Parent-Child Activities, Paid Work Interference, and Child Mental Health

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Parent–Child Activities, Paid Work Interference, and Child Mental Health

Objective: To examine the association between child mental health and (a) the amount of parent–child interaction and (b) the amount of interference in that interaction due to paid work.

Background: Although some research findings suggest children do not always benefit from being with their parents full-time, other studies suggest it is important for children to have their parents' undivided attention.

Method: Analyses are based on the 2013 New Families in the Netherlands dataset (639 fathers and 849 mothers of school-aged children). Using structural equation modeling (SEM), we analyzed how child well-being varied with the frequency of parent–child activities and the amount of interference due to paid work.

Results: Children demonstrated better mental health when the frequency of father–child activities was higher and the amount of interference due to work was lower. We found no effects for mothers. Moreover, the association between the frequency of parent–child activities and child mental health was not moderated by the amount of interference due to paid work (neither for fathers nor mothers).

Conclusion: The findings suggest that children attach great importance to the psychological availability of their fathers. We speculate that children respond more strongly to their fathers because their attention and involvement is less taken for granted than that of mothers.

Implications: Given the intrusive nature of smartphones and laptops in daily life, it is crucial that parents, employers, and family life educators understand how distractions during parent–child time due to paid work can affect children. With this knowledge, strategies to minimize unintended detrimental consequences for children can be developed.

Modern ideas of intensive parenting center on the idea that parent–child time (and mother–child time in particular) is crucial for the well-being of children (Hays, 1998; Milkie, Kendig, Nomaguchi, & Denny, 2010; Milkie, Nomaguchi, & Denny, 2015). Many studies on parent–child time argue that joint time is beneficial because it signifies parental engagement (Lamb, 2000; Yeung, Sandberg, Davis-Kean, & Hofferth, 2001), helps children to establish secure attachment relationships (Pleck, 2007) and engage in increasingly complex social interactions (Bronfenbrenner, 1986), fosters human and social capital (Becker, 1981; Coleman, 1988), enables parents to transmit knowledge and norms (Crouter, Head, McHale, & Tucker, 2000), and provides an opportunity for children to develop a sense of self and identity (Belsky, 1984; Maccoby, 1998).
Parent–Child Time and Child Mental Health

2004; Shanahan, McHale, Crouter & Osgood, 2007; Yeung et al., 2004), and is enjoyable and meaningful (Kahneman, Krueger, Schkade, Schwarz, & Stone, 2004; Offer, 2014).

Surprisingly, empirical studies provide little grounds for the claim that parent–child time enhances children’s mental health. Recent studies indicate that parents’ time with their child positively affects children’s development, but only for some activities, parents, age groups, and outcomes (Hsin & Felfe, 2014; Milkie, Nomaguchi, & Denny, 2015). One possible explanation for these findings is that whether children benefit from parent–child time is contingent on the quality of the shared time. Several indications in the literature suggest that children are more likely to benefit from parent–child time when their parents’ attention is undivided and focused on the children.

**Prior Research on Quality Time**

Time use research suggests that some parent–child activities are of a higher quality than others and that children benefit especially from activities that are interactive and focused on the child (e.g., Bianchi, Robinson, & Milkie, 2006; Hsin & Felfe, 2014; Milkie et al., 2015). For example, Hsin and Felfe (2014) showed that children’s cognitive development and socio-emotional well-being are higher among children whose mothers spend more time in educational and structured activities. Also, Milkie et al. (2015) found that adolescents who spend time with both parents tend to be better off than those who spend time with only one parent.

Qualitative researchers have approached the concept of quality time from a different angle, and in doing so have shown that it is not so much the type of activity, but the level of parents’ attention that matters to children and parents (Christensen, 2002; Roxburgh, 2006; Snyder, 2007; Wajcman, 2014). For example, the children whom Christensen (2002) interviewed attached great value to what were viewed as ordinary activities, such as family meals and watching television. For them, quality parent–child time was stress-free and characterized by undivided attention from the parent. A similar picture emerged from an analysis of children’s essays describing what they valued in their mothers and fathers (Milkie, Simon, & Powell, 1997).

The idea that parents are psychologically available during quality time is corroborated by the work–family literature. This body of literature suggests that paid work can interfere with family life and that this interference can harm both parents and children. When parents’ work demands are high and parents experience work stress, the quality of interactions with their children and partner is lower (e.g., Danner-Vlaardingerbroek, Kluwer, Van Steenberghen, & Van der Lippe, 2013; Repetti, 1994; Strazdins, Clements, Korda, Broom, & D’Souza, 2006), and children’s well-being is lower (Crouter & Bumpus, 2001; Strazdins et al., 2013; Strazdins, Shipley, Clements, Obrien, & Broom, 2010). Moreover, research suggests that parents report higher-quality parent–child relationships when parent–child time is not disturbed by paid-work demands (Roeters, Van der Lippe, & Kluwer, 2010; Wajcman, 2014).

Finally, a growing literature suggests that multitasking is negatively associated with the amount of quality parents spend with children. Parents regularly combine childcare with activities such as work, housework, and leisure (Craig & Brown, 2016; Kotila, Schoppe-Sullivan, & Kamp Dush, 2013; Offer & Schneider, 2011). This is especially true of mothers. For example, one study in the United States found that mothers multitasked during childcare 10 hours per week more than fathers (Offer & Schneider, 2011). Multitasking in the presence of children is generally experienced positively by both fathers and mothers, but multitasking can be a source of stress, depending on the location and presence of others (Offer & Schneider, 2011).

**Goal and Scope of the Present Study**

The present study was designed to examine the association between parent–child time interference due to paid work and children’s mental health. In doing so, we link insights from the time use, qualitative, and work–family literatures with research on multitasking. This allows us to address two gaps in the literature.

First, to date, no known studies have been designed to examine the impact of parental multitasking on children’s mental health. Family studies that did examine the amount of interference due to paid work (e.g., Roeters et al., 2010) have not examined the association with child mental health. Nor has prior research addressed whether children benefit more from parent–child time when the amount of interference due to paid work is lower. Second, it remains unknown
whether children differentiate between their father and mother when it comes to quality parent–child time. Earlier research does suggest that children value different characteristics of their fathers and mothers (Milkie et al., 1997), but it is unclear whether distinctions also exist in the association between quality time and their mental health.

In this study, we focus on interference due to paid work, but interference can also have other sources, such as household work and leisure (Offer & Schneider, 2011). The main reason for focusing on paid work is that work activities originate outside the family domain, whereas this is less the case for housework and leisure. As a result, it may be harder for parents to switch between a work and a care activity than it is to switch between a household or leisure activity and a care activity. Moreover, parents can involve their children in household chores and leisure together, whereas this generally is not the case for work activities.

This study was designed to analyze Dutch two-parent households with school-age children. The Netherlands is an interesting context for this study because both the rate of part-time work and level of child well-being are relatively high (Organisation for Economic Co-operation and Development Data Base, 2017; United Nations Children’s Fund [UNICEF], 2013). We restricted our sample to dual-earner families because this enabled us to compare the effects for employed mothers and fathers. Although single-parent families are interesting to study, the associations between parent–child contact and child well-being are highly complex and conditional on other factors, such as the gender of the child and the level of interparental conflict (Kalmijn, 2016). Such complexities go beyond the scope of this study, and we therefore do not examine single-parent families.

Hypotheses

The direct effect of the amount of parent–child time. We expect that a lower frequency of parent–child activities is associated with lower mental health of children (Hypothesis 1). In line with earlier studies, we accepted that children benefit from spending time with their parents (e.g., Bowlby, 1988; Hsin & Felfe, 2014; Lamb, 2000; Yeung et al., 2001). Although empirical evidence is limited, earlier studies suggest several mechanisms that could link the frequency of parent–child activities to children’s mental health. When parents spend time with their children, they signal engagement. Moreover, joint activities can strengthen the parent–child relationship, be enjoyable for both parents and children, and help parents to transmit norms and knowledge (e.g., Bronfenbrenner, 1986; Coleman, 1988; Crouter et al., 2004; Kahneman et al., 2004; Lamb, 2000; Pleck, 2017; Yeung, Sandberg, Davis-Kean, & Hofferth, 2001).

The direct effect of the amount of interference due to paid work. We expect that a higher amount of paid-work interference during parent–child activities is associated with lower mental health of children (Hypothesis 2). Parent–child time may be more likely to create a meaningful connection between the parent and the child when parents display their engagement and are focused on their children’s stories, worries, and needs. These circumstances may also make joint time more enjoyable and facilitate the transmission of norms. In contrast, we expect that parents who are distracted by work are more likely to miss important signs, stories, or concerns. This may harm the parent–child relationship and the child’s self-esteem because the child may perceive this as a signal of a lack of interest.

Our expectations are also informed by research on parental acceptance–rejection theory (Khaleque & Rohner, 2002; Rohner, Khaleque, & Cournoyer, 2005). This theory suggests that children who feel rejected by their parents are more likely to develop psychological problems because they do not feel emotionally secure and are therefore more likely to withdraw in social relations (Khaleque & Rohner, 2002). There are different forms and levels of parental rejection, varying from verbal and physical abuse to cold and unaffectionate behavior and psychological unavailability (Rohner et al., 2005); paid-work interference most closely aligns with the latter.

Moderation effect. In addition to testing the direct effects of the frequency and interference of parent–child activities, we test whether these dimensions of parent–child time interact. Specifically, we hypothesize that the beneficial effect of the frequency of parent–child activities on child mental health is weaker when
the amount of interference is higher (Hypothesis 3). We expect that the assumed benefits of parent–child time (e.g., the enjoyment that is derived from this) are mitigated when the quality of this time is lower. Under these conditions, the presumed detrimental effects of interference due to paid work (mentioned in support of Hypothesis 2) are likely to outweigh the presumed beneficial effects of more parent–child time (mentioned in support of Hypothesis 1). For example, when a parent takes an afternoon off from work to go to the playground with his or her child but then answers e-mails at the playground, the child may perceive that the parent is not interested or does not enjoy spending time with him or her.

Gender Differences

It is possible that there are gender differences in the hypothesized effects, either because mothers and fathers vary in their behavior or because children respond differently to their mother’s behavior than to their father’s behavior. Some scholars have argued that women are better multitaskers than men (e.g., Stoet, O’Connor, Conner, & Laws, 2013), but empirical evidence in support of this claim is limited. Other studies have found that men are better at multitasking or that there are no meaningful gender differences (e.g., Buser & Peter, 2012; Hirnstein, Larsi, & Laloyaux, 2018; Mäntylä, 2013). In any case, it is more plausible that gender differences are linked to differences in mothers’ and fathers’ involvement with children. Paid and unpaid work are not shared equally by fathers and mothers; fathers tend to spend more time performing paid labor than do mothers, whereas mothers tend to spend more time performing childcare tasks than do fathers (Bianchi & Milkie, 2010; Schieman, Ruppanner, & Milkie, 2017). This gender difference may influence the mechanisms we study. For example, Greenhaus and Beutell (1985) suggested that a role that is more salient is more likely to interfere with a less salient role. As a result, children may be more likely to see their father than mother preoccupied with paid labor. Moreover, mothers may be more sensitive than fathers to signals from their child due to their greater sense of responsibility for childcare. In either case, it seems plausible that mothers’ greater involvement with children buffers the hypothesized detrimental effects of a high level of paid-work interference.

The response of children to their mother and father may also differ. Prior research has found that children respond more to paternal rejection than to maternal rejection (Barnett, Marshall, & Pleck, 1992; Rohner & Veneziano, 2001; Veneziano, 2000). A possible explanation is that children—and people in general—may value men’s evaluations more than women’s. This unequal valuation may add additional weight to a perceived rejection by the father. An analysis of children’s essays also indicated that children differentiate between the roles of their mothers and fathers (Milkie et al., 1997). When children described what they valued in their fathers, they stressed the recreational (i.e., fun) aspect of the time they spend with them. In contrast, the presence and availability of mothers was more taken for granted, and children perceived their mother as someone who provides both instrumental and emotional support.

Given the arguments and studies described here, we examined reports of child behavior for mothers and fathers separately. However, because previous research does not lead to a clearly directed hypothesis on the impact of father–child versus mother–child activities, we adopted an exploratory approach and examined these gender differences without formulating preliminary hypotheses.

Method

Data

The analyses use data from the New Families in the Netherlands data set (Poortman, Van der Lippe, & Boele-Woelki, 2014), which is a nationally representative sample of families with minor children collected by Utrecht University and Statistics Netherlands. The sample was stratified by the parents’ marital status (i.e., divorced, married, and cohabiting; the married and cohabiting subsamples never experienced a dissolution of a marriage, cohabitation, or registered partnership involving minor children). In spring 2013, sampled households were mailed a letter asking for their cooperation. The envelope included a pamphlet that explained the scope of the study, a coupon worth 5 euros (roughly the equivalent of US$6.00), and a request to complete the online survey (individually and independently if there were two parents in the household). Nonrespondents received four reminders. Those who had not responded by the third reminder also received a printed version of the survey.
Table 1. Demographic Characteristics of Participants

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Fathers (n = 639)</th>
<th>Mothers (n = 849)</th>
<th>Overall range</th>
<th>r&lt;sup&gt;c&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>M</strong></td>
<td><strong>SD</strong></td>
<td><strong>M</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Child mental health&lt;sup&gt;a&lt;/sup&gt;</td>
<td>2.65</td>
<td>0.25</td>
<td>2.67</td>
<td>0.32</td>
</tr>
<tr>
<td>Age of child</td>
<td>10.52</td>
<td>3.55</td>
<td>10.48</td>
<td>3.42</td>
</tr>
<tr>
<td>Girl&lt;sup&gt;b&lt;/sup&gt;</td>
<td>0.54</td>
<td>—</td>
<td>0.53</td>
<td>—</td>
</tr>
<tr>
<td>Number of children</td>
<td>2.10</td>
<td>0.81</td>
<td>2.08</td>
<td>0.79</td>
</tr>
<tr>
<td>Low education&lt;sup&gt;b&lt;/sup&gt;</td>
<td>0.21</td>
<td>—</td>
<td>0.16</td>
<td>—</td>
</tr>
<tr>
<td>Intermediate education&lt;sup&gt;b&lt;/sup&gt;</td>
<td>0.36</td>
<td>—</td>
<td>0.37</td>
<td>—</td>
</tr>
<tr>
<td>High education&lt;sup&gt;b&lt;/sup&gt;</td>
<td>0.44</td>
<td>—</td>
<td>0.47</td>
<td>—</td>
</tr>
<tr>
<td>Work hours</td>
<td>43.99</td>
<td>10.78</td>
<td>26.50</td>
<td>12.82</td>
</tr>
<tr>
<td>Frequency of parent–child activities&lt;sup&gt;a&lt;/sup&gt;</td>
<td>4.23</td>
<td>0.91</td>
<td>4.77</td>
<td>0.88</td>
</tr>
<tr>
<td>Interference due to paid work&lt;sup&gt;a&lt;/sup&gt;</td>
<td>2.15</td>
<td>0.55</td>
<td>2.07</td>
<td>0.54</td>
</tr>
</tbody>
</table>

Note. <sup>a</sup>The scale presented here differs from the latent factors estimated in the measurement model. <sup>b</sup>0 = no; 1 = yes. <sup>c</sup>Correlation between paired father and mother reports or scores (n = 524).

Only the subsamples of married and cohabiting parents were presented the survey items concerning time spent with children. Therefore, we focus the present study on individual respondents within intact two-parent families. A total of 2,394 households received an invitation to participate in the study. Both partners were invited. We received responses from one or both partners within the household from 61.6% (n = 1,338) of the sampled households. On the individual level, 2,173 parents participated (for more detailed information on the response rates, see Poortman et al., 2014). The response was high relative to the low survey response rates generally obtained in the Netherlands (Stoop, 2005).

The sample of respondents from two-parent families was further narrowed in several ways. Parents were directed to answer questions about their child closest to 10 years of age. This age was chosen because children at this developmental stage tend to be relatively open to spending time with their parents and can participate in a diverse range of activities. Moreover, middle childhood is an appropriate age group for the measure of child mental health that was used: the Goodman’s Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997). That said, the focal children closest to 10 years within each respondent’s family ranged from 0 to 18 years. Thus, we excluded 158 respondents whose focal child was younger than 4 or older than 17 years because the SDQ only applies to children between 4 and 17 years. Next, we excluded 401 respondents from single-earner families and 22 parents in same-sex relationships. Finally, we excluded 52 households (104 parents) in which there was a discrepancy in the reports of the father and mother with regard to any of the household or focal-child characteristics (i.e., the number of joint children and the focal child’s gender and age). This procedure resulted in a final sample size of 639 fathers and 849 mothers (including 524 couples of which both parents participated), all of whom were heterosexually partnered in dual-earner households with at least one child between 4 and 17 years of age. Cohabiting parents were overrepresented because the study specifically targeted this group of parents. A comparison of the distribution of several demographic characteristics within the sample and within the Dutch population indicated that men and ethnic minorities, as well as parents from highly urbanized areas and with lower incomes, were underrepresented in our sample relative to the population (Poortman et al., 2014).

**Sample Characteristics**

Table 1 shows that the mean age of the focal child was close to 10 years and that parents had a mean of two children. Almost half of the parents reported having education that placed them in the high educational level. There was a large gender difference in reported work hours: Fathers reported spending a mean of 44 hours per week on paid labor, compared with a mean of about 27 hours per week among mothers, which corresponds with the population statistics in the Netherlands (Cloïn, 2013). Table 1 also
displays the correlations between the father’s and the mother’s responses among couples in which both partners participated. With the exception of work hours, all correlations were statistically significant (results not shown), indicating that partners have similar background characteristics.

**Measures**

**Independent variables.**

Frequency of parent–child activities. Although we would ideally use time diary data to capture the amount of parent–child time (Altinbas, 2016; Hook & Wolfe, 2011), these data were not available. Instead, we used a measure of the frequency of a selected set of parent–child activities, which is commonly used as a proxy for parents’ time with children (e.g., Bianchi et al., 2006; Kalmijn, 2016). To measure the frequency of parent–child activities, parents were asked to rate how often they and the focal child participated in the following 10 activities in the preceding month: (a) eat dinner together; (b) help child with homework; (c) talk about issues in the child’s life; (d) watch television; (e) play or doing crafts; (f) participate in outdoor activities; (g) read to the child; (h) drive child to activities; (i) wake, dress, and get the child ready for bed; and (j) have children help with chores. This list of activities was based on other studies that have used the same array of activities to estimate the amount of time parents and children spend time engaged with one another (Bianchi et al., 2006). Response options for each activity ranged from multiple times per day (scored as 1) to never (7). Items were reverse scored so that higher values corresponded with a higher frequency of parent–child activities.

Paid-work interference. Interference with those parent–child activities by paid work was measured with a scale adapted from Roeters et al. (2010) that was designed to measure the same construct. The only difference is that the term smartphone was introduced in our adapted version of the scale. Specifically, to gauge how often paid work interfered with family life, respondents were presented with the following eight items: (a) I multitask at home; (b) during holidays, I am busy with my work (e.g., making phone calls or reading); (c) at home, I work on my laptop or computer; (d) when I am out with my child(ren), I finish work-related matters using my phone or smartphone; (e) at home, I am preoccupied with work-related issues; (f) when I spend time with my child(ren), this is for a long, uninterrupted period; (g) when I am playing with or talking to the child(ren), I get distracted by work-related issues; and (h) activities with my child(ren) get interrupted (e.g., because my work contacts me). Response options for each item ranged from never (1) to almost always (5). Notably, although this measure has similarities with other, more common measures of work-to-family conflict (e.g., Geurts et al., 2005; Netemeyer, Boles, & McMurrian, 1996), this particular measure was chosen both because it (a) uses neutral wording rather than implying through language that work-to-family conflict is problematic, (b) focuses on work–family conflict specific to parent–child activities instead of family life more generally, and (c) incorporates modern information and communications devices such as laptops and smartphones.

Item f was excluded from the final measurement model because doing so improved the model fit substantially (see Analytic Strategy section). This is the only item referring to duration of time, which might explain why it deviated from the other items. In addition, because the item is the only positive statement, its poor fit might indicate acquiescence bias in the responses (Hercz & Engelland, 1996). Importantly, too, reverse-worded items in a scale can serve as attention checks by identifying respondents who may not have responded carefully and thoughtfully to the survey items. Unfortunately, we cannot determine what drove the deviation from the scale in this case.

**Child’s mental health (dependent variable).**

Mental health of the focal child was measured with the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997), which is designed to capture both problem behaviors and strengths of children. The instrument comprises 25 items that load on five dimensions: conduct problems, emotional problems, hyperactivity, peer problems, and prosocial behavior. Example items include “The child is considerate of other people’s feelings” (prosocial behavior) and “The child often loses his/her temper” (emotional problems). Response options for each item are not true (1), somewhat true (2), and certainly true (3). Confirmatory factor analysis supported the five-factor structure with these data.
Because we have reports from both mothers and fathers, we constructed a higher-order latent variable. The overarching concept of child mental health was based on the reports of fathers and mothers that, in turn, tap into the subscales of child mental health that load on the individual items. To account for the fact that the reports of the fathers and mothers measure the same latent variable (i.e., child well-being), we added covariances between the corresponding items of fathers and mothers (Kline, 2015). There was a correlation of .80 between the latent variable on the level of the fathers’ and mothers’ report. Because the items had three answer categories, we estimated categorical measurement models.

Control variables. Higher-educated individuals tend to be more involved parents (Altinas, 2016; Gracia, 2014), and their children tend to score better on measures of well-being than the children of less-educated parents (Conger, Conger, & Martin, 2010). Therefore, we controlled for parental education—measured as low (elementary school or lower secondary school); intermediate (higher secondary school or lower vocational education); and high (higher vocational education or college degree)—to account for the possibility of a spurious effect. Furthermore, in line with other studies on the work–family interface (e.g., Cooklin et al., 2015; Hook & Wolfe, 2011; Strazdziņš et al., 2013), we controlled for the age of the child, the number of joint children in the household, and the number of actual work hours (values higher than 80 were set at 80) divided by 10 (because the model estimation we used requires the variance of each covariate to be smaller than 10).

Analytical Strategy

The hypotheses are tested using structural equation modeling (SEM), which has several advantages in the context of this study: A large proportion of the variables in the model, including the dependent variable, were latent variables, and SEM enabled us to account for the covariance between the independent variables. We conducted the analyses in Mplus Version 7.3 (Muthén & Muthén, 1998), which is the only statistical program that enables the inclusion of higher order latent variables and categorical measurement models. Where one of the parents’ reports was missing, the model was estimated on the basis of the other parents’ information using full information maximum likelihood. Our central dependent and independent variables are latent factors. We constructed these variables by applying confirmatory factor analysis. The model fit was evaluated on the basis of the Bayesian information criterion, the Akaike information criterion, and the root mean Square error of approximation.

The analytical model is presented in Figure 1 and was built in three steps. First, we estimated the higher-order latent variable measurement model of children’s mental health and the measurement models of the latent independent variables. Given that the items of the SDQ have only three response categories, we conducted factor analyses for categorical data. Because all latent variables were measured for both parents, we tested for measurement invariance between genders to assess whether they measure the same concept for mothers and fathers. For all measurement models, (partial) metric measurement invariance was confirmed. This means that we constrained the factor loadings to be equal for mothers and fathers and that we measured the same concept for both. In the second step, we would ideally have estimated the measurement models and the structural models simultaneously. However, the high level of complexity, including an interaction between two latent variables, led to a model that did not converge. Therefore, we estimated more parsimonious structural models in which we used the saved factor scores of the latent variables, along with the controls. In the third and final step, we included the interaction terms of the latent variables frequency of parent–child activities and amount of interference in the model.

Results

Descriptive Analyses

Table 1 shows that children’s mental health was high: The mean SDQ score was close to the maximum possible score, and the standard deviations were small. Although fathers reported less frequent engagement than mothers, both mothers and fathers reported a high frequency of engagement in activities with their children; both also reported similar and moderate amounts of paid-work interference while engaging with their children. Overall, and with the exception of work hours, the means and standard deviations indicated that gender differences were small.
Figure 1. Conceptual model.

Figure 2. Results of the structural equation model.

Note: \( N = 964 \) households. Fit statistics were as follows: Akaike information criterion = 5774.66, Bayesian information criterion = 6213.05, and root mean square error of approximation < .01. Analyses controlled for work hours and level of education of both parents and age of the child.

Table 1 also displays the correlations between the father’s and the mother’s responses among couples in which both partners participated. As was the case for the demographic statistics, there was a statistically significant correlation between the responses of partners. This suggests that parents made similar estimations of their children’s mental health and that parents were similar in their reported involvement with children.

Explanatory Analyses

As displayed in Figure 2, Tests of the direct effects of time spent with children (Hypotheses 1) and amount of paid-work interference (Hypothesis 2) showed that only father’s quantity of time spent with the child (\( \beta = .27, p < .001 \)) and amount of interference due to paid work (\( \beta = -.22, p < .001 \)) statistically enhanced the prediction of the child’s mental health. Specifically, the child’s mental health tended to be higher when fathers reported a higher frequency of father–child activities and when they reported lower amounts of paid-work interference. Neither the mother’s reported quantity of time with the child nor the mother’s reported work interference statistically enhanced the prediction of the child’s mental health. For the control variables, there was a positive association between the age of the child and the child’s
mental health ($\beta = .19$, $p < .001$), but neither parents’ education nor paid-work hours were statistically related to the child’s mental health.

We estimated the model with all main effects and with the interaction terms. We found no support for our hypothesis that the association between frequency of parent–child interaction and child mental health varies according to the amount of paid-work interference (Hypothesis 3).

**Sensitivity Checks**

We performed a number of additional analyses to verify the stability of our results. First, we found that the structural model could not be identified if it included the gender of the focal child. We therefore decided to exclude this variable from the model. To assess the influence of gender, we estimated the models separately for boys and girls and tested whether the effects differed (results not shown). We found no statistical differences and therefore assumed the effects to be similar for boys and girls.

Second, because children of different ages might respond differently to their parents’ time and attention (Cooklin et al., 2015; Crouter, Head, McHale, & Tucker, 2004), we tested for age differences. We stratified the children by age in two groups—primary school (younger than 12 years of age) and secondary school (12 years of age and older)—and estimated interactions between this age dichotomy and (a) the frequency of parent–child activities and (b) the amount of interference due to paid work. No statistically significant interaction effects on child mental health were found (results not shown), suggesting that children of both age groups are affected in similar ways and to similar degrees.

Third, because prior research has shown that overwork is detrimental for father–adolescent relationships (e.g., Crouter et al., 2001), we explored whether the frequency and nature of parent–child activities interacted with parents’ paid-work hours. We stratified the mothers and the fathers into two groups—(a) working less than 50 hours per week and (b) working 50 or more hours per week—and estimated interactions with frequency of parent–child activities and the amount of paid-work hours for both fathers and mothers. Only one interaction term yielded a statistically significant effect: The association between frequency of father–child activities and child mental health was contingent on the father’s work hours. For fathers who reported working 50 or more hours per week, the positive effect of the frequency of father–child activities was weaker. In contrast, lowering the cutoff point to 40 hours or 20 hours did not result in any statistically significant interaction, which indicates that the difference was mainly between conventional work hours and extremes. We found no interaction effects between the frequency of mother–child activities and mother’s work hours, nor any interaction effects with interference of parent–child time, regardless of the cutoff point.

Fourth, some previous studies have excluded the *prosocial behavior* dimension from the SDQ when measuring children’s mental health (e.g., Lawson & Mace, 2010). These studies did so because this is the only dimension that relates to children’s strengths, whereas the other four relate to children’s difficulties. Therefore, we estimated the models with mental health as measured by the remaining four dimensions (i.e., emotional problems, conduct problems, hyperactivity, and peer problems). This omission had no consequences for any of the effects.

Finally, some studies that have considered quality of parent–child time suggest that some types of activities are more beneficial for children than others. For example, Hsin and Felfe (2014) found that unstructured activities (such as watching television) do not yield any positive child outcomes. Therefore, we estimated our final model using subsets of activities, in which we distinguished the activities that require the parent’s active involvement (e.g., helping with homework or reading to the child) from the more passive activities (e.g., watching television or having the children help with chores). Interestingly, the use of these two subsets yielded similar results.

**Discussion**

Although children tend to benefit from spending time with their parents in most cases, and both children and parents alike tend to value access to one another highly (Christensen, 2002; Snyder, 2007), some parent–child activities matter more than others for a child’s well-being (Hsin & Felfe, 2014). In any case, the quality of time parents and children share with one another may be particularly important for the parent–child relationship and for children themselves. We designed the present study to investigate this premise; specifically, we analyzed...
the association between children’s mental health and a specific indicator of quality time: the extent to which paid work interferes with parent–child activities. Although our findings are only correlational, the results suggest that children’s mental health may benefit when fathers spend more time with them and when the father’s work does not interfere with the interaction between the father and the child. For mothers, we did not find any associations between time with children, interference, and children’s mental health. Moreover, we did not find that the association between the frequency of parent–child activities and child mental health was contingent on the level of interference due to paid work.

Our findings suggest that the extent to which fathers multitask paid work and childcare is associated with children’s well-being. This finding is in line with earlier research that has shown fathers’ work demands are associated with the quality of parent–child interactions and children’s well-being (e.g., Cooklin et al., 2015; Crouter & Bumpus, 2001; Hook & Wolfe, 2011; Strazdins et al., 2013). Moreover, the results for fathers confirm earlier research on quality time. For example, qualitative studies have shown that parents and children attach particular importance to the parent’s psychological availability (Christensen, 2002; Snyder, 2007). That said, it was surprising that we did not find any effects for mothers because prior research has found that children’s well-being is associated with other aspects of the mother’s work, such as work–family conflict and job quality (e.g., Strazdins et al., 2010, 2013).

There are several possible explanations for the gender differences. First, children might be more responsive to the quality of time with their father because fathers’ involvement is generally lower than that of mothers; although fathers spend more time with their children now than a generation ago, paternal engagement with children still lags behind that of mothers (Bianchi & Milkie, 2010; Cloïn, 2013; Kotila et al., 2013). In the Netherlands, a large majority of mothers work part time, which implies they are available for their children during a large part of the week. Moreover, because women spend more time with children than men and their parent–child time is often not shared with the father (Craig, 2006), children may be more likely to take their mothers’ availability for granted (Milkie et al., 1997). As a result, children may not perceive paid-work interference during mother–child time as a lack of interest or involvement. In contrast, if children consider their father’s involvement as less self-evident, the quality of time spent with their father may matter more to them. The idea that children respond more strongly to signs of acceptance and rejection by fathers has also been suggested in the research of Rohner and colleagues (Khaleque & Rohner, 2002; Rohner et al., 2005; Rohner & Veneziano, 2001).

The gender differences may also be attributed to differences with regard to multitasking and the level of work-to-family conflict. For example, mothers may simply be more successful in multitasking than fathers. In other words, it may be easier for women than men to divide their attention while still signaling psychological availability. Although the body of literature on gender differences with regard to multitasking is mixed (e.g., see Hirnstein et al., 2018), these studies typically entail memory recall, spatial abilities, and other experimental designs in a laboratory; we are unaware of any studies that have examined multitasking proficiency differences by gender in the context of childcare or psychosocial interactions. That said, Greenhaus and Beutell (1985), as well as others, have argued that more salient roles will tend to interfere with less salient roles more often than the reverse. Because fathers tend to attach more salience to paid work than parenthood and mothers tend to attach more salience to parenthood than paid work (e.g., Landivar, 2017; Poortman & Van der Lippe 2009; Van der Horst, 2014), mothers may find it more difficult than fathers to focus on work and ignore children when attempting to multitask between paid work and childcare.

**Limitations and Future Directions**

The present study is subject to at least four limitations. First, analyses were based on cross-sectional data. Therefore, it is not possible to make claims with regard to causality. For example, parental involvement may be a response to child well-being. Second, we used frequency measures instead of time-use data (such as Gracia, 2014; Hook & Wolfe, 2013). Although it seems unlikely that this would create a systematic bias in the data, it would be worthwhile to design a future study to see whether our results replicate with time-use data. Third, we relied on self-reports, whereas more objective measures would have been ideal. For example, it
may be that norms associated with motherhood prompt mothers to underestimate the amount of interference due to paid work or to overestimate the frequency of mother–child activities. We cannot be certain that this did not bias the data. If it did, then this could explain why we did not find any effects for mothers. Fourth, because we used data from the Netherlands and the sample was not representative in terms of both age and socioeconomic status of children, the generalizability of the results may be limited. Sensitivity checks suggested that the results of this study apply to different age groups, but we were unable to study the role of the country context and socioeconomic status. Nevertheless, we expect that the association between the nature of parent–child time and child well-being may vary across countries and socioeconomic groups. Future research should examine whether this is indeed the case. For example, the frequency and nature of mother–child activities may matter more for child well-being in countries where working mothers spend more time in paid employment. The Netherlands is characterized by high levels of part-time work; many employees have the legal right to reduce their work hours, and part-time employees are protected against discrimination (Yerkes & Visser, 2006). This potentially makes it easier for Dutch mothers to combine paid work with the care for children and minimize spillover from work to the family domain.

The socioeconomic status of parents is another possible source for variation in the effects. Our measure of paid-work interference is mostly applicable to higher educated individuals. For example, given differences in the flexibility of the work (e.g., with regard to location and time), those with upper-level occupations (e.g., lawyer or professor) are more likely to have opportunities to work at home than those with lower-level occupations (e.g., store cashier or administrative assistant; Kossek & Lautsch, 2017). Conversely, if the amount of interference due to paid work is indeed higher among parents with a higher socioeconomic status, the detrimental effects of this could be counterbalanced by the advantage children of higher-socioeconomic-status parents have due to their parents investing more in their cognitive and socioemotional development (Altinas, 2016; Conger et al., 2010; Gracia, 2014).

Implications

The introduction and widespread dissemination of information and communication technologies such as smartphones has eroded the boundaries between work and family life. Nowadays, many parents are able to stay in contact with work while at home (Wajcman, 2014). As a consequence, new forms of work–family conflict arise. A parent–child activity that is disturbed is one possible manifestation of this. Knowledge on the association between work–family conflict and child mental health can help parents, employers, and researchers minimize the impact of eroding boundaries on children. To this end, UNICEF in Sweden developed a smartphone app that helps parents set work–family boundaries (Crisp, 2014). With a different approach but similar intent, a French employment law that took effect in 2017 obliges French companies to guarantee their employees the right to disconnect from communication tools outside of work hours (Agence France-Presse, 2016). In the Netherlands, a former minister of social affairs and employment called for a similar measure to be enacted (NRC, 2017). Our findings underline the importance of such tools and interventions for fathers in particular.

Conclusion

This study builds on current knowledge about parent–child relations and work-to-family conflict. By distinguishing between the parent’s physical availability (the frequency of parent–child activities) and psychological availability (the extent to which the parent is distracted by paid work), we have built on earlier studies that stress the importance of accessibility in family relationships (Danner-Vlaardingerbroek et al., 2013; Milkie et al., 2015). Moreover, our results show that, for fathers, this specific dimension of work-to-family conflict is associated with the socioemotional well-being of children. As new technologies both enable flextime work and entice parents to work at home, it becomes increasingly important to understand the implications of work–family conflict for the well-being of children and parents.

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REFERENCES


