section 2.1), parents' presence is thought to be primarily motivated by their desire for both control and support. Control aspects include the interview situation and content, as well as the information provided by children. In panel surveys, parents gain knowledge on interview procedures and survey questions during the first interview they are present for. Parental presence as a means of controlling these aspects is thus assumed to be less likely in later panel waves. Increased interview experience along with age and cognitive development may also affect children's responses. More specifically, managing tasks related to the question-answer process is likely to improve (Borgers et al., 2000), mitigating child-parent discrepancies in survey reports.[4] Parents' presence as a means of controlling the interview situation and information disclosure may also depend on parenting styles as well as relationship characteristics. In particular, parents' desire for a close supervision of their child's behavior, activities, and companions may increase the likelihood of their presence during the interview. A closer monitoring of and thus interaction with the child may also result in more similar evaluations of problem behaviors by parents and children as parents know more about the child.

Providing support as an additional influencing factor of parental presence is likely to decrease with children's in-

[4]In a panel survey, interviewer changes may enhance control tendencies, entailing higher levels of parental presence during children's interviews. However, assuming that parents and children react to such changes in a similar way, namely being more reserved toward unfamiliar interviewers, reporting discrepancies are likely not to be affected.

terview experience and age. Moreover, support tendencies may vary with general parenting goals such as autonomy, and children raised to develop their own opinions might provide answers that deviate more from parents' assessments. When considering that children also have a say in whether their parents may be present during the interview, their assertiveness is presumed to be the most relevant influence factor, which may also provoke a greater independence in answering survey questions. Finally, children are more likely to approve parental presence if intimacy in communication as one aspect of relationship quality is high, and a generally greater information exchange may entail higher levels of consistency in survey reports.

Given that such selection processes are likely, the preferable approach to achieve randomness in parental presence would be to implement an experiment. However, this would be very challenging, especially given requirements for parental consent, as is often the case (see Ozan, Pollock, Goswami, & Lynn, 2018). Parents' approval may depend on whether it is possible for them to be present during the child's interview, and may thus be at stake if interviewers insist on conducting the interview in private. Previous studies on third-party effects have mainly attempted to account for selection processes by controlling for a set of potentially confounding variables in regression analyses (e.g., Aquilino, 1993; Aquilino et al., 2000; Zipp & Toth, 2002). Diop et al. (2015) apply propensity score matching to assess bystander effects among respondents with and without third parties present only for comparable cases regarding various personal and household characteristics. However, regression as well as matching approaches both suffer from the difficulty of accounting for all relevant selection variables if these are not (adequately) measured.

In light of these shortcomings of standard approaches to address selection effects and given that randomness of parental presence is difficult to achieve with experimental designs, longitudinal approaches such as fixed-effects regression provide a sounder basis for conclusions about bystander effects. Comparing discrepancies in survey reports by parental presence within the same child-parent dyads allows to implicitly control for differences in all time-constant, unobserved confounding factors, in addition to measured time-varying aspects. More specifically, all stable components of unobserved individual and family characteristics can be accounted for (e.g., personality traits, family-specific communication styles and levels of intimacy, as well as child-specific parenting).

3 Data and Methods

3.1 Data

The present analyses are based on waves 6 to 9 of the German Family Panel pairfam (Brüderl, Drobnič, et al., 2018), an annual survey of a random sample of German residents from the birth cohorts 1971-1973, 1981-1983, and 1991-1993.[5] Data collection started in 2008 with approximately 4,000 interviews from each cohort using computer-assisted personal interviews. Covering partnership quality and stability, parenting, and child development, the study provides an important data base for couple and family research. To get the full picture of a family's life, pairfam captures information from multiple perspectives, allowing for the analysis of couple and family relations at a dyadic level. To this end, the study implements a multi-actor approach, including main (anchor) respondents' partners, children, and parents (for a more detailed description of the study, see Huinink et al. (2011).

Integrating anchor respondents' children is organized as follows: All biological, adopted, foster children, and stepchildren aged 8 to 15 living in the anchor's household are eligible, whereby participation requires consent from both the anchor respondent and the child. Children are interviewed at the anchor's residence, using a 15 to 20 minute computer-assisted personal interview. Information on parenting of 8 to 15 year olds that are eligible for the child interview is collected from anchor respondents and their partners via a supplemental paper-and-pencil questionnaire.[6]

Information on the presence of third parties during the child interview is available from wave 6 onwards and differentiated by parent(s), sibling(s), other family members, and other persons. Although it is not specified whether parents are present during the whole interview, this is likely for most cases as the duration of the child interview is relatively short. The available information on parental presence does not differentiate between anchor respondents and the other parent. However, most of the child interviews are conducted directly after the anchor interview (82.7%) as opposed to on a different interview date. Thus, it is very likely that it is the anchor parent who is present.

3.2 Analyses Samples

Analyses rely on waves 6 to 9 of the pairfam study and child-parent dyads with both members of the dyad participating in the parenting/child survey. To ensure that parent reports stem from the parent who was present during the child interview (for cases where only one parent was

[5] The analysis sample includes the DemoDiff subsample of respondents residing in Eastern Germany. For more details, see Brüderl, Hajek, et al. (2018). Information on data access is provided at https://www.pairfam.de/en/data/data-access/.

[6] Averaged over waves 6 to 9, children's response rates conditional on parent consent are high, amounting to 95.5%. Overall, 71.4% of all eligible children are available for analyses. The parenting survey was completed by 80.1% of eligible anchor parents, covering 73.7% of children eligible for the child interview; for more details on response rates, see Brüderl, Schmiedeberg, et al. (2018).

present), analyses are restricted to anchor reports on parenting and cases in which the child interviews were conducted directly after the anchor interview. In the following, notes on the parent thus refer to anchor respondents.

Fixed-effects regression models allow for a more precise test of parent presence effects, but require at least two observations per dyad. However, from a data user's perspective, it is important to know whether survey reports differ by parental presence in the panel waves available for substantive analyses, and sample restrictions may affect such differences. For descriptive purposes, differences by parental presence are thus first presented for the sample of child-parent dyads with both members participating in at least one wave between waves 6 to 9 (full sample), and then additionally for the subsample used for fixed-effects regression analyses with at least two observations per dyad (restricted sample).

The full sample contains 3,924 observations from 1,823 child-parent dyads nested in 1,291 anchor households. The restricted sample with at least two observations per dyad and valid data on dependent and independent variables comprises 3,191 observations from 1,134 dyads (nested in 842 households). For a total of 372 children the interview setting regarding parental presence changed at least once within the observation period (32.8%). Analyses of reports on hyperactivity symptoms are restricted to waves 7 and 9 as parent information is only collected in uneven panel waves. Here, the full (restricted) sample includes 1,961 (1,000) observations from 1,451 (500) dyads.

3.3 Measures

The impact of parental presence is evaluated for five scales concerning children's problem behaviors and difficulties in the parent-child relationship that are identical across both the child and parenting survey and applied in at least two waves. Problem behavior scales comprise subscales of the strengths and difficulties instrument, namely: conduct problems, hyperactivity, and emotional symptoms. Relationship aspects encompass conflicts and a negative communication style of the anchor. All items on problem behaviors were captured in a 3-point response scale ("not true", "somewhat true", and "certainly true"), whereas response options for the relationship items included "never" (1), "seldom" (2), "sometimes (3), "often" (4), and "always" (5).[7] The respective items are combined to five additive indices, whereby positively phrased items have been inverted (Thönnissen, Wilhelm, Alt, Greischel, & Walper, 2018). The wording of the items as well as Cronbach's Alpha for the combined indices are shown in Table 1.

Reporting discrepancies in these scales are calculated as child reports minus parent reports, with a positive difference score indicating higher values reported by children and vice versa. For problem behaviors, difference scores range from -2 to 2 and for relationship aspects from -4 to 4. These measures sensitive to the direction of deviations are applied for descriptive purposes. As effects of parental presence might cancel each other out in the case of alignments from both positive and negative difference scores towards a greater consistency in survey reports, the absolute difference between children's and parent's scale ratings is used for multivariate analyses.

Differences by parental presence are assessed for children's age and number of completed interviews, as well as for parental assessments of the child's self-assertion and relationship and parenting characteristics (Section 2.2). In particular, assertiveness is measured by a 2-item scale about the child making the anchor do things his/her way and getting his/her way when the anchor and the child don't agree. Intimacy of communication is based on an adapted dimension of the Network of Relationship Inventory (Furman & Buhrmester, 1985) and measured by two items concerning the frequency of talking about personal thoughts and sharing secrets and private feelings. The monitoring scale includes questions about discussing the child's new friends, getting to know them quickly, knowing exactly where the child is when he/she goes out, and asking what the child did and experienced while he/she was out. Response options for all items on assertiveness, intimacy, and monitoring range from "never" (1) to "always" (5). Finally, children's autonomy as a parenting goal is measured by two items about the importance of doing things autonomously and being independent, as well as being able to form one's own opinion. Parents rated these items on an eleven-point scale ranging from "not important at all" (0) to "absolutely important" (10).

3.4 Fixed-effects Models

The present study applies linear fixed-effects regression to analyze changes in child-parent reporting discrepancies (for details on fixed-effects regression, see, e.g., Allison (2009), Brüderl and Ludwig (2015)). As impacts of parental presence and absence on survey responses are thought to be immediate and to be driven by the same mechanisms, analyses include both directions. Effects of changes in parental presence are evaluated within the same child-parent dyad, accounting for all observed and non-observed stable family and personal characteristics. The models therefore only include time-varying confounders that may affect parental presence as well as reporting discrepancies.

The most important confounding factors are children's interview experience and age (Section 2.2). The number of interviews a child has completed is highly correlated with age ($r = 0.84$), as most children enter the survey at age 8 when they become eligible. Baseline models thus include age and

[7] Nonresponse for all items amounts to 1% on average in both the child survey and the parenting survey across the respective panel waves available for analyses.

Table 1
Scales on children's problem behaviors and the parent-child relationship

	Cronbach's Alpha (range across waves 6-9)	
	Child	Parent
Conduct problems	0.49–0.54	0.56–0.60
I get very angry and often lose my temper		
I am often accused of lying or cheating		
I fight a lot		
I take things that are not mine		
I usually do as I am told		
Hyperactivity	0.71–0.73	0.80–0.82
I am restless/ cannot stay still for long		
I am constantly in motion and fidgety		
I am easily distracted/ find it difficult to concentrate		
I finish the work I'm doing/ can concentrate long enough		
I think before I act		
Emotional problems	0.66–0.68	0.72–0.75
I am nervous in new situations		
I have many fears/ I am easily scared		
I get a lot of headaches, stomach-aches or sickness		
I am often unhappy, depressed or tearful		
I worry a lot		
Negative communication	0.56–0.64	0.69–0.75
Anchor criticizes you		
Anchor yells at you because you did something wrong		
Anchor scolds you because he/she is angry at you		
Conflicts	0.71–0.73	0.76–0.81
You are annoyed or angry with each other		
You disagree and quarrel		

In the parenting questionnaire, items are phrased correspondingly from the parent perspective. Cronbach's Alpha is based on the full sample of dyads in waves 6 to 9.

a dummy variable for the child's first interview to account for a higher likelihood of parental presence and greater reporting discrepancies for children without any interview experience and younger ages.

Relevant relationship and parenting characteristics as outlined in Section 2.2 are thought to be mostly stable across the observation period. When assessing the effect of parental presence within child-parent dyads in a fixed-effects model, their time-constant influence is already captured by design. However, to adjust for deviations from baseline levels across the observed panel waves, intimacy of communication as well as monitoring by parents are additionally included in the models. For example, situational factors such as problems at school might entail a closer monitoring of and interaction with the child, increasing the likelihood of parental presence during the interview and reducing child-parent discrepancies in survey reports as parents know more about the child. Variations in intimacy and attention paid to the child may also stem from life events such as changes in the anchor's job and relationship status, as well as changes in the household composition. It is important to note that autonomy as a general parenting goal has only been measured in one wave as it is considered mostly stable and is therefore not adjusted for in the models. As for relevant time-varying personal traits, children's assertiveness is included in the models to account for individual changes that are independent of age.

As outlined in Section 2.1, effects of parental presence are presumed to differ between young children and adolescents, mainly due to varying levels of independence from parents. To evaluate possible moderating effects of age, a further set of models for each of the dependent variables includes multiplicative interaction terms between parental presence and middle childhood (age 8 to 11), with adolescents (age 12 to 15) as the reference group.

Additional factors might reinforce or lessen the impact of parents' interview presence on reporting discrepancies. For survey questions concerning problems in the parent-child relationship, effects of parental presence may differ by relationship quality. More specifically, an alignment of survey reports toward parents' views might only apply for higher quality relationships, whereas in the case of problems, parental presence may represent a means to express dissatisfaction by exaggerating negative parent behavior. Effects of parental presence on reporting discrepancies for high and low quality relationships would thus cancel each other out. To test for this moderating effect, information on intimacy in communication is used as a proxy for relationship quality, identifying relationships in which problems are not usually discussed with the parent. A dummy variable is created to indicate dyads with children who never, seldom, or only sometimes talk about personal thoughts and never, seldom, or sometimes share secrets and private feelings with their parents (according to parent reports).[8] Interactions of parental presence with low intimacy are then applied for models explaining discrepancies in reports of conflicts and negative communication, whereby separate models are run for middle childhood and adolescence.

Finally, given that parents' support and control motivations likely depend on their knowledge of interview procedures and content, as well as the child's previous interview performance, parents might sit next to their child during the first interview(s) and only be present elsewhere in the room thereafter. The latter case might also be registered as "presence" by interviewers, but implies different possibilities for active and passive influence on children's responses. To test for a differing effect of parent presence in the first interview(s) as opposed to later ones, a further set of models includes interactions with the number of completed interviews.

4 Results

4.1 Descriptive Statistics

Parental Presence. Averaged over waves 6 to 9, parental presence during the child interview as registered by the interviewer amounts to 39.1%. In 7.5% of all interviews, other children are present, whereas the presence of other family members or persons is negligible (less than 1%). In total, 40.9% of all child interviews are not conducted in a private setting. When only considering children who enter the study in waves 6 to 9 (i.e., the waves in which third-party presence has been measured), bystander presence amounts to 48.2% of interviews and parental presence to 46.1%. Despite this relatively high level of third-party presence, disruptions by bystanders are rare (11.0%) and mainly occur at the first child interview (in 48.5% of disruptions).

Table 2 shows differences in personal, relationship, and parenting characteristics, as well as interview experience for dyads with and without parental presence based on the full sample of dyads in waves 6 to 9, focusing on characteristics that are likely to be correlated with reporting discrepancies as well (Section 2.2). Consistent with the assumption that parental presence is not random, significant differences between the two groups can be observed throughout. As presumed, parents' interview presence is more common for younger children and for those with a lower number of completed interviews. Based on parent reports, children show lower levels of assertiveness and child-rearing is characterized by higher levels of monitoring. Correspondingly, parents appear to attach less value to autonomy as a parenting goal as compared to those not attending the interview. Furthermore, intimacy of communication between parent and child is higher for the group with parental presence (Table 2). These differences, as assessed by two-sample *t*-tests for metric and chi-square tests for categorical variables, are significant at the 0.001 level, except for monitoring and intimacy (significant at the 0.05 level).

Outcome measures. Next, the focus lies on the five outcome variables based on problem behavior and relationship scales. Figure 1 shows the mean child-parent difference scores by parental presence, with scores closer to zero indicating smaller differences. In line with expectations, reporting discrepancies are significantly lower for dyads with parental presence as compared to those without, with group differences most pronounced for hyperactivity and negative communication. The only exception is the scale on emotional problems, for which discrepancies are similar in both groups. Overall, reporting discrepancies are small, with values close to zero throughout.

Comparing baseline scale levels between children and parents, positive values in Figure 1 indicate higher levels reported by children as compared to parents, and vice versa. For both groups with and without parental presence, children report more emotional and hyperactivity symptoms than do parents, whereas for conduct problems, parents' scores are higher. As for relationship aspects, children provide a more favorable description than do their parents, reporting lower levels of conflicts and negative communication (Figure 1, see Appendix Table A1 for baseline scale levels).[9]

Overall, reporting discrepancies remain relatively stable

[8] The reference category includes the most frequently chosen response option "often" (48.4% and 55.8% for intimacy items as described in Section 3.3) as well as "very often". Defining the dummy variable to indicate only reports of "never" and "seldom" is not possible as case numbers for combinations with parental presence are too small.

[9] Two-sample *t*-tests show that mean differences in child and parent reports differ significantly from zero (Appendix Table A1). The baseline level of correspondence between reports can be classified as weak according to Spearman's correlation throughout, with values ranging between 0.34 and 0.38. One exception is the moderate correlation of hyperactivity reports (0.46, Appendix Table A1).

Table 2
Differences by parental presence; Mean/Percent of observations

	Presence of Parents		
	Not present	Present	N (obs.)
Child's assertiveness (1 to 5, parent report)	2.52	2.43	3,917
Monitoring (1 to 5, parent report)	4.05	4.08	3,906
Intimacy (1 to 5, parent report)	3.68	3.74	3,917
Autonomy as parenting goal (0 to 10, parent report)	9.20	9.07	3,110
Child's number of interviews	3.73	3.20	3,924
Child's number of interviews (children entering in waves 6 to 9)			
1st	34.1%	47.8%	602
2nd	34.4%	29.2%	476
3rd	20.6%	16.2%	276
4th	11.0%	6.9%	135
Child's age (years)			
8–9	19.1%	32.2%	949
10–11	29.1%	29.6%	1,150
12–13	30.9%	23.3%	1,095
14–15	21.0%	14.9%	730

Full sample of child-parent dyads. The number of cases is smaller for autonomy as this information is not available for the DemoDiff sample.

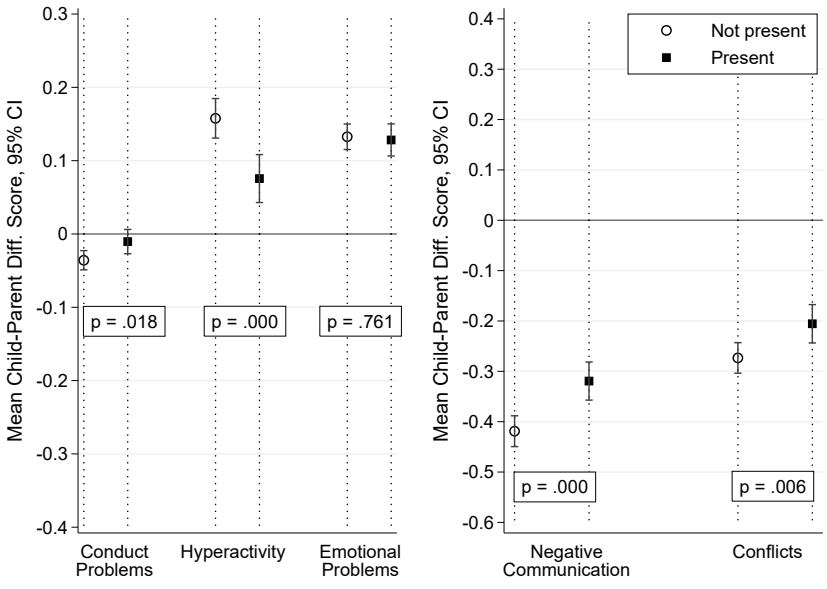

Figure 1. Child-parent reporting discrepancies by parental presence.
Notes: Full sample of child-parent dyads; Difference scores were calculated as child report minus parent report and range from -2 to 2 for problem behaviors and -4 to 4 for relationship aspects; *p*-values stem from two-sample *t*-tests.

across children's age (Appendix Figure B1). While children's scores on emotional problems and symptoms of hyperactivity are higher throughout, the direction of discrepancies regarding conduct problems changes towards higher parent scores for adolescent ages. As for relationship aspects, parents report higher levels of negative communication and conflicts as compared to their children throughout, with a tendency toward smaller reporting discrepancies for adolescents (Appendix Figure B1).

Descriptive Statistics of Variables Used in Fixed-effects Analyses. Focusing on the restricted sample with at least two observations per dyad, differences between dyads with and without parental presence as observed for the full sample (Table 2 and Figure 1) persist. One exception is that reporting discrepancies regarding conduct problems no longer significantly differ by parental presence, in addition to those regarding emotional problems (Appendix Table A2). Fixed-effects analyses are thus applied for discrepancies in reports of hyperactivity, negative communication, and conflicts, which show significant differences by parental presence.

Table 3 reports mean values and percentages of dependent and time-varying independent variables. In addition, percentages of within-dyad changes across the observation period are presented to describe variation in these variables. To quantify variations for scale variables, differences per dyad between the last and the first value observed within the observation period are displayed. For 32.8% of dyads, the interview setting regarding parental presence changes across the observation period. As the estimation sample includes children who participated in the survey from wave 2 on, first interviews are relatively rare in the observed panel waves, amounting to 10.6%. For most dyads, scale ratings on assertiveness, monitoring, intimacy, as well as scores on outcome variables vary across waves. For instance, reports on monitoring change for 85.3% of dyads. However, within-dyad differences in these scales are not pronounced, with values close to zero throughout.

4.2 Fixed-effects Regression Models

As presented thus far, descriptive results suggest that parents' and children's survey reports are more aligned when parents are present during the child interviews. However, dyads with and without parental presence systematically differ on various characteristics that are also likely to be correlated with reporting discrepancies. The last step of the analysis therefore aims to disentangle selection and causal effects of parental presence on survey responses by applying a longitudinal analysis of child-parent dyads.

Table 4 shows the results from fixed-effects regression analyses on child-parent reporting discrepancies, with positive (negative) coefficients indicating an increase (decrease) of mean absolute reporting discrepancies due to changes in parental presence. As analyses are based on a sample that contains siblings living in the same household and multiple observations from one child-parent dyad, standard errors are adjusted for within-cluster correlation at the household level. Results do not reveal any statistically significant effect of changes in parental presence on discrepancies in reports of hyperactivity, negative communication, or conflict (Table 4). Thus, changes in interview privacy do not appear to be associated with changes in reporting discrepancies, accounting for unmeasured heterogeneity and relevant observed confounders. It is important to note that this conclusion applies to baseline models as well (results not shown). Adjusting for all stable characteristics within child-parent dyads as well as children's age and the first child interview thus already accounts for relevant systematic differences between interview settings with and without parental presence.

The impact of parental presence was presumed to differ by age, with young children being especially prone to adjustments of survey responses toward parental views and adolescents maintaining or even exaggerating their assessments in the presence of parents. However, age does not appear to obscure effects of changes in parental presence on reporting discrepancies. Interaction terms with middle childhood added to each of the fixed-effects models in Table 4 did not prove to be significant (Table 5). Moreover, auxiliary analyses (not reported here) show that results remain unchanged when varying the cut-off point for age delineations of middle childhood (8 to 10, 8 to 12, and 8 to 13), as well as when including interactions of parental presence with age dummies.

Furthermore, relationship quality was presumed to moderate effects of parental presence on reporting discrepancies regarding conflicts and negative communication. The interaction terms of parental presence with low intimacy (not shown) were not significant, neither in the models run for children aged 8 to 11, nor in those for 12 to 15 year olds, and varying age delineations did not change results. Thus, variations in this aspect of the parent-child relationship do not appear to mask parental presence effects. Finally, there is no indication of a differing impact of parents' presence during the first interview(s) as opposed to later ones due to differences in what is registered as "presence", as interactions with the number of interviews were not significant in the models for the three outcome variables (results not shown).

The overall finding of nonsignificant effects of changes in parental presence on reporting discrepancies persists when applying both the baseline and fully specified regression models, as well as those including interaction terms to outcome variables sensitive to the direction of deviations (results not shown). However, using absolute difference scores as dependent variables is considered the more conservative test of the impact of parental presence as effects may cancel each other out when implementing directionally-sensitive difference scores.

In sum, results point to the conclusion that differences in

Table 3
Descriptive statistics of dependent and independent variables

	Mean or proportion of obs	Std. Dev	Percent change between waves (dyads)	Within-dyad difference
Parental presence (%)	38.4	-	32.8	-
Child's age	11.4	2.01	98.2	-
Child's first interview (%)	10.6	-	29.8	-
Child's assertiveness (range 1 to 5)	2.5	0.64	75.2	0.03
Monitoring (range 1 to 5)	4.1	0.56	85.3	−0.14
Intimacy (range 1 to 5)	3.7	0.73	71.9	−0.11
Child-parent diff. scores (absolute)				
Hyperactivity (range 0 to 2)	0.4	0.30	86.0	0.01
Negative communication (range 0 to 4)	0.7	0.53	93.0	−0.06
Conflicts (range 0 to 4)	0.6	0.53	80.3	−0.04
N (dyads)	1,134			
N (observations)	3,191			

Restricted sample of child-parent dyads; Hyperactivity: $n = 1,000$ (500 dyads). Within-dyad differences are calculated based on scale ratings of the last and the first sample observation per dyad.

Table 4
Fixed-effects regression analyses of parental presence effects

	Child-Parent Difference Scores (absolute)					
	Hyperactivity range 0 to 2	Std. Err.	Negative communication range 0 to 4	Std. Err.	Conflicts range 0 to 4	Std. Err.
Parental presence	−0.024	0.035	0.003	0.031	−0.009	0.031
Child's age	−0.003	0.009	−0.030**	0.009	−0.020*	0.009
Child's first interview	−0.029	0.048	−0.047	0.035	−0.019	0.037
Intimacy of communication	−0.048	0.025	−0.046*	0.023	−0.014	0.023
Monitoring	0.028	0.033	0.055	0.034	0.003	0.034
Child's assertiveness	0.039	0.023	0.078***	0.021	0.045	0.025
N (dyads)	500		1,134		1,134	
N (observations)	1,000		3,191		3,191	
(Within) R^2	0.013		0.014		0.004	

Unstandardized regression coefficients, and cluster robust standard errors.
* $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

outcome variables between interviews with and without parents present (Section 4.1) are not due to parental presence affecting response behavior, but rather to composition effects, i.e., different characteristics of child-parent dyads in which parents are present during the child interview as compared to those with private interview settings.

5 Conclusions and Discussion

Including children in standard survey practice calls for routines to solve the discrepancy between interview privacy and their greater need for assistance. Parental presence as one factor reducing privacy is largely inevitable in household interview settings and thus quite common, but it is unclear how this affects data quality. While children are presumed to be more susceptible to influence and interview distortions, effects on survey responses are difficult to predict given the fragmented understanding of question sensitivity and misreporting among this group. However, when considering the nature of the parent-child relationship, an increased orientation towards parent perspectives is likely, especially for young children. In multi-actor studies designed to capture multiple perspectives, such an alignment in reports would represent an important form of measurement error.

Table 5
Fixed-effects regression analyses of parental presence effects, including interactions with middle childhood

	Child-Parent Difference Scores (absolute)					
	Hyperactivity range 0 to 2	Std. Err.	Negative communication range 0 to 4	Std. Err.	Conflicts range 0 to 4	Std. Err.
Parental presence	0.015	0.042	0.005	0.039	0.002	0.041
Mid. childh. (ref.: age 12–15)	0.072	0.037	−0.042	0.038	0.027	0.040
Parental pres. × mid. childh.	−0.082	0.050	−0.001	0.049	−0.022	0.051
Child's age	0.006	0.011	−0.039**	0.012	−0.016	0.012
Child's first interview	−0.014	0.049	−0.058	0.037	−0.013	0.038
Intimacy of communication	−0.049*	0.025	−0.045	0.023	−0.015	0.023
Monitoring	0.025	0.034	0.054	0.034	0.003	0.034
Child's assertiveness	0.038	0.023	0.078***	0.021	0.044	0.025
N (dyads)	500		1,134		1,134	
N (observations)	1,000		3,191		3,191	
(Within) R^2	0.022		0.014		0.004	

Unstandardized regression coefficients, cluster robust standard errors.
* $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

The present study thus focused on this aspect of data quality, providing insight as to whether it is possible to capture independent perceptions of a given issue in child interviews if parents are present. Given that a random assignment of parental presence is difficult to achieve in surveys involving minors and considering the shortcomings of cross-sectional approaches to address selection issues, longitudinal analyses offer a more solid basis for drawing conclusions about third-party effects on survey responses. Fixed-effects regression models allowed for a more profound analysis of whether observed differences by parental presence can be explained by selection processes, or whether parents' interview presence in fact alters survey responses.

The present analyses offer two main conclusions: First, comparing child-parent dyads with and without parental presence regarding various relationship, parenting, and interview characteristics suggests that parents' interview presence is not random, which is in line with previous findings. While descriptive results indicate that for most outcome measures, reporting discrepancies are significantly smaller when parents are present during the interview, parental presence has no effect on reporting discrepancies when accounting for selection processes in longitudinal analyses. Thus, the second conclusion is that children's survey data quality does not appear to be affected by parents' interview presence. Rather, differences in outcome variables can be attributed to differences in the composition of child-parent dyads with and without parental presence. This is in line with descriptive findings concerning baseline levels of parent and child reports on conflicts and negative communication: As parents report more of these negative relationship aspects as compared to their children, it is unlikely that they would prevent their children from providing such information. Additionally, considering that parental presence is highest at the first child interview, parents appear to be present during the interview because they are interested in interview procedures and their child's perspectives, rather than to exert control over information disclosure. Furthermore, children do not seem to be influenced by the mere presence of their parent(s), regardless of active interference.

There are some points to note concerning shortcomings of the present analyses. First, bias in child responses arising from parental presence is evaluated relative to parent reports. The theoretical reasoning is based on the assumption that children are much more prone to be influenced and to adjust their survey answers as compared to parents. However, parents may also be influenced to provide ratings that are more in line with their children's views if they fill out the parenting questionnaire after being present during the child interview. The information available does not allow for the disentanglement of parents' and children's mutual interference on survey responses. Given the specific nature of the parent-child relationship, the assumption that children's reports are more susceptible to bias and parents' interview presence affecting children's responses rather than vice versa, however, appears reasonable. Child influence on parent reports may seem plausible for relationship aspects, but it is rather unlikely that parents would adjust their ratings of hyperactivity having heard that their children report more of such symptoms.

Another point worth mentioning is that information on parental presence does not detail the duration of such, nor whether parents who are present in the room can actually

overhear the interview. Evaluating the effect of interruptions by bystanders as registered by interviewers would provide an additional test for third-party influence. However, such cases are quite rare in the pairfam data, making analyses next to impossible. Previous research indicates that adolescents report less delinquent behavior even in self-administered interview modes when parents are present (Aquilino et al., 2000; Moskowitz, 2004) and although parents mostly did not actively interfere with the interview (Aquilino et al., 2000). Focusing on young children and survey questions about relationship aspects and parent behavior, active interference by parents appears more relevant. However, more precise measures are necessary in order to differentiate between various types of interference, in particular whether children adjust their survey responses after remarks made by parents.

Finally, it should be noted that although response rates are high, selective nonresponse in the child and parenting survey may attenuate variation in baseline scale levels and reporting discrepancies. For instance, parents who assess the relationship with their children as problematic may neither want to participate in the parenting survey, nor to involve their children by providing consent to the child interview. Thus, it cannot be excluded that parental presence during child interviews affects survey answers in the case of more problematic child behavior and relationship outcomes.

Multi-actor studies in family research seek to capture couple and family life from multiple perspectives by gathering information from a variety of sources. If survey reports on a given issue are available from multiple actors, researchers will base the choice of informant for substantive analyses on theoretical considerations. As the source of information may affect research outcomes, such decisions have to be made based on the belief that differences in reports are due to divergent perspectives and do not result from measurement error. Focusing on parent-child constellations within such survey designs, the present study indicates that data collection of child perspectives in the pairfam study can be considered independent from parental presence during the interview, regardless of whether parent and child assessments actually differ.

Acknowledgements

This paper uses data from the German Family Panel pairfam, coordinated by Josef Brüderl, Sonja Drobnič, Karsten Hank, Bernhard Nauck, Franz Neyer, and Sabine Walper. The pairfam study is funded as a long-term project by the German Research Foundation (DFG). I am grateful to Philipp Alt, Claudia Schmiedeberg, and members of the Department of Sociology's research colloquium "Analytical Sociology" at LMU Munich for helpful comments on an earlier version of this paper. Further, I would like to thank Madison Garrett for language editing.

References

Allison, P. D. (2009). *Fixed effects regression models*. Thousand Oaks, CA: Sage.

Aquilino, W. S. (1993). Effects of spouse presence during the interview on survey responses concerning marriage. *Public Opinion Quarterly*, *57*(3), 358–376.

Aquilino, W. S. (1997). Privacy effects on self-reported drug use: Interactions with survey mode and respondent characteristics. In U.S. Department of Health and Human Services (Ed.), *The validity of self-reported drug use: Improving the accuracy of survey estimates* (pp. 383–415). Washington, DC: National Institutes of Health.

Aquilino, W. S., Wright, D. L., & Supple, A. J. (2000). Response effects due to bystander presence in CASI and paper-and-pencil surveys of drug use and alcohol use. *Substance Use & Misuse*, *35*(6/8), 845–867.

Baumrind, D. & Thompson, R. A. (2002). The ethics of parenting. In M. H. Bornstein (Ed.), *Handbook of parenting: Vol. 5 practical issues in parenting* (pp. 3–33). Mahwah, NJ: Erlbaum.

Bell, A. (2007). Designing and testing questionnaires for children. *Journal of Research in Nursing*, *12*(5), 461–469.

Borgers, N., De Leeuw, E., & Hox, J. (2000). Children as respondents in survey research: Cognitive development and response quality. *Bulletin de Méthodologie Sociologique*, *66*(1), 60–75.

Brüderl, J., Drobnič, S., Hank, K., Huinink, J., Nauck, B., Neyer, F. J., … Wilhelm, B. (2018). The German Family Panel (pairfam). ZA5678 data file version 9.1.0. GESIS Data Archive, Cologne. doi:10.4232/pairfam.5678.9.1.0

Brüderl, J., Hajek, K., Herzig, M., Lenke, R., Müller, B., Schumann, N., & Schütze, P. (2018). Pairfam data manual. release 9.1. Retrieved from http://www.pairfam.de/fileadmin/user_upload/redakteur/publis/Dokumentation/Manuals/Data_Manual_pairfam_9.1.pdf

Brüderl, J. & Ludwig, V. (2015). Fixed-effects panel regression. In H. Best & C. Wolf (Eds.), *The Sage handbook of regression analysis and causal inference* (pp. 327–357). London: Sage.

Brüderl, J., Schmiedeberg, C., Castiglioni, L., Arránz Becker, O., Buhr, P., Fuß, D., … Schumann, N. (2018). The German Family Panel: Study design and cumulated field report (waves 1 to 9). Retrieved from http://www.pairfam.de/fileadmin/user_upload/redakteur/publis/Dokumentation/TechnicalPapers/TP01_Field-Report_pairfam9.1.pdf

Busse, B. & Backeberg, L. (2018). Longitudinal research on children and young people in Europe and beyond. In G. Pollock, J. Ozan, H. Goswami, G. Rees, & A.

Stasulane (Eds.), *Measuring youth well-being. how a pan-European longitudinal study can improve policy* (pp. 71–89). Cham, Switzerland: Springer.

Coleman, P. K. & Karraker, K. H. (1998). Self-efficacy and parenting quality: Findings and future applications. *Developmental Review*, *18*(1), 47–85.

Cooper, C. R., Grotevant, H. D., & Condon, S. M. (1983). Individuality and connectedness in the family as a context for adolescent identity formation and role-taking skill. *New Directions for Child and Adolescent Development*, *22*, 43–59.

De Goede, I. H. A., Branje, S. J. T., & Meeus, W. H. J. (2009). Developmental changes in adolescents' perceptions of relationships with their parents. *Journal of Youth and Adolescence*, *38*(1), 75–88.

De Leeuw, E., Borgers, N., & Smits, A. (2004). Pretesting questionnaires for children and adolescents. In S. Presser, J. M. Rothgeb, M. P. Couper, J. T. Lessler, E. Martin, J. Martin, & E. Singer (Eds.), *Methods for testing and evaluating survey questionnaires* (pp. 409–429). Hoboken, NJ: Wiley.

Diop, A., Le, K. T., & Traugott, M. (2015). Third-party presence effect with propensity score matching. *Journal of Survey Statistics and Methodology*, *3*(2), 193–215.

Franc, R., Sučić, I., Babarović, T., Brajša-Žganec, A., Kaliterna-Lipovčan, L., & Dević, I. (2018). How to develop well-being survey questions for young children: Lessons learned from cross-cultural cognitive interviews. In G. Pollock, J. Ozan, H. Goswami, G. Rees, & A. Stasulane (Eds.), *Measuring youth well-being. how a pan-european longitudinal study can improve policy* (pp. 91–109). Cham, Switzerland: Springer.

Furman, W. & Buhrmester, D. (1985). Children's perceptions of the personal relationships in their social networks. *Developmental Psychology*, *21*(6), 1016–1024.

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.

Herrera, A. V., Benjet, C., Méndez, E., Casanova, L., & Medina-Mora, M. E. (2017). How mental health interviews conducted alone, in the presence of an adult, a child or both affects adolescents' reporting of psychological symptoms and risky behaviors. *Journal of Youth and Adolescence*, *46*(2), 417–428.

Holden, G. W. (1995). Parental attitudes toward childrearing. In M. H. Bornstein (Ed.), *Handbook of parenting: Vol. 3. status and social conditions of parenting* (pp. 359–392). Mahwah, NJ: Erlbaum.

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. *Zeitschrift für Familienforschung*, *23*(1), 77–101.

Kalmijn, M. & Liefbroer, A. C. (2011). Nonresponse of secondary respondents in multi-actor surveys: Determinants, consequences, and possible remedies. *Journal of Family Issues*, *32*(6), 735–766.

Krumpal, I. (2013). Determinants of social desirability bias in sensitive surveys: A literature review. *Quality & Quantity*, *47*(4), 2025–2047.

Maccoby, E. E. (1992). The role of parents in the socialization of children: An historical overview. *Developmental Psychology*, *28*(6), 1006–1017.

Moskowitz, J. M. (2004). Assessment of cigarette smoking and smoking susceptibility among youth: Telephone computer-assisted self-interviews versus computer-assisted telephone interviews. *Public Opinion Quarterly*, *68*(4), 565–587.

Ogan, C., Karakuş, T., & Kurşun, E. (2013). Methodological issues in a survey of children's online risk-taking and other behaviours in Europe. *Journal of Children and Media*, *7*(1), 133–150.

Ozan, J., Pollock, G., Goswami, H., & Lynn, P. (2018). Challenges in conducting a new longitudinal study on children and young people well-being in the European Union. In G. Pollock, J. Ozan, H. Goswami, G. Rees, & A. Stasulane (Eds.), *Measuring youth well-being. how a pan-european longitudinal study can improve policy* (pp. 111–130). Cham, Switzerland: Springer.

Scott, J. (2008). Children as respondents: The challenge for quantitative methods. In P. Christensen & A. James (Eds.), *Research with children: Perspectives and practices 2nd ed* (pp. 87–108). New York: Routledge.

Thönnissen, C., Wilhelm, B., Alt, P., Greischel, H., & Walper, S. (2018). Scales and instruments manual waves 1 to 9. Retrieved from http://www.pairfam.de/fileadmin/user_upload/redakteur/publis/Dokumentation/Manuals/Scales_Manual_pairfam_9.1.pdf

Tourangeau, R. & Yan, T. (2007). Sensitive questions in surveys. *Psychological Bulletin*, *133*(5), 859–883.

Wray-Lake, L., Crouter, A. C., & McHale, S. M. (2010). Developmental patterns in decision-making autonomy across middle childhood and adolescence: European american parents' perspectives. *Child Development*, *81*(2), 636–651.

Zipp, J. F. & Toth, J. (2002). She said, he said, they said: The impact of spousal presence in survey research. *Public Opinion Quarterly*, *66*(2), 177–208.

Appendix A
Tables

Table A1
Child and parent reports on problem behavior and the parent-child relationship

	Conduct problems	Hyper-activity	Emotional problems	Negative communication	Conflicts
Range	0–2	0–2	0–2	1–5	1–5
Child: Mean	0.31	0.74	0.50	1.94	2.12
Parent: Mean	0.34	0.61	0.37	2.32	2.36
Mean child-parent difference	-0.03^{***}	0.14^{***}	0.13^{***}	-0.38^{***}	-0.25^{***}
Spearman's correlation parent and child reports	0.37	0.46	0.36	0.34	0.38
N (observations)	3,911	1,951	3,909	3,902	3,899

Two-sample *t*-tests; Full sample of child-parent dyads
* $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$

Table A2
Differences by parental presence; Mean of observations

	Presence of Parents	
	Not present	Present
Child's age	11.63	11.07^{***}
Child's number of interviews	3.90	3.44^{***}
Child's assertiveness (1 to 5, parent report)	2.52	2.41^{***}
Monitoring (1 to 5, parent report)	4.04	4.08^{*}
Intimacy (1 to 5, parent report)	3.67	3.73^{*}
Autonomy as parenting goal (0 to 10, parent report)	9.21	9.05^{***}
Child-parent difference scores		
Conduct problems (range -2 to 2)	−0.03	−0.01
Hyperactivity (range -2 to 2)	0.18	0.07^{***}
Emotional problems (range -2 to 2)	0.13	0.12
Negative communication (range -4 to 4)	−0.44	-0.33^{***}
Conflicts (range -4 to 4)	−0.26	-0.21^{*}
N (dyads)	1,132	
N (observations)	3,183	

Restricted sample with at least two observations per dyad and valid data on the displayed variables; Autonomy: $n = 2,534$ observations; Hyperactivity: $n = 1000$.
* $p < 0.05$ ** $p < 0.01$ *** $p < 0.001$ two-sample *t*-tests

Appendix B
Figures

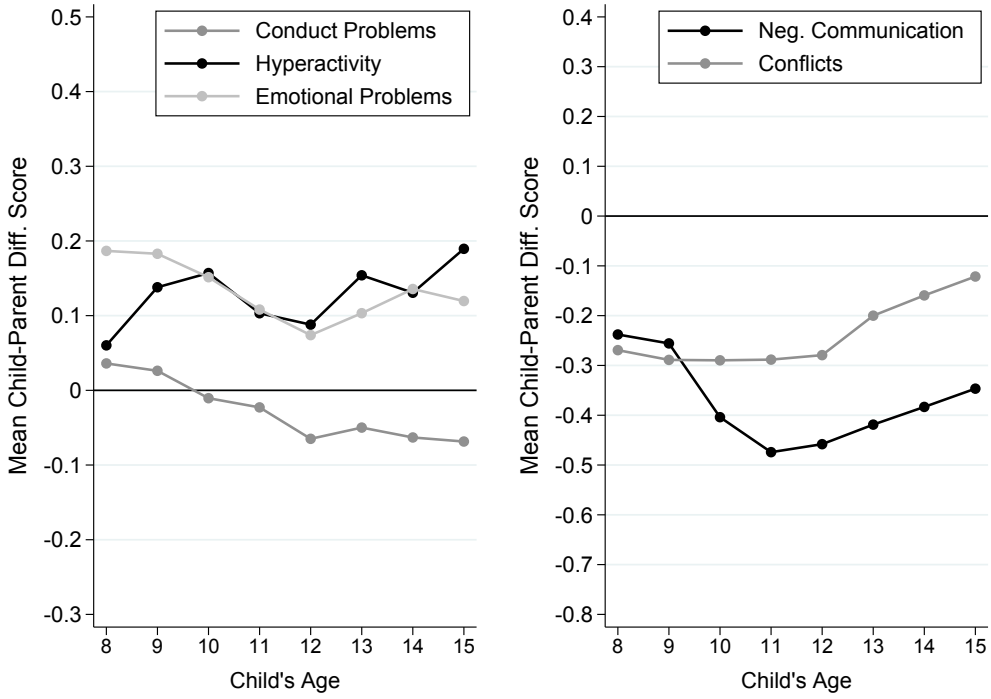

Figure B1. Child-parent reporting discrepancies by child's age
Note: Full sample of child-parent dyads. Difference scores were calculated as child report minus parent report and range from -2 to 2 for problem behaviors and -4 to 4 for relationship aspects.