

WORKING OUT FAMILY LIFE:  
THE INFLUENCE OF MOTHERS' AND FATHERS' WORK DEMANDS ON THE  
FREQUENCY OF CHILD-RELATED CARE AND LEISURE ACTIVITIES

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## ABSTRACT

This study examines whether the frequency of child-related activities is associated with parents' own work demands and those of their partners. In addition to the often studied parental working hours, we consider other work demands as well. Moreover, we differentiate between child-related care and leisure activities. Using self-collected data on 643 Dutch couples with young children, we find that working hours are consistently associated with a lower frequency of child-related activities. Fathers generally respond more strongly than mothers to their own work demands and those of their partner. Finally, whereas for fathers, both their own and their partners' work demands are more strongly related to care than to leisure activities, mothers do not differentiate between the two types of activities.

## INTRODUCTION

In the last decades the number of dual-earner families has increased drastically in Western societies (Bianchi, Robinson, & Milkie, 2006) and feelings of time pressure have become widespread (Hochschild, 1997). There is a general concern in society that this comes at the cost of the time parents spend with their children (Bianchi, 2000). However, although research on child-development has indeed shown that parental involvement has important implications for the well-being of children (e.g. Bogenschneider, 1997; Yabiku, Acinn, & Thorton, 1999), studies on the combination of work and family life generally find small and inconsistent effects of parental work on the time that is spend with children (e.g. Bianchi, 2000; Bianchi et al., 2006; Brayfield, 1995; Gottfried & Gottfried, 2006; Nock & Kingston, 1988; Peterson & Gerson, 1992; Zick & Bryant, 1996). In the cases where an effect of maternal employment and parental working hours on time with children is found, this effect is usually negative (e.g. Bianchi, 2000). Moreover, Nock and Kingston (1988) found that the working hours of mothers only affected activities that are not child-oriented, such as shopping together, whereas for men, working hours did affect play and care activities. By contrast, McBride and Mills (1993) found an effect of parental working hours on parental involvement for mothers, but not for fathers.

It is often suggested that work has a small impact on time with children because parents, and especially mothers, strongly protect this time (Bianchi, 2000; Nock & Kingston, 1988). If this is the case, this would imply that employed parents are taking up a double burden, by not letting work come at the cost of the time with their children. In this article we will re-examine this presumption and analyse how parental participation in child-related activities is associated with parents' own work demands as well as with those of their partners. It may be premature to claim that parental work

demands do not affect this aspect of family life. There are two reasons why previous research may have underestimated the effects of parental work on the time that parents spend with their children.

The first reason is that most studies do not differentiate between different *types* of child-related activities, whereas activities may strongly differ in the extent to which parents can choose to participate in them. The current research will argue that work has different theoretical implications for care activities than for leisure and educational activities. Diapers have to be changed, but parents can choose whether they place their child in front of the television or actively engage in leisure activities with them, such as playing games. Most child-care activities are activities that simply have to be done, such as bathing and feeding children. Leisure and educational activities, such as watching television together, having long talks or helping the child with its homework, provide parents with more choice. Bianchi et al. (2006: 65-67) distinguished between 'routine' and 'interactive' activities, but did not examine whether these two types differed in the way they were related to parental work. Some studies on the effects of work have considered different categories of child-related activities separately (e.g. Hofferth & Sandberg, 2000; Nock & Kingston, 1988), but a more general pattern may be detected when a broader distinction is drawn between care activities on the one hand and leisure and educational activities on the other hand.

The second reason why previous research may have underestimated the effects of work on time with children is that parental work has been conceptualised quite narrowly. In general, only the number and scheduling of working hours have been taken into account (e.g. Bianchi, 2000; Nock & Kingston, 1988). However, job characteristics, such as working in an unsupportive work environment or experiencing high job insecurity, may function as additional work demands because they absorb

time and energy that cannot be directed at one's family (e.g. Thompson, Beauvais, and Lyness, 1999; Valcour & Batt, 2003; Van der Lippe, 2007). The current research improves upon earlier studies by including specific job and organizational characteristics.

Besides differentiating between care and leisure/educational activities and taking additional work demands into account, this study will also extend the current literature by explicitly taking fathers into account. Previous research on the influence of work on parental time with children has focused strongly on the harmful effects of maternal employment but has largely overlooked how paternal employment affects the family. If there was any attention for the participation of the father, the focus was mainly on the question how fathers are affected by the working hours of their partner (e.g. Brayfield, 1995; Coverman 1985; Presser, 1994, with the exception of Nock and Kingston, 1988). However, because fathers have increased their share in child care (Bianchi, 2000; SCP, 2006), it is logical to take fathers into account when examining the relation between work and time with children.

## THEORY AND HYPOTHESES

Previous research has explained the negative influence of employment on participation in child-related activities on the basis of the scarcity of time (e.g. Bianchi, 2000). This *time availability approach* argues that being employed and working more hours both decrease the time that is available for one's family. Greenhaus and Beutell (1985) refer to this mechanism as time-based conflict. The time availability approach is related to conflict theory, a frequently used theory in the literature on work and the family that claims that the demands that are posed by paid work come at the cost of the family (Eby, Casper, Lockwood, Bordeaux, & Brinley,

2005). Besides time, paid work can absorb energy as well (Becker, 1991; Eby et al., 2005; Greenhaus & Beutell, 1985). Thereby work demands may decrease the energy that parents have available at home, yielding an additional effect on participation in energy-intensive child-related activities.

The *demand/response capacity approach* is an extension of the time availability approach (Brayfield, 1995; Coverman, 1985). This approach takes both partners into account and argues that participation in household and child-care tasks depends on two factors: the demand that is posed upon an actor and the extent to which he or she can respond to this demand. Having an employed partner and young children is argued to increase the demand, whereas a high number of working hours restricts an actor's response capacity. An implicit assumption of this approach is that parents substitute one another in their time with children. The possibility that parents may choose to outsource child-care arrangements is seldomly considered. This might be due to the fact that outsourcing is an endogenous variable; it is an alternative to child-care, instead of a predictor.

The demand/response capacity approach is largely confirmed in the literature. Men participate slightly more in domestic labor and child care when their wife is employed and works more hours (Blood & Wolfe, 1960; Coverman, 1985; Pleck, 1977; Nock & Kingston, 1985; Peterson & Gerson, 1992). Brayfield (1995) even finds that the working hours of a father's spouse have a greater impact on his involvement than the father's own working hours. However, as was the case for the time availability studies, the effects that are found are very small (e.g. Coverman, 1985; Hawkins & Olson, 1993; Nock & Kingston, 1988). Moreover, empirical studies have mostly examined how paternal participation in child-related activities is affected by the working hours of the female partner, whereas the opposite is seldomly done. The few studies that have examined the effects of partner characteristics on mothers

yielded mixed results. Nock and Kingston (1988) found a small positive effect of the father's working hours, whereas Peterson and Gerson (1992) found no effect.

The demand/response capacity approach is the starting point of our theoretical framework. Whereas the time availability approach only focuses on the individual, the demand/response capacity approach provides a useful framework to study both actor effects (the influence of an actor's own work demands) and partner effects (the influence of the work demands of an actor's partner) (see Kenny (1996) and Kenny and Cook (1999) for an elaborate discussion of these types of models). We extend the theoretical perspective of the demand/response capacity approach in two ways. Firstly, we distinguish between care activities and leisure/educational activities because they may be related to parental work in different ways. Secondly, we consider job characteristics in addition to the time demands, because characteristics such as the organizational culture may be related to the response capacity as well.

*Actor effects: The influence of an actor's own work demands*

In line with both the time availability and demand/response capacity approach, we presume that work demands affect the extent to which an actor can respond to the family needs, because work demands absorb time and energy that cannot be spent on the family. Our first and most general hypothesis therefore states that more work demands are associated with a lower participation in child-related activities (*H1*). As stated before, in addition to the time demands from work (i.e. the working hours), we consider other demanding job characteristics. In line with the usual expectation in the literature, we argue that spending more time at work prevents parents to participate in activities with their children. We further elaborate Hypothesis 1, by anticipating that workplace characteristics have an additional effect on the participation of parents. We consider three types of workplace characteristics that are often considered in the

organizational literature on the family-responsiveness of organizations (e.g. Moen, 2003; Presser, 1986; Thompson et al., 1999; Valcour & Batt, 2001). Firstly, we expect that access to *flexible work-family arrangements* affects one's response capacity. For example, when it is not possible to work flexible hours, parents cannot leave work to pick up their children after school. Secondly, when an *organizational culture* is unsupportive towards the family demands of employees, this may restrict the extent to which parents participate in activities with their children. This could for example be the case in an organization in which working overtime on a regular basis is considered to be an important indicator of organizational commitment (Thompson et al., 1999). Parents that work for such organizations will be stimulated to direct more commitment, time and energy to work and this is likely to prevent them to invest time and energy in activities with their children. Thirdly, more *job insecurity* may stimulate people to invest more time and energy in their work in order to secure their job and career and this is likely to detract time and energy from the family (Van der Lippe, 2007). We test the direct effects of these three job characteristics but we acknowledge that they may also have an indirect effect via the parental working hours.

In our second hypothesis we modify the expectation from the first hypothesis by distinguishing between care activities on the one hand and leisure and educational activities on the other hand. Because care activities are of a more urgent and obligatory nature than leisure and educational activities, we expect that parental work will affect these activities to a lesser extent. We presume that parental work comes more at the cost of participation in leisure and educational activities, because it may be easier for parents to postpone these activities. We thus predict that the negative effect of work demands on parental participation in child-related activities is weaker for care activities, than for leisure and educational activities (*H2*).

*The partner effects: The influence of the partner's work demands*

So far, we assumed that the partners were isolated actors. Although this is in line with the time availability studies, the demand/response capacity approach predicts that actors respond to the work demands of their *partner* as well. It is argued that if one partner is unable to take up activities with the children, as a result of high work demands, the other partner compensates for this by increasing his or her own participation. The third hypothesis relates to this approach by stating that more work demands of one partner are associated with a higher participation in child-related activities by the other partner (*H3*). Although previous research only focused on the effects of the partners employment status and working hours, we again expect that the workplace characteristics of an actor's partner may have an additional effect. A lack of flexibility, an unsupportive organizational culture or high job insecurity that limits an actor's partner in his or her participation in child-related activities are likely to motivate this actor to increase his or her own participation.

We further extend the demand/response capacity approach by arguing that the partner-effect of work demands may differ for the two types of child-related activities. We presume that partners are more likely to replace each other with regard to child-care activities than with regard to leisure and educational activities. Care activities cannot be postponed and as a result parents may be forced to increase their own participation when their partner's work is more restrictive. Leisure and educational activities on the other hand have a less obligatory nature. For example, when a mother's work demands limit her own child-related activities, her partner will be obliged to participate more in feeding and bathing the children whereas he may not feel responsible to increase the frequency of play activities. Moreover, whereas previous research has considered child-related activities as an aspect of unpaid labor, it may be more suitable to examine leisure and educational activities in the context of

a family's life-style (Gronau, 1977; Shaw, 1997). In this context it is likely that mothers who are strongly involved in child-related leisure and educational activities have a partner that is strongly involved as well (Harris & Morgan, 1998).

Consequently, the fourth and final hypothesis states that the positive association between the work demands of an actor's partner on the parental involvement of this partner (the partner effect) is stronger with regard to child-care activities than with regard to educational and leisure activities (*H4*).

Figure 1 provides a simplified overview of the effects that will be investigated. Hypotheses 1 and 2 refer to the actor effects and hypotheses 3 and 4 refer to the partner effects. Because previous research has consistently shown that men and women respond differently to the demands from work and the family (e.g. Bianchi et al., 2006; Hochschild, 1997; SCP, 2006), we distinguish between fathers and mothers in our model.

[Figure 1 about here]

## METHOD

### *Data, sample and response*

During the spring of 2007, we collected survey-data from a sample of Dutch two-parent households with at least one child aged 11 or younger. We selected households with young children because our research population should be concerned with both care and non-care activities. The data were collected through a computer-based survey and the household data enabled us to study both actor and partner effects. The respondents were selected from the TNS – NIPO Household Panel, a large-scale household panel in the Netherlands that comprises 200.000 households and is

representative for the Netherlands. We checked whether the persons who did not respond differ from our respondents in terms of gender, age and educational level, but the results of this analysis showed no remarkable differences.

Of the 1.690 two-parent households (3.380 parents) with dependents aged 11 and below that were approached, we received a response from 1.267 households. This implies that the response rate among households is 75%. We narrowed this sample down to our final sample in two steps. Firstly, we excluded the 373 households that indicated that they had had a holiday in the week of or preceding the survey. Secondly, we excluded the households in which only one of the partners returned the questionnaire: This was the case for 251 of the remaining households. This procedure resulted in a final sample size of 643 households.

Because our hypotheses are tested on the basis of Dutch households data it is relevant to note that in the Netherlands a relatively large proportion of women with children are employed but that the vast majority works part-time (Van den Broek, 2006). The implications of considering this research population will be addressed in the discussion of this article.

### *Measures*

We asked the respondents to rate how often they participated in eighteen child-related activities, such as having dinner and watching television together, in the week preceding the survey. Presenting the respondents with concrete activities made it easy for them to recall how often they participated in these activities. Moreover, this method leads to less socially desirable answers than asking them to estimate how many hours per week they usually spent in activities with their children. Still, we asked the respondents to estimate this time in order to run additional analyses to assess the validity of our dependent variable. These analyses showed that the

frequency of child-related activities is positively correlated with the estimated time per week that is spent on care and leisure/educational activities. This underscores that our dependent variable is a valid measure for the extent to which parents participate in child-related activities.

The activities that were rated as care are having breakfast, lunch or dinner together, caring for babies, toddlers, and young children, medical care and picking children up or dropping them off. The remaining activities were labeled as leisure/educational activities and concern indoor activities (e.g. playing with baby, reading to a child, watching television together), outdoor activities (e.g. walking and biking, going to the playground), educational activities (e.g. talking, helping the child with homework), and performing household tasks together (e.g. household chores, shopping). The response categories for the activities range from 0 = *never* to 6 = *more than three times per day*.

We constructed the measures for the frequencies of care and leisure/educational activities by taking the mean score on the different types of activities for each person. This results in a score ranging from 0 (low frequency) to 6 (high frequency). The reliability of the frequency of care activities is relatively low, with an  $\alpha$  of .56 for fathers and .48 for mothers, which may be explained by the wide range of age categories the activities relate to. The leisure and educational activities are applicable in almost all age ranges and as a result the reliability of the measures is higher with an  $\alpha$  of .79 for fathers and .81 for mothers.

*Independent variables.* Five indicators of the work demands are considered: (a) employment status (1 = *employed*, 0 = *unemployed*), (b) working hours, (c) flexibility in working hours, (d) the extent to which the organizational culture is family-friendly, and (5) job insecurity. The reason why we take employment status into consideration,

in addition to working hours, is that it is possible that employed and unemployed parents differ in the ways in which they use their time and are committed to child activities (Nock & Kingston, 1988). *Working hours* (including overtime) were measured by asking the respondents how many hours they worked in the week preceding the survey (the same period for which we asked the respondents to rate their participation in child-related activities).

The measure for *flexibility in working hours* was constructed on the basis of two questions: ‘Who determines the time you start and end your workday?’ (1= This is fully determined by other people/ my working hours are fixed to 5= I fully determine my planning) and ‘If something unexpected happens that requires your presence at home, is it possible for you to take a day off or work from home?’ (1 = *impossible* to 5 = *this is no problem at all*). The mean score ranges from 1 (low flexibility) to 5 (high flexibility).

The *family-friendliness of the work-family culture* was measured using a shortened version of the ‘family friendliness’ scale developed by Thompson and others (1999). The items on this scale are to managerial support, career consequences and time expectations. We included four items for each aspect so our final measure consists of twelve items (e.g. ‘In the event of a conflict, managers are understanding when employees have to put their family first.’), each ranging from 1 = *totally disagree* to 5 = *totally agree*. The  $\alpha$  is .90, both for fathers and mothers. We took the mean score, which resulted in a five-point score ranging from a highly family un-friendly culture to a highly family friendly culture.

The scale measuring *job insecurity* consists of five items (e.g. ‘I am worried that I will lose my job’) with answers again ranging from 1 = *totally disagree* to 5 = *totally agree*. The same scale has been used in the ‘European Quality of Life’ study

(Crompton, Lewis, & Lyonette, 2007). The reliability is high, with an  $\alpha$  of .83 for fathers and .80 for mothers.

In order to include both employed and unemployed respondents in our analyses, the unemployed respondents and those respondents that are not in paid employment were assigned the mean score of the employed respondents on the work demand-variables. By assigning the mean score of the respondents in paid employment, the whole sample is preserved whereas the effects of the work demands only relate to the employed respondents. This is a common procedure that has among others been used by Poortman and Kalmijn (2002, p. 184).

*Control variables.* The age and educational level of the parents, the number of children and the average age of the children in the household are included as control variables, as these variables are generally considered in the literature on parent-child interaction.

#### *Method of analysis*

Because the unit of analysis is the couple and we wanted to estimate the actor and partner effects simultaneously, we employed structural equation modeling using AMOS (Arbuckle, 2006). This method takes into account that the dependent variables (in this case the frequency of child-related activities of mothers and fathers) are non-independent, by modeling the correlation between the measurement errors. Because we did not consider the exact same set of explanatory variables for all dependent variables (i.e. we did not estimate the association between an actor's age and educational level and this actor's partner's participation in child-related activities) we employed structural equation modeling instead of seemingly unrelated regression. Moreover, this enabled us to take the covariance between the explanatory variables into account and to estimate how the dependent variables are correlated.

We estimated a model that includes both the actor and partner effects (Hypothesis 1 and 3) and that differentiates between the two dimensions of child-related activities (Hypothesis 2 and 4). Structural equation modeling enables us to test cross-equation differences between coefficients by imposing equality constraints. By comparing the chi-squares of the models with and without the equality constraints, we were able to contrast the two types of activities and test whether the association between the work demands and care activities differs significantly from the association between the work demands and leisure and educational activities.

## RESULTS

### *Descriptive and bivariate analyses*

The average age of the fathers in our sample is 38.97, the average age of mothers is about two years younger: 36.47. The educational level of respondents is measured on an 11 - point scale and both fathers and mothers have an average score between 6 and 7. The women are slightly higher educated. The mean number of children is 1.97, which is consistent with the national average (CBS, 2007). The average age of all children present is 6.23 and ranges between 0 and 14.67.

Table 1 provides the means and standard deviations of the dependent and explanatory variables that are included in the model. In addition to this, the table presents the correlation coefficients between the independent variables and the work demands. For the fathers in the sample, the average frequency of care activities is 1.19 (on a scale ranging from 0 to 6) and the average frequency of leisure and educational activities is lower, with a value of .70. As was to be expected, the frequencies of child-related activities are significantly higher for the mothers than for the fathers in

the sample (the results are not reported). The average score is 2.40 with regard to care activities and 1.20 with regard to leisure and educational activities.

[Table 1 about here]

Almost all fathers (97%) have a job and the employed fathers worked an average of 38.94 hours in the week preceding the survey. The majority of the mothers (88%) is employed and the employed mothers worked an average of 20.42 hours in the week preceding the survey. This is not surprising because a large proportion of Dutch women, and especially mothers, works part-time (Van den Broek, 2006). The other work demands show no remarkable means or standard deviations. The fathers and mothers in our sample are very similar with regard to their experienced flexibility, organizational culture and job insecurity.

The scores on the two types of child-related activities are positively correlated. The frequency of child-related activities of fathers is negatively associated with paternal working hours and job insecurity. Parental working hours are negatively associated with both types of activities, whereas job insecurity only yields a negative association with care activities. The supportiveness of the organizational culture is marginally positively associated with both care and leisure/educational activities. For the mothers, both employment status and working hours are negatively associated with care and leisure/educational activities. None of the other work demands yields a significant correlation.

### *Explanatory analyses*

The structural equation model that was constructed on the basis of our theoretical expectations has a chi-square of 576.545 with 108 degrees of freedom. The model fit

is quite low with a CFI of .846 and an RMSEA of .082. Because we tested the same model as a multivariate regression model and the results were robust, the results from the structural equation model are reliable.

An advantage of using structural equation modeling is that it enables us to estimate the correlation between the dependent variables. The correlations between the reports of the partners were positive (.281 for the care activities and .378 for the leisure/educational activities). This implies that if one partner reports a high frequency of child-related activities, the other partner reports a high frequency as well, even when the family and work demands are taken into account. This result is surprising because the demand/response capacity approach assumed that parents function as substitutes for one another in their time with the children. This would imply that if one partner decreases the frequency of child-related activities, the other partner would increase this frequency. There are two possible explanations why this is not the case. Firstly, parents may divide child-related activities *not* among themselves, but among themselves and a third party: They may choose to outsource child-related activities. Secondly, participation in child-related activities may be an aspect of a joint 'family lifestyle', implying that highly involved fathers are married to highly involved mothers.

[Figure 2 about here]

### *The actor effects*

Figure 2 presents the significant actor effects in the structural equation model. Although the actor and partner effects were tested simultaneously in one model, they are presented separately. We chose to do this in order to make the differences between the two types of activities clear. Hypothesis 1 predicted that parents who experience

high work demands report a low frequency of child-related activities. In line with the results of the bivariate analyses, the results showed that this is especially the case for the time demands. The parental working hours are negatively associated with both the frequency of care and leisure/educational activities for both fathers and mothers. This is in line with Hypothesis 1. An examination of the standardized coefficients showed that the actor-effects for the fathers are larger than the actor-effects for the mothers. Moreover, the frequency of child-related activities is related to some of the other work demands, but this is only the case for fathers. Fathers that experience a high level of job insecurity report a lower frequency of care activities. Moreover, the level of supportiveness of the father's organizational culture shows a weak positive association with the frequency of leisure and educational activities ( $p = .063$ ). The frequency of child-related activities of mothers is not related to her flexibility, organizational culture or job insecurity. We can therefore conclude that Hypothesis 1 received partial support from the model: More working hours are consistently related to lower frequencies of child-related activities, but the other job characteristics are only associated with the activities of fathers.

Hypothesis 2 differentiated between the dimensions of child-related activities and predicted that work demands are more strongly related to the frequency of leisure and educational activities than to the frequency of care activities. In order to test this hypothesis, equality constraints were imposed upon the equations for care and leisure/educational activities. In figure 2, we indicated for which relations the equality constraint resulted in a significant decline of the model fit. The results show that the differences between the two types of activities are only significant for the fathers. For the mothers, neither of cross-equation differences was significant, which indicates that mothers do not differentiate between the two types of activities. With regard to the fathers, the model does show differences between the effects on care and leisure, but

these differences are in the opposite direction as our prediction: The work demands are related more strongly to the frequency of care activities than to the frequency of leisure and educational activities. The effect of the father's working hours on participation in care is stronger than the effect on the frequency of leisure and educational activities ( $p = .01$ ) and the same is true for the impact on job insecurity ( $p = .01$ ). Moreover, although the job status of the father is not significantly related with either of the activities, the relation *is* significantly stronger for care activities ( $p = .03$ ). Finally, although the supportiveness of the father's organizational culture is (weakly) associated with the frequency in leisure and educational activities and unassociated with care activities, the coefficients are not significantly different from each other.

Summarizing, Hypothesis 2 was rejected. Instead, the results indicate that men's care activities yield a stronger association with their work demands than with their leisure activities. This suggests that care activities are not something fathers are forced into, but that they have a choice that is affected by their work demands. Possibly, this results from low feelings of responsibility for childcare. An alternative, but related, explanation could be that fathers strongly protect the more agreeable leisure and educational activities with their children. The finding that women do not differentiate between the two types of activities suggests that they feel equally responsible for the two types of activities.

[Figure 3 about here]

### *The partner effects*

Figure 3 shows the significant partner effects in our model. Hypothesis 3 predicted that parents increase the frequency of their child-related activities when the work demands of their partner increase. The results indeed show that some of the partner's

work demands effects are positively related to the frequency of child-related activities. What is remarkable, is that although the actor effects for women were quite limited, their work demands clearly yield more partner effects. Fathers report a higher frequency of care activities when their partner has a job and works more hours. Moreover, paternal participation in both care and leisure activities is negatively related to the level of supportiveness of their spouse's work environment. These results suggests that fathers report a higher frequency of child-related activities when their partner's response capacity towards the family demands is more restricted. Only the father's working hours are significantly associated with the mother's frequency of leisure/educational activities. Summarizing, we can conclude that Hypothesis 3 is partially confirmed. The respondents increase their own participation when the work demands that are posed upon their partner increase. Fathers, however, seem more responsive to their partners' work demands than mothers.

This leads us to Hypothesis 4 that stated that the impact of the partner's work demands on care activities is stronger than the impact on leisure and educational activities. The results suggest that this is only partially the case because the difference again only occurs for the fathers. For the fathers, two of the equality constraints that were imposed, resulted in a significant deterioration of the model fit. The impact of the mothers' working hours on the care activities of fathers, is indeed stronger than the impact on leisure and educational activities ( $p = .02$ ). The same is true for the effect of the employment status of the mother, although the difference is only marginally significant ( $p = .08$ ). The supportiveness of the mother's organizational culture does not have a different impact on the father's care and leisure/educational activities. Moreover, even though only the working hours of fathers are associated with the mothers' leisure activities, the difference with the association with care is not significant.

In general, we can conclude that Hypothesis 4 receives little support. Still, the finding that the mother's employment status and maternal working hours have a stronger impact on paternal participation in care than on paternal participation in leisure, indicates that men are more responsive to their partner's work demands with regard to care activities. For mothers there is again no significant difference between the effects on care and leisure.

With regard to the control variables, the involvement of fathers and mothers in both types of activities is higher when their children are younger and when they have more children. The educational level is only significant for mothers: Higher educated mothers spend less time in child-related activities than lower educated mothers. The age of the parents is not related to the frequency of child-related activities. Additional analyses showed that the effects of the age and number of children are stronger for care activities than for leisure activities. This is the case for both the fathers and mothers.

## DISCUSSION

The aim of this study was to examine how parental participation in care and leisure/educational activities is associated with parents' own work demands and those of their partner. There are three main conclusions. Firstly, we have shown that it is important to disentangle child-related care and leisure/educational activities for fathers. Fathers respond stronger to their own work demands and the work demands of their partner when care activities are concerned. Mothers do not seem to differentiate between the two types of activities. Secondly, we found that considering the organizational culture and job insecurity as work demands, in addition to the commonly considered working hours, adds to the explanation of the time parents

spend with their children. Finally, we can conclude that it is relevant to include both fathers and mothers when analysing how work affects the family. By considering both partners, partner effects can be established. Moreover, our results have shown that fathers respond differently and more strongly to work demands than women.

The finding that women respond less strongly to their work demands may be the result of active protection of child-related activities, but may also indicate that women feel strongly responsible for child-related activities and therefore experience little discretionary space when it comes to letting work affect the family (Bianchi, 2000; Nock & Kingston, 1988). This may also explain why their partner's work demands have little impact on their participation. The finding that men's work demands, and those of their partner, affect their care activities slightly more than their leisure and educational activities, whereas there is no difference between the two activities for women, suggests that men do not consider care activities as activities that simply have to be done. Moreover, it could indicate that men do not let their work come at the cost of 'fun' activities, whereas they do decrease their involvement in the less agreeable care-related activities.

With regard to the job characteristics, flexibility, the supportiveness of the organizational culture and job insecurity, the limited association with the participation in child-related activities may result from the specific situation in the Netherlands. Working part-time provides parents with more flexibility to successfully fulfil both their roles as employee and as parent (Hochschild, 1997; Valcour & Batt, 2003). Because the majority of Dutch mothers works part-time, the scarcity of the time and energy may not be such an issue for them. In other words, this work arrangement may function as a buffer, protecting the family for the demands from work. Because men in the Netherlands work less hours than men in the U.S. (Gershuny, 2000) a similar mechanism may occur for this group. An international comparative study could

examine whether work demand have a greater effect in countries in which employees experience higher time pressure from work.

Given that time and energy are scarce resources, the small effects of work on family life imply that the work demands possibly come at the cost of other activities for parents and especially mothers, for example 'pure' leisure time without children (Bittman and Wacjman, 2000). It also provides further evidence for the notion of the double burden. By not letting work come at the cost of their family life, parents increase their total time in paid and unpaid labor and this could have important implications for their well-being. Further research should examine whether these preliminary findings can be confirmed.

Because our analyses are based on cross-sectional data, we cannot exclude the possibility that selection effects have occurred. It is possible that parents select a certain workplace because they want to maximize the time they spend with their children, and the same goes for the number of working hours. However, Gesthuizen and Dagevos (2005) have shown that employees with children are less likely to have turn-over intentions or change jobs than childless employees, even when they experience low job-satisfaction. Future research should examine whether it might be better to consider working hours as an endogenous variable in the analysis of parent-child time. In line with previous research, our study has implicitly assumed that working hours determine how much time is left for family activities, but it is also possible that parents decide simultaneously how much time they allocate to work and their family. Previous research has shown that especially mothers are likely to adjust their work schedules to accommodate the demands from the family (England & Farkas, 1986; Presser, 1986). Further research could provide more insight in the sequence of these mechanisms.

Although time budget studies have generally assumed that time with children is an aspect of unpaid labor, it has been questioned whether this really is the case and whether it should not be considered as leisure because it has some intrinsic value (Gershuny, 2000; Gronau, 1977). This discussion has important theoretical implications. Do we assume that parents divide child-related activities among themselves, just like they divide who does the laundry, or is involvement with children part of a family's life style? Our study has shown that parents increase their participation in child-related activities when their partner experiences high work demands. This points in the direction of the division of labor. On the other hand, we have shown that highly involved fathers are married to highly involved mothers, which could indicate that there is simply a distinction between families with high and low levels of solidarity. By considering other outcomes such as outsourcing and individualistic leisure time future research could shed further light on this issue.

Finally, we have replicated the common finding that fathers participate less in activities with their children than mother. We have also shown, however, that it is exactly the fathers' participation that can more easily be influenced. Our model has shown that fathers are more responsive to their own work demands as well as to those of their partner. Maternal participation in child-related activities was only affected by the mother's own working hours and those of the father, whereas fathers were affected by their own working hours, their own experienced job insecurity, as well as by the employment status, working hours and organizational culture of the mother. Policies aimed at increasing the participation of fathers in the family could therefore focus on several aspects of fathers' own work, as well as on the labor market participation of mothers.

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FIGURES AND TABLES

Figure 1: Conceptual model

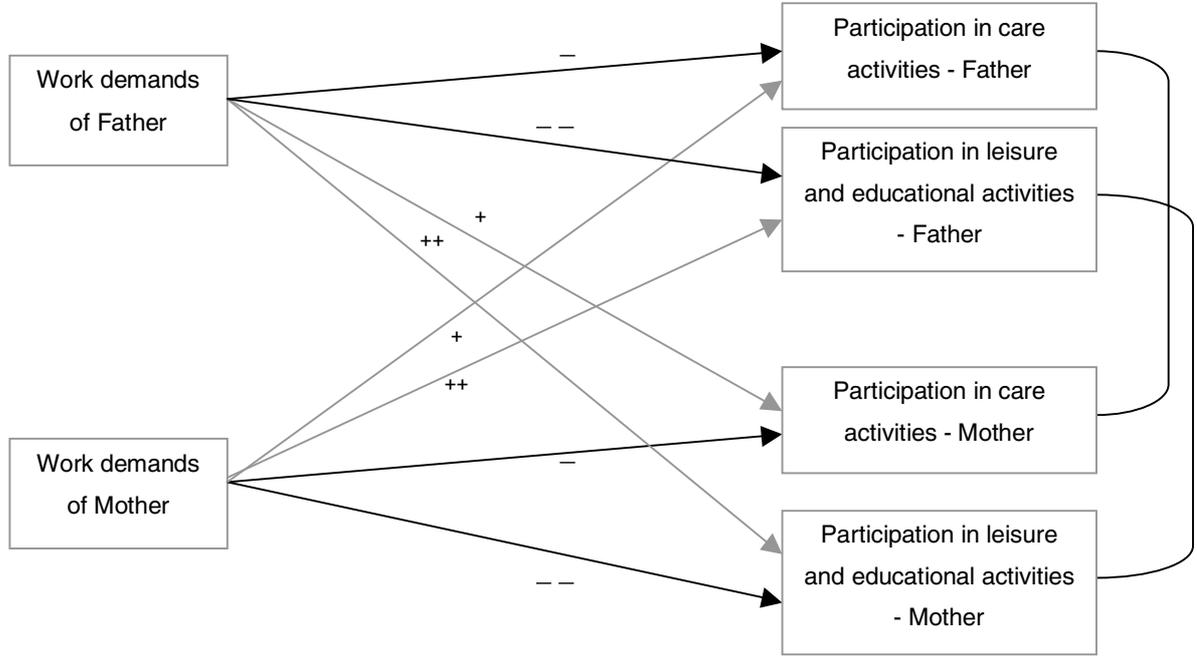
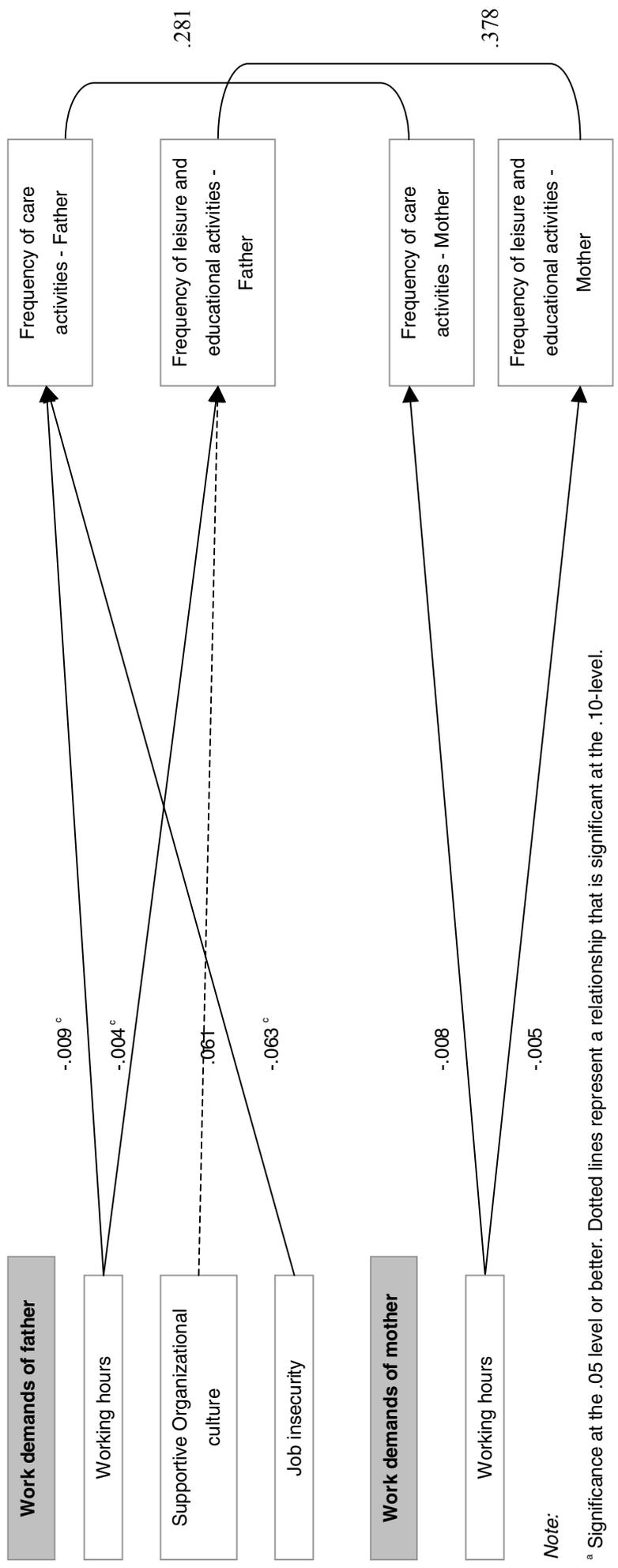


Figure 2: Path Model with Significant Actor effects Predicting Child-related Activities<sup>a, b</sup>. Unstandardized Coefficients. N = 643.



Note:

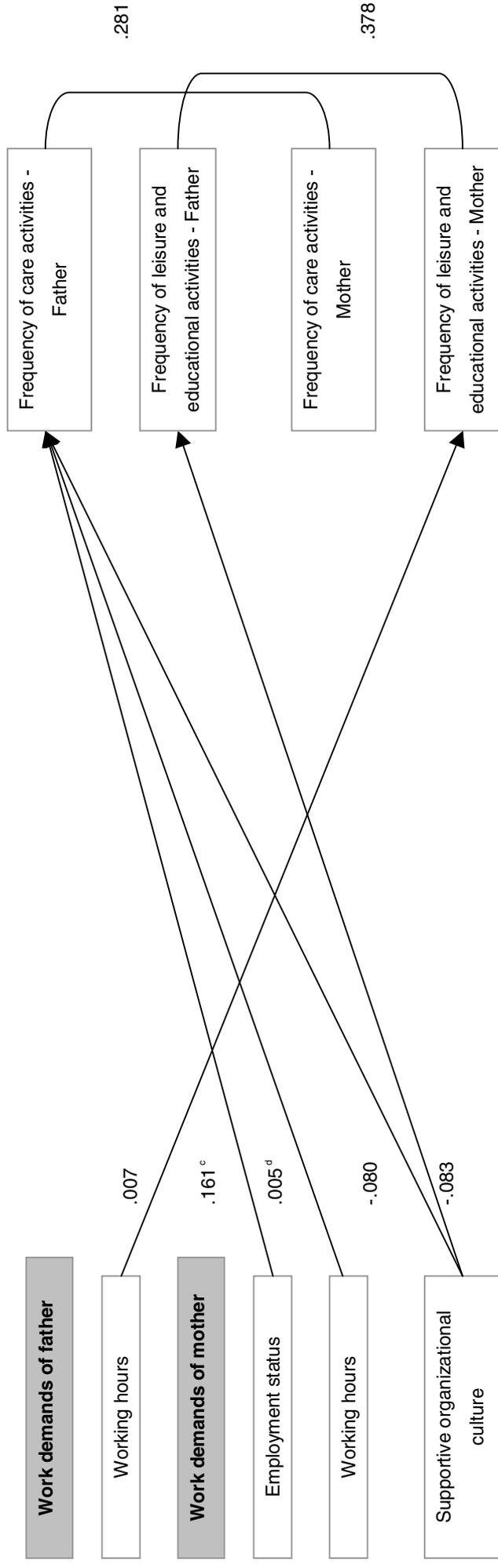
<sup>a</sup> Significance at the .05 level or better. Dotted lines represent a relationship that is significant at the .10-level.

<sup>b</sup> Controlled for the partner characteristics, educational levels and ages of the parents, the average age and the number of children in the household.

<sup>c</sup> Imposing equality constraints between the effects of father's working hours on fathers' care activities and leisure/educational activities results in a significant decline of the model fit at the .01 level.

<sup>d</sup> Imposing equality constraints between the effects of father's job insecurity on fathers' care activities and leisure/educational activities results in a significant decline of the model fit at the .01 level.

Figure 3: Path Model with Significant Partner Effects Predicting Child-related Activities<sup>a b</sup>. Unstandardized Coefficients. N = 643.



Note

<sup>a</sup> Significance at the .05 level or better.

<sup>b</sup> Controlled for the respondents' own characteristics, educational levels and ages of the parents, the average age and the number of children in the household.

<sup>c</sup> Imposing equality constraints between the effects of the mothers' employment status on care activities and leisure/educational activities of fathers results in a significant decline of the model fit at the .10 level.

<sup>d</sup> Imposing equality constraints between the effects of the mothers' working hours on care activities and leisure/educational activities of fathers results in a significant decline of the model fit at the .05 level.

Table 1. *Correlations, Means, and Standard Deviations of the Independent and Dependent Variables for Fathers and Mothers (N = 643).*

	<i>M</i>	<i>SD</i>	Correlation with care activities actor	Correlation with leisure/education activities actor
<i>Fathers</i>				
Frequency of care activities	1.19	0.65	1	.64***
Frequency of leisure/ educational activities	0.70	0.49	.64***	1
Employment status - dummy <sup>a</sup>	0.97	0.16	-.05	-.01
Working hours	38.94	11.91	-.18***	-.13***
Flexibility in working hours	2.94	0.97	.04	.03
Family-friendly culture	3.30	0.65	.07 <sup>†</sup>	.07 <sup>†</sup>
Insecurity	2.25	0.76	-.10*	-.02
<i>Mothers</i>				
Frequency of care activities	2.40	1.00	1	.62*
Frequency of leisure/ educational activities	1.20	0.65	.62*	1
Employment status - dummy	0.89	0.32	-.06	-.05
Working hours	20.42	12.14	-.13***	-.09*
Flexibility in working hours	2.86	0.97	.01	-.05
Family-friendly culture	3.50	0.61	-.02	-.02
Insecurity	2.31	0.76	.02	.01

*Note:* Descriptive statistics of work demands only concern the employed fathers and mothers.

<sup>a</sup> Employment status: 0 = *unemployed*, 1 = *employed*.

<sup>†</sup>  $p < .10$ . \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$  (two-tailed).