The difficulty of being a professional, a parent, and a spouse on the same day:

Daily spillover of workplace interactions on parenting, and the role of spousal support

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Abstract

Designing parenting interventions and preventions requires knowledge on the factors and processes that shape parenting behaviors. Using data collected over 10 days, during the last hour of work and before going to bed, this study examined the spillover of interpersonal work stresses into positive and negative parenting behaviors. Data were collected among 103 couples who had at least one child between the age of one and eight years. Of particular interest was the role of received emotional spousal support as a moderator of stress spillover. Dyadic variants of multilevel models were used to analyze the data. The results showed that on days on which mothers or fathers reported stressful interpersonal interactions in the workplace, they also reported less positive parenting behaviors. In addition, mothers reported more negative parenting behaviors on days characterized by these kinds of work experiences. Mothers and fathers were found to report more positive parenting behaviors, and mothers less negative parenting behaviors, on the days on which they received more spousal support. Received spousal support also moderated spillover of work stress into parenting behaviors and this finding was found to be gender-specific: for mothers, support enhanced spillover into positive behaviors, and for fathers it enhanced spillover into negative parenting behaviors.

Keywords: daily family life, ecological momentary assessment, emotional support, parenting, spillover, spousal support, work stress
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Designing parenting interventions and preventions requires knowledge on the factors and processes that shape parenting behaviors. One research area that contributes to this knowledge focuses on how stress outside the family shapes behaviors and interactions in the family. Within this broader area, a smaller body of research has examined the daily mechanisms of stress spillover (e.g., Story & Repetti, 2006). While part of this literature examines spillover of daily experiences into the couple relationship (e.g., Schulz, Cowan, Cowan, & Brennan, 2004; Schoebi, 2008), some studies have investigated spillover of this kind into the parent-child relationship (e.g., Gassman-Pines, 2011; Repetti & Wood, 1997). Understanding the conditions under which spillover is more or less likely requires the identification of moderators at the daily level. The present study aimed to contribute to this knowledge by investigating spillover of stressful interpersonal work day experiences into parent-child interactions and the role of spousal support as a moderator of this spillover. To this end, we assessed parents’ experiences in the workplace and later at home to examine daily spillover from work to home.

Spillover of Stress Experiences into Family and Parenting

One theoretical approach to the study of the dynamics and variation of daily family life is that of emotional transmission (see Larson & Almeida, 1999; Repetti, Wang, & Saxbe, 2009). Briefly defined, the emotional transmission paradigm assumes that various emotions and experiences are transmitted not only from one family member to another (crossover), but also from one life domain to another (spillover). This study focuses on spillover of work experiences into parenting-child interactions, and more specifically, on the transmission of interpersonal work day stress into parental behaviors. Interpersonal stressors
have been shown to be particularly consequential for, and predictive of, psychological
distress and physical symptoms than other types of stressors (Almeida, 2005).

Daily experiences at work, particularly those involving stressors, have been
found to have a strong effect not only on individual wellbeing and marital behaviors but also
on parents’ interaction with their children (for a review see, Bass, Butler, Grzywacz, &
Linney, 2009; Crouter & Bumpus, 2001; Repetti et al., 2009). Studies suggest two different
kinds of short-term reactions to work stress: social withdrawal and increase in conflicts and
expressions of anger (Repetti, 1989; Repetti, Wang, & Saxbe, 2009; Schulz et al., 2004). As a
short-term reaction, social withdrawal can be seen as a way of recovering from a stressful
work day and thus as an effective coping strategy protecting the family (see, e.g., Repetti &
Wang, 2014).

Repetti’s (1989) study of male air traffic controllers showed, using several
subjective and objective measures, that work day experiences are transmitted to home, and
specifically, to father-child interactions. On days with a higher work load, fathers were more
likely to withdraw behaviorally and emotionally from parental interaction. On days
characterized by interpersonal conflicts at work, fathers reported greater use of discipline and
more negative emotion expressions with their children. Another study, focusing on low- and
middle-income mothers, found that spillover effects are also present among mothers: mothers
showed emotional and behavioral withdrawal from their preschoolers on days of greater
workload or interpersonal stresses at work (Repetti & Wood, 1997). Similarly, Gassman-
Pines (2011) conducted a daily diary study on low-income mothers and found that on days
when mothers were criticized by their supervisor at work, they reported more withdrawal and
harsh interactions with their children.
Spousal Support as a Moderator in the Link between Daily Work and Parenting Experiences

Along with showing that work experiences are often carried home, researchers have noted variation between individuals and between days in the contagion of these experiences. This study examines whether differences in spousal support explain this variation. As Lazarus (1999) notes, social support is one of the main factors affecting how individuals respond to daily stressors. Social support can buffer against the negative effects of stress by promoting effective coping and less negative appraisals of stress (Lakey, 2013; Lakey & Cohen, 2000). Social support is known to protect the emotional and physical wellbeing of individuals against many types of stressors (for a review, see Cohen, Gottlieb, & Underwood, 2000). Whether spousal support plays a role in the association between work experiences and parenting behaviors, however, has not been investigated. Focusing on the association of work overload and the marital relationship, Repetti (1989) found that the provision of spousal support reported by wives facilitated their male partners’ withdrawal from marital interaction in response to high work load. In addition to buffering against the effects of negative experiences, spousal support may directly influence individuals’ wellbeing, for example, by promoting self-esteem (Lakey & Cohen, 2000).

It has been shown, however, that spousal support is not always beneficial, and that receiving such support can intensify spillover of negative work experiences. Here, the distinction between available support and received support may be of help. Whereas most earlier research suggests that an individual’s perception that one can get help when needed buffers the effects of stress, the benefits of support actually received are less clear (e.g., Bolger, Zuckerman, & Kessler, 2000; Shrout, Herman, & Bolger, 2006; Wills & Shinar, 2000). In fact, receiving support can increase distress in the recipient, possibly because of the negative effects of feeling overbenefited and under an obligation to repay (Gleason, Iida,
Shrout, & Bolger, 2008; Lazarus, 1999; Shrout et al., 2006). Receiving support may also be negatively experienced because it draws attention to the problem in question or because offers of support may undermine the recipient’s evaluations of self-efficacy and autonomy. The findings by Neff and Karney (2005) may help in understanding the detrimental role of support while also suggesting gender differences. These authors showed that on days when women find themselves facing high stress, supportive behaviors on the part of their spouse are often accompanied with negative behaviors. This inadequate use of support, as they suggest, may contribute to distress in women.

In sum, although the research literature suggests that emotional support can buffer against the negative effects of work stress, emotional support has also been found to play an intensifying role in the spillover of negative work day experiences.

The Present Study

This study examines the daily transmission of negative work day experiences to parenting behaviors. Going beyond the prior research, we also study the moderating role of spousal support in this link between work experiences and parenting. The study falls within the tradition of examining daily individual variation in experiences (instead of focusing on global reports), and thus the research questions are answered utilizing momentary assessments of parental work and parenting experiences. Following the methodological approaches used in landmark studies on the mechanisms of spillover into the family (e.g., Schulz et al., 2004; Schoebi, 2008; Story & Repetti, 2006), we used an intensive repeated measures design to examine daily associations between interpersonal stress experiences reported at the workplace and reports on behaviors toward one’s children at home later on the same day. This approach allows the study of within-person and dyad processes with high ecological validity and minimal memory bias (Laurenceau & Bolger, 2005).
We hypothesized that interpersonal stress experienced at work spills over into the same person’s evaluations of her or his parental behaviors later that day. Specifically, we expected reports of stressful experiences at work to predict the same person’s evaluations of her or his parental behaviors later on that day. In addition, we explored whether the associations between stressful experiences at work and interactions with children later in the evening vary as a function of perceptions of spousal support.

**Method**

**Participants**

The participants were 103 parental couples who had at least one child between the age of one and eight years. Couples were recruited by means of ads in newspapers and flyers distributed in childcare facilities, family centers, and residential areas. The following inclusion criteria were applied: both spouses (i) agreed to participate in the study, (ii) lived together in the same home, and (iii) were professionally active for 12 hours per week or more with a regular work schedule.

Of the 113 couples who responded to the ads and flyers and fulfilled the participation criteria, 108 couples participated in the study. Of these couples, four provided incomplete data and one couple comprised two women. These couples were excluded from the present analysis, resulting in a final dataset of 103 couples.

The mean age of fathers was 38.1 (SD = 6.3) years, and that of mothers 35.2 (SD = 4.7) years. Many couples were married (87%), with an average length of marriage of 5.6 years (SD= 3.8) years. More than half of the fathers (60.8%) and mothers (55.9%) had completed higher education. Most couples had one or two children (M = 1.7, SD = 0.8), the average age of the youngest child being 2.64 (SD= 2.01) years. About 97% of fathers and 76% of mothers reported a professional workload of at least 20 hours per week. The participants were well educated, with about 60.8% of men and 55.9% of women having completed higher education, and every second participant reported being employed in a junior or senior executive
position. About 16.3% of men and 10.8% of women reported being self-employed. All the participants were living in the German-speaking part of Switzerland and were fluent in German.

**Procedure**

Participants were visited in their homes by research assistants, who explained the momentary assessment procedure, which was to be implemented on handheld devices. Participants practiced using the devices and each item was explained. A detailed instruction manual was issued to all participants. Four specific reporting times per day were planned: (i) before starting work in the morning, (ii) during the last hour of work (or on the way home, but before arriving home), (iii) during the 45 minutes following the reunion with partner, and (iv) before going to bed at night. For the present study, we used the data reported at the workplace (ii) and before going to bed (iv). Participants were instructed to report during their working days for two consecutive weeks (Monday to Friday; 10 days). Participants were discouraged to report retrospectively, and once initiated, reports could only be sent within a 1-hr time window. We also administered a set of questionnaires prior to and after the momentary assessment period. Participants were rewarded to the value of $50 after the assessment period. Parents provided complete data on 9.93 days (SD = 1.51), totaling 2,045 days of data.

**Measures**

**Interpersonal stress.** At the end of the work day, participants were asked to describe their interactions with other individuals (superiors, colleagues, clients) in the workplace. Ratings were given using two bipolar visual analogue scales with tick marks, ranging from 1 = *not at all strenuous* to 7 = *strenuous* (item 1), and from 1 = *not at all pleasant* – 7 = *very pleasant* (item 2; reverse scored). Participants reported on their interpersonal experience by moving the slider with the stylus from the central, default
position, or by directly tapping the scale at a specific location. The within-subject association between the two items was $r = .81$. To obtain a measure of stressful interactions, we averaged the two items.

**Positive and negative parenting behaviors.** Each day before going to bed, parents reported on the time spent with their youngest child since coming home. If they reported that they had interacted with the child, they were asked to describe their behaviors toward the child by means of five visual analogue slider scales (scored from 1 = *not at all* to 7 = *very*). Two of the items reflected negative behaviors (Toward my child, I was irritable; I was rude), and three items reflected positive behaviors (Toward my child, I was close/affectionate; I was open/attentive; I was tender). Items were averaged to form scores reflecting positive and negative behaviors.

**Received emotional support.** In each evening report, parents who indicated that they had spent time with their partner also described how they had experienced their partners’ behaviors by rating 10 items. We averaged the scores of three items (My partner was: understanding; encouraging/cheering me up; supportive), rated on a visual analog scale (scored from 1 = *not at all* to 7 = *very much*), to yield a measure of received emotional support.

**Data Analysis**

Applications of intensive repeated measures designs on couples yield data that typically involve at least two sources of non-independence. First, repeated reports by an informant are likely to be similar to each other because they are provided by one and the same person. Second, data provided by a husband and wife dyad are likely to show resemblances because they stem from two individuals who share many aspects of daily life, including children. These sources of non-independence need to be taken into account to ensure reliable significance tests (see e.g., Bolger & Laurenceau, 2013). The preliminary
analyses suggested moderate non-independence on a day-to-day level (with within-couple across-time correlations of $r = .10$ for positive parenting behaviors, and $r = .19$ for negative parenting behaviors), and substantial similarities between the two partners (with between-subject across-couples correlations of $r = .43$ for positive behaviors and $r = .32$ for negative behaviors). We therefore used dyadic variants of multilevel models to analyze the data. This approach uses a multilevel framework to incorporate multiple repeated reports by the couple, and integrates both partners – represented by separate sets of parameters for the mother and the father – into the equation (see, e.g. Laurenceau & Bolger, 2005). This model can be considered a multilevel extension of the Actor-Partner Interdependence Model (e.g., Cook & Kenny, 2005). Accordingly, we modeled spillover with the following level 1 equation (1):

$$\text{Parental Behavior}_{ij} = b_0(M^{\star}\text{INTERCEPT}_i) + b_1(M^{\star}\text{INT\_STRESS}_{ij})$$

$$+ b_2(M^{\star}\text{Partner\_INT\_STRESS}_{ij}) + b_3(F^{\star}\text{INTERCEPT}_i) + b_4(F^{\star}\text{INT\_STRESS}_{ij}) +$$

$$b_5(F^{\star}\text{Partner\_INT\_STRESS}_{ij}) + e_{ijM} + e_{ijF}$$

In this model, the behavior on day 1 of the mother or father of couple $j$ is captured by an intercept of the mother ($b_0$) or father ($b_3$), by a report on interpersonal stress experienced by the mother ($b_1$; an actor effect) or father ($b_4$; an actor effect), by the partner’s report on interpersonal stress for the mother ($b_2$; a partner effect) or father ($b_5$; a partner effect), and by an error term for each of the parents ($e_{ijM}$, $e_{ijF}$). The interpersonal stress measures were centered at each person’s mean score across all the repeated reports. Therefore, the coefficients for these parameters reflect within-subject associations of interpersonal stress and daily fluctuations of reports on behaviors.

To examine whether received emotional support moderated spillover, we added the received report scores (again, centered at each individual’s mean on this variable) and its multiplicative interaction term with the interpersonal stress variable to the equation. Significant coefficients for the interaction term can be interpreted as modulation (moderation
or enhancement) of the spillover associations on days on which the partners received emotional support.

**Results**

In a first step, we examined spillover and crossover (partner effects) of interpersonal stress in the workplace on positive and negative behaviors reported for interactions with the youngest child. For mothers, we found significant spillover effects into both positive behaviors ($b = -.042, se = .017; p = .014$) and negative behaviors ($b = .050, se = .023; p = .032$). For fathers, we found significant spillover into positive behaviors ($b = -.049, se = .019; p = .009$), but not negative behaviors ($b = .033, se = .025; p = .200$). This suggests that mothers reported less positive and more negative behaviors on days when they experienced taxing interpersonal interactions in the workplace, compared to days with pleasant interpersonal situations. For fathers, a reduction in positive behaviors was confirmed, but not an increase in negative behaviors.

In a second step, we introduced the received emotional support variable and its interaction term with the interpersonal stress reports (actor effects only). The results showed highly significant main effects of received emotional support on positive behaviors, suggesting that both mothers and father reported more positive behaviors toward their youngest child on days in which they received more emotional support from their spouse (mothers: $b = .125, se = .032; p = .000$; fathers: $b = .112, se = .032; p = .001$). An equivalent effect for negative behaviors was only partially supported (mothers: $b = -.097, se = .044; p = .026$; fathers: $b = -.020, se = .044; p = .642$).

Examining the interaction terms suggested that the spillover effects of interpersonal stress in the workplace on the positive behaviors of mothers were stronger on days when they perceived the father to be more supportive ($b = -.046, se = .022; p = .038$). We found no equivalent interaction effect for fathers’ behaviors ($b = .007, se = .026; p = .799$), and
comparison with a model in which mothers’ and fathers’ interaction terms were constrained to be equal suggested that this difference in parameter estimates was significant ($\chi^2(1) = 4.331, p = .037$). For negative behaviors, we found a marginally significant estimate suggesting stronger spillover of fathers’ interpersonal stress in the workplace into their negative behaviors on days when they perceived their partners to be more supportive ($b = .051, se = .030; p = .088$). We found no equivalent association for mothers ($b = .011, se = .030; p = .352$). Comparison with a model in which the parameter estimates were constrained to be equal did not suggest a significant gender difference ($\chi^2(1) = 2.121, p = .145$), and the constrained coefficient was marginally significant ($b = .034, se = .021; p = .097$). Taken together, testing for interaction effects provided partial support for a detrimental effect of specific emotional support perceptions, with received emotional support enhancing rather than buffering against spillover of interpersonal stress in the workplace into positive (for women) or negative (for men) behaviors toward their youngest child.

In a last step, we re-examined the models, adjusting for the behavioral reports of the previous day. The results for these revised models did not alter the current pattern of findings in any meaningful way.

**Discussion**

This study examined whether parents’ experiences of interpersonal stress during the work day affect their behaviors with their children during the evening. Of particular interest was the role of spousal support as a moderator of stress spillover. To answer these questions, we used data collected from 103 parental dual-earner couples on 10 days, at both the end of the work day and before going to bed.

Examination of the spillover associations confirmed earlier research findings: negative work day experiences predicted variability in individual’s reports on their behaviors toward their children. Specifically, we found that on days on which mothers or fathers
reported taxing interpersonal interactions in the workplace, they also reported less positive parenting behaviors. In addition, we found that mothers, but not fathers, reported more negative parenting behaviors on days characterized by these kinds of work experiences.

The current study also examined the moderating effect of spousal supportiveness. We found that where emotional support received from one’s spouse benefitted positive parenting, it did so in a nonspecific way. We also found examples of days where it even intensified the spillover of negative interpersonal stress experiences into parenting. Clearly, emotional support does not stand out as a promising candidate for preventing the transmission of interpersonal work stress to the parenting context. Mothers and fathers reported more positive behaviors toward their youngest child on the days when they received more spousal support. Among mothers, this was true also with respect to reduced negative behaviors. Beyond these main effects, however, spillover of interpersonal work stresses into parenting behaviors was enhanced rather than buffered on days when more spousal support was perceived. This finding was found to be gender-specific: for mothers receiving support enhanced spillover into positive behaviors, and for fathers it enhanced spillover into negative parenting behaviors. Although it is possible that this association may be an outcome of stressed individuals receiving more spousal attention, it may also be the case that, in particular when distress becomes visible through less positive or more negative behaviors, this immediate support does not always produce its intended effects.

Before discussing the implications of this study for the intervention and prevention contexts, it is important to draw attention to its limitations. First, the study relies exclusively on self-report data. Multi-method approaches to the assessment of parenting behaviors would benefit from more valid information on actually enacted behaviors. In addition, interpersonal stress was assessed in a relatively crude manner, which may have prevented the uncovering of stronger associations. At the same time, some of the associations
may have been inflated by shared method variance. Furthermore, the study is correlational, and therefore we cannot draw any strong causal inferences from the results, although looking at prospective associations to identify spillover allows for some informed speculations on the causal direction of effects. The data stem from relatively well-educated middle-class families, and hence conclusions drawn on the basis of these data may not be applicable to families from less favorable backgrounds. Also, the stress experiences analyzed stem from a relatively short period of time, and are likely to reflect minor stressors. It is possible that the effects of more serious stressors do not follow the same patterns as the present findings.

As a result of the increase of the dual earner model in families with young children, daily reconciliation of work and family and work-family spillover increasingly concerns mothers as well as fathers. As Crouter and Bumpus (2001) note, there is a need for intervention programs for parents, especially for those employed in stressful occupations. These programs could help parents to recognize how they respond emotionally to work stress and give them effective strategies for minimizing the possible corrosive effects of such stress-related negative emotions on parenting and family interaction. One possible strategy might be to take personal time out to recover from work. Some promising examples of parental preventions and interventions that have included parental work as an element of training already exist (Martin & Sanders, 2003; Rönkä, Malinen, Jokinen & Häkkinen, in press). Such interventions could also help spouses to be aware of situations when one or other spouse is stressed after a work day and how to react to prevent negative spillover in such situations (see Repetti, Wang, & Saxbe, 2009).

The data studied here suggest that spouses can be a mutual parenting resource. However, the results indicate that supporting a stressed spouse is difficult and may even be harmful from the viewpoint of spillover of negative work experiences. Spousal support seems to be most effective when provided in a non-conditional way, rather than targeted on days
when one’s spouse is stressed at work. It is possible that, on high stress days, supportive behaviors draw an individual’s attention to the problem or enhance feelings of incompetence (see Gleason, Iida, Shrout, & Bolger, 2008; Lazarus, 1999; Shrout et al., 2006).

In the families with young children, in particular, practical spousal support in the form of taking over more child care duties might be more effective than emotional support. If the other parent takes care of children, the exhausted parent can withdraw from the parenting of young children to recover from stress without endangering the wellbeing of children. It has been acknowledged earlier (Campos, Graesch, Repetti, Bradbury, & Ochs, 2009; Repetti, Wang, & Saxbe, 2009) that it is more typical, allowed and easier for fathers than mothers to withdraw from family proximity after a stressful working day; however, withdrawal might also be beneficial for mothers in similar situations. Story and Repetti (2006) argue that differences in men’s and women’s responsibilities for housework and parenting could contribute to reactivity at home among women following a stressful work day. This could also explain why in our study only women showed negative parenting behaviors as a reaction to their work day experiences. In parental training programs, parents could be advised on the different forms of spousal support that can prevent spillover of work day stresses. The father’s practical help with children and housework, in particular, might need to be emphasized as a good way of supporting the female partner after work. Above all, the role of practical support in the form of taking care of the children needs empirical study.

This study focused on examining the daily link between interpersonal work stresses and parenting behaviors and the moderating role of daily spousal support in this link. Such a multilevel study design opens up possibilities for addressing a number of important research issues that was not possible to include here. For example, do these spillover and moderation processes show weekly fluctuation? Do couples differ in the effectiveness of spousal support in buffering against negative spillover, and, if so, what dyadic characteristics
(e.g., relationship quality) explain this variation? Our results emphasize the view that in order to maintain and support family well-being, a narrow focus on specific phenomena and processes inside the family is insufficient (see also Martin & Sanders, 2003; Repetti, Wang, & Saxbe, 2009). Beyond buffering against spillover, the present results, showing that interpersonal work stress undermines positive parenting, highlight the importance of enhancing the work atmosphere and creating family-friendly work places as a preventive measure.

References


