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Daily Occupational Stressors and Marital Behavior

Lisa B. Story
Duke University

Rena Repetti
University of California, Los Angeles

This study examined daily fluctuations in marital behavior (anger and withdrawal) as a function of same-day job stressors, using hierarchical linear modeling (HLM). Forty-three couples provided daily diary reports of their workload and negative social interactions at work on 5 consecutive days. Within-subject analyses demonstrate that husbands and wives reported greater marital anger and withdrawal following negative social interactions at work, and wives reported greater marital anger and withdrawal following days of heavy workload. Mediation analyses provide support for the negative mood spillover hypothesis (e.g., workload no longer predicted wives' marital anger when controlling for negative mood). Between-subjects analyses suggest that spouses in high-conflict families may be especially vulnerable to the effects of job stressors on marital interaction.

Keywords: marriage, behavior, job, stress, mood

The quality of any couple's marriage is, to some degree, shaped by their surrounding life circumstances. For example, predictions of future marital functioning are improved when researchers consider the chronic stressors to which couples are exposed (see Karney & Bradbury, 1995; Story & Bradbury, 2004). Given the increasing number of dual-career families and the lengthening work week (e.g., Clarkberg & Moen, 2001), job stressors merit particular emphasis in the study of stress and marriage. In between-subjects comparisons of couples exposed to high and low levels of stressors, stressful work experiences have been associated with greater marital conflict, lower marital support, and more marital dissatisfaction (e.g., Crouter, Bumpus, Head, & McHale, 2001; Hughes & Galinsky, 1994; Larson, Wilson, & Beley, 1994; see Perry-Jenkins, Repetti, & Crouter, 2000, for a review). Recent advances in daily diary methods have begun to provide rich data on within-subject changes in job stressors, mood, and marital behaviors over consecutive days (Bolger, DeLongis, Kessler, & Wethington, 1989; Repetti, 1989; Schulz, Cowan, Cowan, & Brennan, 2004). In contrast to between-subjects comparisons, daily within-subject analyses control for individual-difference characteristics that undermine assumptions of causality. Daily diary studies also provide proximal measures of stressors and capture fluctuations in affect and behavior that would otherwise be missed. The current study examines the within-day associations between two daily job stressors, heavy workload and negative social interactions at work, and the daily marital behaviors of husbands and wives in dual-earner couples. In addition, we examine potential moderators of these effects and the role of negative mood as the mechanism by which negative experiences at work are transferred into the marital relationship at home.

Negative Mood Spillover and Withdrawal as a Coping Response

Two different social responses to an increase in job stress have been identified in the research literature: (a) increases in conflict and expressions of anger and (b) social withdrawal. In cross-sectional and longitudinal designs, chronic job stressors have been linked to increases in marital conflict through changes in psychological distress (e.g., Hughes, Galinsky, & Morris, 1992). According to the *negative mood spillover model*, stressors such as heavy workload or negative interactions with coworkers may create feelings of irritability, tension, and frustration. After work, the employed individual carries the residue of these feelings into the home, increasing the likelihood that he or she will become engaged in conflictual marital interactions. In one

Lisa B. Story, Department of Psychiatry and Behavioral Sciences, Duke University; Rena Repetti, Department of Psychology, University of California, Los Angeles.

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Correspondence concerning this article should be addressed to Lisa B. Story, Duke University Medical Center, Box 3842, Durham, NC 27710, or to Rena Repetti, Department of Psychology, University of California, Los Angeles, 405 Hilgard Avenue, Los Angeles, CA 90095-1563. E-mail: lisa.story@duke.edu or repetti@psych.ucla.edu

recent daily diary study, there was some evidence suggesting that wives, but not husbands, may have exhibited more angry and critical daily behaviors toward their spouses following busy workdays (Schulz et al., 2004). In another study there was a same-day link between husbands' reports of tensions or arguments at work and tensions or arguments with their wives, but this pattern was not observed for wives (Bolger et al., 1989). Negative emotion spillover from work also appears to affect parent–child interactions, resulting in fathers' increased expressions of anger toward children and use of disciplinary tactics, such as yelling and punishing, after more socially stressful days at work (Repetti, 1994). However, evidence also suggests that, at least among husbands, stressful days at work can be followed by short-term declines in marital anger. In one study this pattern was observed both in husbands' self-reports and in their wives' daily descriptions of the husbands' marital behavior (Schulz et al., 2004). In another case, the declines in marital anger were predicted by both subjective and objective measures of daily workload (Repetti, 1989).

Declines in marital anger may reflect a process of recovering from a draining workday that involves withdrawing from social interaction (Repetti, 1989; Repetti & Wood, 1997b). Activities such as watching television, reading, or listening to music may help individuals to emotionally recuperate from a stressful day by providing them with a period for relaxation, distracting them from thoughts about their day, and shielding them from the potential stressors that may arise during social interaction. This process does not require conscious effort and may often occur outside of awareness (Repetti, 1992). Two daily diary studies of work and marital interaction have uncovered evidence of social withdrawal following a stressful day at work. Male air traffic controllers were more distracted and less involved and interested in social interaction with their wives following more difficult or busy days at work (Repetti, 1989). In another study, husbands were more withdrawn after emotionally distressing workdays, and wives were more withdrawn after more demanding and faster paced workdays (Schulz et al., 2004). There is also evidence that mothers and fathers tend to be less behaviorally and emotionally involved with their children after stressful days at work (Repetti, 1994; Repetti & Wood, 1997a).

In both the model of mood spillover and that of withdrawal-based coping, mood is hypothesized to play a central role in the transfer of negative work experiences into the quality of life at home. Whereas there is a direct expression of negative mood during marital behavior in the negative mood spillover model, there is an indirect effect of mood on marital behavior in the model of withdrawal-based coping, through the behavioral consequences of emotion regulation coping strategies.

Identifying Potential Moderators

Part of the goal of understanding how job stressors are linked to the interior workings of marriages is to identify potential moderators of these effects. The few relevant daily diary studies that have been conducted indicate that short-term consequences of daily job stress can range from increases in marital anger and conflict to decreases in anger and withdrawal from interaction. Which couples are most vulnerable to negative emotion spillover and social withdrawal responses to daily stressors? The marital support that couples provide to each other is one promising avenue to explore. Emotional support may help shield the marital relationship from the negative consequences of stressors by reducing spouses' emotional distress (Conger, Rueter, & Elder, 1999). Marital support may also take the form of helping with household chores and other demands on stressful days (Bolger et al., 1989), which may also facilitate the distressed partners' withdrawal-based coping. Air traffic controllers were less likely to exhibit anger and were more likely to withdraw from marital interaction after high-workload days at the airport if they received more support from their wives that evening, perhaps allowing them a period of emotional recuperation (Repetti, 1989).

In contrast, couples who are high in conflict or marital dissatisfaction may be more vulnerable to the deleterious effects of stressors on their marriage (Shapiro, Gottman, & Carrere, 2000; Cox, Paley, Burchinal, & Payne, 1999). For example, husbands who report lower marital satisfaction appear to be at greater risk for domestic violence when exposed to stressors (Straus, 1990). Dissatisfied and high-conflict couples may be more prone to negative escalation under stress because they are already predisposed to engage in negative marital interaction and are more likely to reciprocate emotional negativity during marital interaction (Gottman & Levenson, 1986). The daily behavior of husbands in the Schulz et al. (2004) study was consistent with this pattern; those who reported more marital satisfaction tended to be less likely to express anger following a stressful workday. Of interest, the wives' daily behavior followed a different pattern. It was the wives in the more satisfied marriages who became angry after more stressful days at work. These investigators found a number of gender differences in the daily effects of job stressors, which await replication and further exploration.

Current Study

The current study examined whether individuals deviated from their typical patterns of marital anger, withdrawal, and support following days characterized by heavier workloads or more negative social interactions at work. Hierarchical linear modeling (HLM) methods were used to analyze daily data collected over 5 consecutive days from husbands and wives in two-earner families. There are several methodological advantages to the current study. As discussed above, the within-subject daily diary design significantly enhances the precision with which models of stressors, mood, and behavior can be examined and rules out individual-difference factors as alternative explanations for effects. In addition, the between-subjects analyses examine potential moderators of these effects, identifying who is most vulnerable to the daily effects of the stressors on marital interactions. In this study, job stressors and mood were measured at the end of each workday, and marital behaviors were measured each

evening. Although this strategy required greater participant effort, it created a temporal distance between the work and home measures. This temporal distance is critical to a test of spillover from one domain to the other, as it ensured that the descriptions of job conditions and mood are not colored by subsequent marital interactions. In addition, the multiple assessments limited the period of recall to a few hours, decreasing the likelihood of memory bias. The behavioral measures asked individuals to describe the degree to which they engaged in specific marital behaviors, yielding greater specificity than could have been provided by global measures of relationship quality or conflict. Furthermore, partners do not consistently confirm spouses' behavioral reports on high-stress days (Bolger et al., 1989), and all effects were reestimated using partner reports of marital behavior, demonstrating the extent to which findings are specific to self-perceptions or extend to observer reports. Finally, previous studies have typically provided indirect support for mood as a mechanism of the daily behavioral effects (e.g., Hughes et al., 1992), and we subjected this hypothesis to the more stringent analysis of mediation.

Hypotheses

HLM techniques were used to examine within-subject associations between daily stressors and marital behaviors as well as between-subjects moderators of these effects. First, the daily associations between job stressors (workload and negative social interactions at work) and marital behaviors (anger and withdrawal) were examined. We hypothesized that individuals would report greater anger and withdrawal on days of greater job stressors (Bolger et al., 1989; Repetti, 1989; Schulz et al., 2004). In addition, the use of partner reports allowed us to evaluate the extent to which partners observed changes in their marital behaviors on these days.

Negative mood was examined as a mechanism of the daily within-subject effects. In accordance with the models of mood spillover and withdrawal-based coping (e.g., Repetti, 1989), we hypothesized that negative mood acts as a mediator between negative experiences at work and evening marital interactions. There are three steps to an analysis of mediation. First the independent variable (job stressor) must predict the outcome variable (marital behavior). Then, the job stressor must predict the putative mediator (negative mood). Finally, when the daily stressor and mood are simultaneously entered into the model, negative mood should predict behavior, whereas the contribution of the job stress predictor should be reduced. Negative mood was tested as a mediator for each of the significant within-subject effects.

We also tested whether the effects of daily stressors on marital interaction differed across individuals according to three characteristics of the family and the marriage: the degree of conflict in the family environment, the amount of emotional support typically received from a spouse, and marital satisfaction. On the one hand, a conflictual family environment would be expected to exacerbate both mood spillover and withdrawal-based coping responses to job stress. That is, feelings of irritability or frustration generated at work may precipitate conflictual marital interactions to the extent that open expressions of anger and hostility are common and accepted in the household. If high-conflict families are more vulnerable to negative mood spillover, then spouses in these families may be more motivated to avoid social interaction following stressful days at work. On the other hand, a supportive spouse, a high level of marital satisfaction, and a relatively harmonious family life may act as buffers that help shield marital relationships from the indirect effects of daily job stressors (e.g., Cox et al., 1999; Shapiro et al., 2000). This line of reasoning suggests that the very couples who are already most at risk for marital difficulties would be most vulnerable to the deleterious effects of stressors on their marriage.

Method

Participants

Analyses involved 43 dual-earner couples who participated in the University of California, Los Angeles (UCLA) Family Development Study. These data were collected in the 2nd year of a larger 3-year longitudinal study of stress and coping. Families were recruited for the 3-year study when a target child in the fourth grade at one of three schools in the Los Angeles area was provided with a description of the study. Of the 677 families who were invited, 248 (37%) agreed to participate in the longitudinal study. A subset of the families who agreed to participate ($N = 112$) were deemed eligible for the smaller daily report study because (a) they had participated in the previous year and (b) both parents in the household worked at least part time, within a more or less regular work schedule (e.g., 9 a.m. to 5 p.m.). Of the 112 families who were eligible for the daily report study, 83 families (74%) agreed to participate. Chi-square analyses and *t* tests indicated no demographic differences between those who agreed to participate and those who did not agree to participate. Of these 83 families, 30 families were excluded from the analyses presented here either because they were single-parent families or because one parent did not work during the week of data collection or failed to complete the daily measures. Of these 53 couples, 10 couples were excluded from subsequent analyses owing to insufficient data on the part of at least one spouse. The 10 couples excluded from data analysis did not differ significantly from the remaining 43 couples on marital satisfaction, average daily job stressors, or demographic variables.

The analyses reported here were based on the final sample of 43 couples who participated in the daily report study. They were a middle-aged, middle-class sample. The average length of marriage was 16.5 years ($SD = 5.1$), and couples had an average of 2.4 children ($SD = 0.9$). The mean age was 45.8 years ($SD = 3.7$) for husbands and 42.8 years ($SD = 3.7$) for wives. On average, husbands had completed a master's-level degree, and wives had completed some coursework beyond a bachelor's degree. The mean number of hours worked per week was 47.0 ($SD = 10.0$) for husbands and 32.1 ($SD = 13.3$) for wives, a statistically significant difference, $t(39) = -5.26$, $p < .001$. The mean family income ranged between $80,000 and $100,000. Of the 86 participants, 87% were Caucasian, 5% were Asian or Pacific Islander, 4% were Latino, and 4% identified themselves as belonging to another ethnic group.

Procedure

For the daily report study, each family selected a week with a "typical" schedule (Monday through Friday) during the school year. During their selected week, couples completed four diary forms each day: in the morning at home, in the afternoon at work, in the early evening at home, and in the late evening at home, before going to bed. The measures of job stressors and mood were completed at the end of each workday (second daily diary form). The measures of marital behavior were completed at the end of the day, before going to bed (fourth daily diary form). Each spouse responded separately to the measures of daily marital behavior, provided that they had spent at least 30 min together. If couples missed a scheduled data collection, they were instructed to skip that diary rather than attempt to respond retrospectively. Each spouse was paid $50 for his or her participation.

Several steps were taken to maximize compliance with the daily data collection procedures. First, researchers visited families in their homes just prior to the data collection week to review the procedures in detail and to answer any questions. During the home visits, participants completed sample diary forms and discussed advance planning for the changes in their daily routines that participation in the study would entail. Second, participants were given watches that were preprogrammed (according to that individual's daily schedule) to signal alarms at the appropriate moments in each day as a cue to complete diary forms. Finally, families received evening telephone calls from a researcher. The calls not only acted as daily reminders but also were opportunities for the researcher to address any questions that may have arisen and to inquire about any difficulties that the participants may have encountered with the procedures.

In addition to data collected as part of the daily report study, some of the analyses reported here also included data from the annual questionnaire that was completed as part of the longitudinal study. Measures of marital satisfaction, marital support, and family conflict were used to assess between-subjects differences in family functioning.

Materials

Daily diary measures, those completed before leaving work each day (second daily diary form) and the marital behavior scales completed in the evening before going to bed (fourth daily diary form), are presented first. The measures of between-subjects differences in family functioning are described next. Correlations between the variables are presented in Table 1.

Table 1
Correlations Between Negative Mood and Couple Functioning

Variable	1	2	3	4
1. Negative mood	**−.01**	.24	−.24	−.33*
2. Family conflict	.29	**.69*****	−.50**	−.62**
3. Emotional support	.06	−.40**	**.60*****	.84***
4. Marital satisfaction	−.19	−.55***	.82***	**.74*****

Note. $N = 43$ wives (above diagonal) and 43 husbands (below diagonal). Values shown in bold are intercorrelations between husbands' and wives' variables. The daily mood scores were averaged over 5 days.
$^{*}p < .05$. $^{**}p < .01$. $^{***}p < .001$, two-tailed.

Workplace Daily Diary Measures

Daily job stressors. At the end of each workday (second daily diary form), individuals described their experiences with two potential job stressors: negative social interactions at work and workload. The five-item Busy Day Scale inquires about the amount and pace of workload that day (Repetti 1989, 1993; Repetti & Wood, 1997a). It includes items such as "There were more demands on my time than usual" and "I could have used more time for a break." A 4-point response scale, anchored at 1 (*completely inaccurate*) and 4 (*completely accurate*), was used, and a mean score was computed each day ($M = 2.29$, $SD = 0.72$). Previous analyses indicated significant day-to-day associations between this scale and objective measures of daily workload (Repetti, 1989) in a sample of air-traffic controllers. In the current sample, Cronbach's alpha ranged between .78 and .90 for wives and between .68 and .92 for husbands, across the different days of the week.

The seven-item Negative Social Interactions at Work Scale (Repetti, 1993) asked individuals to rate the extent to which they experienced negative feelings (e.g., *resentful*, *tense*, *distant*) during interactions with supervisors and coworkers that day. Participants rated the same seven feelings on a 4-point scale ranging from 1 (*rarely*) to 4 (*almost always*) to describe their interactions with supervisors and, again, to describe their interactions with coworkers. The mean of all 14 ratings was computed ($M = 1.26$, $SD = 0.32$). The Negative Social Interactions at Work Scale is a valid and reliable measure of interpersonal difficulties at work. It has been shown to correlate reliably with independent measures of satisfaction with social relationships at work and social support in the workplace (Repetti, 1993). Across the different days of the week, Cronbach's alpha ranged between .87 and .91 for wives and between .83 and .91 for husbands in this sample. The correlation between mean daily workload and mean daily negative social interactions at work was significant ($r = .32$, $p = .04$, for husbands and $r = .32$, $p = .03$, for wives), indicating a moderate level of association between the two aspects of workplace stressors.

Negative mood. At the end of each workday, each spouse rated a series of 11 adjectives describing his or her negative mood (second daily diary form). This scale was developed and revised in other daily report studies (Repetti, 1989; Repetti & Wood, 1997a) and was composed of the following items: *frustrated*, *sad*, *tired*, *angry*, *emotionally drained*, *skeptical*, *tense*, *overwhelmed*, *nervous*, *clutched-up*, and *impatient*. Each item was rated as 1 (*did not experience this mood at all today at work*), 2 (*slightly applied to how I felt at work*), or 3 (*definitely applied to how I felt today at work*). A total score was created for each partner by averaging across the items. Participants' mean score on this scale was 1.34 ($SD = 0.36$). Cronbach's alpha ranged between .83 and .91 for wives and .69 and .82 for husbands, across different days of the week.

Evening Measures of Daily Marital Behavior

The self-report and partner-report measures of each spouse's behavior (marital anger, withdrawal, and support) were adapted from similar measures used in another study (Repetti, 1989). Many of the items were adapted from the Spouse Observation Checklist (Weiss & Perry, 1983). Each item was rated (fourth daily diary form) as "true," "false," or "not applicable," and totals reflected the sum of "true" responses.

The Marital Anger Scale asked partners to describe their expressions of criticism, sarcasm, and disapproval during marital interactions that evening. The scale included 19 items such as "I started an argument" and "I got angry and wouldn't tell my partner

why." On average, our participants endorsed 2.66 out of 19 items. Cronbach's alpha ranged between .81 and .91 for wives and between .85 and .89 for husbands, across different days of the week. Spouses additionally reported their perceptions of their partners' anger on 18 parallel items, such as "My partner started an argument" and "My partner got angry and wouldn't tell me why." On average, our participants endorsed 2.16 out of 18 items. Cronbach's alpha for the partner's report ranged between .76 and .93 for wives and between .80 and .92 for husbands, across different days of the week.

Items on the Marital Withdrawal Scale describe a lack of interest in interactions with one's spouse and being distracted and nonresponsive. The scale included 12 items, such as "I read the paper (or watched TV) when my partner probably would have preferred some attention" and "I was too tired to interact with people." On average, our participants endorsed 2.04 out of 12 items. Cronbach's alpha ranged between .64 and .88 for wives and between .61 and .76 for husbands, across different days of the week. Spouses additionally reported their perceptions of their partners' withdrawal from interaction on 10 parallel items, such as "My partner read the paper (or watched TV) when I would have like some attention" and "My partner was too tired to do anything." On average, our participants endorsed 1.50 out of 10 items. Cronbach's alpha for the partner's report ranged between .66 and .82 for wives and between .63 and .81 for husbands, across different days of the week.

Owing to the skewed distribution of the behavioral variables, a natural log transformation was performed on the marital behavior variables prior to the analyses reported here.

Family-Difference and Individual-Difference Variables

Spouses completed the following paper-and-pencil measures during Year 2 of the longitudinal study, the same year as the daily diary study.

Family conflict. The nine-item Conflict subscale of the Family Environment Scale (Moos & Moos, 1981) is a widely used measure of anger, aggression, and conflict in families and is considered a valid and reliable measure of family conflict (Touliatos, Perlmutter, & Straus, 1990). The scale consists of items such as "Family members hardly ever lose their tempers" (reverse scored), "Family members sometimes hit each another," and "Family members often criticize each other." Items were rated on a Likert scale, ranging from 1 (*definitely false*) to 4 (*definitely true*), and scores were computed by averaging across the nine items. As shown in Table 1, there was a high correlation between husband and wife reports of family conflict ($r = .69$, $p < .001$). The scale Cronbach's alpha was .79 for husbands and .74 for wives.

Emotional support. The Partner Support subscale of the UCLA Social Support Inventory (Dunkel-Schetter, Feinstein, & Call, 1986; see Helgeson, 1993) assesses individuals' perceptions of their partners' general provision of emotional support. A total score reflects the mean of five items, rated on a scale from 1 to 5 (*never* to *very often*). For example, "At certain times we want to feel like a good person whom others think well of. Within the past three months, how often did your spouse convey respect, approval, and/or acceptance?" As shown in Table 1, there was a high correlation between husband and wife reports of emotional support ($r = .60$, $p < .001$). Cronbach's alpha was .93 for husbands and .93 for wives.

Marital satisfaction. Marital quality was assessed by the Satisfaction subscale of the Dyadic Adjustment Scale (DAS; Spanier, 1976), a valid and reliable measure of marital adjustment. The full 32-item scale assesses marital satisfaction, sense of cohesion, affection, and consensus. Husbands averaged 106.8 ($SD = 19.1$) and wives averaged 110.9 ($SD = 10.9$) on the total DAS, well above the traditional cutoff of 97 for marital distress, indicating that on average, the couples were relatively well adjusted. However, the standard deviations indicate that there is a moderate range of variability in marital functioning in this sample. The Satisfaction subscale was used in subsequent analyses to avoid confounding the DAS total score, which included behavioral items, with daily measures of marital behavior. The average marital satisfaction reported on the DAS Satisfaction subscale was 36.53 ($SD = 8.1$) for husbands and 37.93 ($SD = 8.3$) for wives.

Results

Hierarchical linear analysis techniques were used to examine the associations between daily job stressors (workload and negative social interactions at work) and marital behavior (anger and withdrawal) on 5 consecutive days. The HLM program (Bryk, Raudenbush, & Congdon, 1996) was used to examine a two-level model of stressors and behavior. Level 1 analyses examined daily within-subject associations between stressors and marital behavior as well as the daily within-subjects interactions between stressors and moderators. Level 2 analyses examined between-subjects differences (family conflict, emotional support, and marital satisfaction) as moderators of the within-subject effects. Although several of these moderator variables measure family or dyadic functioning, in this study they were assessed at the individual level of analysis (e.g., individual perceptions of family conflict). Following the model presented in Laurenceau and Bolger (2005), husband and wife effects were estimated in the same model for all analyses. Dummy variables were used to nest husband and wife data within each couple, yielding 5 rows (or days) of husband data and 5 rows of wife data for each couple. If there were no missing data, this approach would yield 430 rows of daily diary data (43 couples $\times$ 10 rows). Of the potential total of 430 days, 7 were skipped entirely by our respondents, and an additional 134 were lost when the HLM data file was created using listwise deletion. Thus, there were a total of 289 rows of data (150 days for husbands and 139 days for wives). The Level 1 and Level 2 models were estimated using random effects.

Linear Model of Marital Behavior

Before conducting the within-subject analyses, it was necessary to determine whether day of the week should be included in Level 1 analyses. To determine whether marital behaviors change systematically over the week, linear and quadratic models were estimated for each marital behavior (anger and withdrawal) over the 5 consecutive workdays. If marital behavior changes linearly over the week, then it should be modeled with an initial level (intercept) and a rate of change (slope). If the quadratic model is appropriate, the quadratic parameter can capture nonlinear, systematic change in behavior over the week.

Each behavior was estimated separately using Equations 1 and 2, respectively:

$$Y_{ij} = B_{1j}(\text{husband}) + B_{2j}(\text{wife}) + B_{3j}(\text{husband day}) + B_{4j}(\text{wife day}) + r_{ij} \quad (1)$$

$$Y_{ij} = B_{1j}(\text{husband}) + B_{2j}(\text{wife}) + B_{3j}(\text{husband day}) + B_{4j}(\text{wife day}) + B_{5j}(\text{husband day}^2) + B_{6j}(\text{wife day}^2) + r_{ij}, \quad (2)$$

where Y_{ij} represents the marital behavior on day i of couple j; B_{1j} represents the intercept of husband's behavior; B_{3j} represents the slope, or the rate of linear change in the husbands' marital behavior over time; B_{5j} represents the rate of quadratic change in the marital behavior over time; and r_{ij} represents error, assumed to be independent and normally distributed across couples. Using this model, the husband and wife variables are dummy variables, allowing spouses to be nested within couple. A significant day or day^2 parameter would indicate the use of the respective linear or quadratic model. The linear and quadratic models were estimated in four analyses (marital anger and withdrawal reported by self and partner). The day and day^2 parameters were not statistically significant in the respective linear and quadratic models of behavior. This pattern of results indicates that marital anger and withdrawal do not appear to vary systematically over the course of 1 week and that the day and day^2 parameters should not be included in subsequent analyses.

Tests of Daily Within-Subject Behavioral Effects

Daily Job Stressors and Marital Behavior

Within-subject analyses examined the same-day associations between individuals' exposure to job stressors and their subsequent marital behavior. Individuals were expected to report more negative marital interactions on days of higher job stress. The within-subject effects were estimated at Level 1, using the following equation:

$$Y_{ij} = B_{1j}(\text{husband}) + B_{2j}(\text{wife}) + B_{3j}(\text{husband job stressor}) + B_{4j}(\text{wife job stressor}) + r_{ij}, \quad (3)$$

where Y_{ij} represents the behavior on day i of couple j. To estimate the parameters of this equation for each couple, job stressor scores were centered around the weekly mean, using group-mean centering. Significant estimates of the parameters B_{3j} and B_{4j} indicate that daily changes in the job stressors were associated with day-to-day changes in marital behaviors. Each equation examines the association between one job stressor (workload or negative interactions at work) and one marital behavior (marital anger or withdrawal). To address the potential role of self-report biases, each model was separately estimated using behaviors obtained by self-report and partner report.

Table 2 presents the results of eight separate analyses that tested the association between two daily job stressor predictor variables and two marital outcome variables, as described by self-report and partner report. Within each of the eight models, one parameter represented husbands' daily ratings of job stressors (B_{3j}) and one represented wives' daily job stressors (B_{4j}). Thus, with respect to the prediction of husbands' marital behavior, four parameters in Table 2 tested the effect of a husband daily job stressor variable as a predictor of husbands' later self-reported marital behavior, and four parameters tested a husband daily job stressor as a predictor of wives' reports of the husbands' behavior. As shown in the table, husbands' reports of more negative

Table 2
Within-Subject Associations Between Daily Job Stressors and Marital Behaviors

Variable	Perceived workload as a predictor			Negative social interactions at work as a predictor		
	Coefficient	*SE*	*p*	Coefficient	*SE*	*p*
Daily marital anger						
Husbands						
Self-reported behavior	.01	.01	.42	.08	.02	.003
Partner-reported behavior[a]	.05	.02	.02	.04	.04	.37
Wives						
Self-reported behavior	.03	.02	.03	.16	.03	< .001
Partner-reported behavior[a]	.01	.01	.57	−.03	.03	.21
Daily marital withdrawal						
Husbands						
Self-reported behavior	.01	.02	.48	.17	.04	< .001
Partner-reported behavior[a]	.03	.01	.04	−.03	.04	.51
Wives						
Self-reported behavior	.05	.02	.003	.16	.04	.001
Partner-reported behavior[a]	−.004	.02	.80	−.04	.03	.21

Note. $N = 43$ husbands and 43 wives, two-tailed. Husbands and wives described job stressors, mood, and their own and their partner's marital behavior on 5 consecutive days. Each day was recorded as a row of data for each spouse. Listwise deletion yielded a total of 150 days of data for husbands and 139 days of data for wives.
[a] As described by marital partner.

social interactions at work were associated with a same-day increase in husbands' self-reported marital anger and marital withdrawal, but partners' reports did not confirm increases in husbands' marital anger or withdrawal on these days. Heavy workload was not associated with increases in husbands' self-reported marital anger or withdrawal. However, partners did report increases in husbands' expressions of anger and withdrawal following busy days at work.

All four of the within-subject analyses predicting wives' self-reported marital behavior resulted in significant effects. Following days at work that were more demanding and pressured, wives described higher levels of marital anger and withdrawal. Following days with more negative social interactions at work, wives also reported increases in their marital anger and withdrawal. However, none of these effects were confirmed by their partners' descriptions of wives' behavior each evening.

Thus, the results of the HLM analyses presented in Table 2 indicate that husbands and wives reported both more marital anger and more marital withdrawal after days when they had described more distressing interactions with coworkers and supervisors. In addition, wives reported significantly more marital anger and withdrawal on days of increased workload. Wives also described increases in their husbands' expressions of anger and withdrawal following days that their husbands had described as more demanding. Partner reports did not confirm the other findings based on self-reported marital behavior.

Negative Mood as a Mediator

It was hypothesized that job stressors would be linked to changes in marital interaction at least in part through negative mood at the end of the workday. In order to test negative mood as a potential mediator of these behavioral effects, the three steps of mediation (Baron & Kenny, 1986) were examined. The self-report measures of marital behaviors were used in all analyses of mediation. We begin our discussion of these analyses with an examination of wives' workload as the predictor of wives' behavior.[1] Wives' workload has already been shown to predict their self-described marital anger and withdrawal. In addition, wives' daily negative mood was significantly predicted by their reports of heavier workload ($B = .13$, $SE = .03$), $t(42) = 3.88$, $p = .001$. To test the mediation hypothesis, wives' negative mood and workload variables were entered simultaneously in the prediction of their self-reported marital anger and withdrawal. If wives' negative mood mediates the association between job stressors and marital behavior, then the coefficient associated with the workload should be reduced, and the coefficient associated with mood should remain significant.

The results suggested that both of the associations between wives' daily workload and marital behavior (anger and withdrawal) were mediated by negative mood. When workload and negative mood were simultaneously entered in the prediction of self-reported daily marital anger, the coefficient for daily workload was reduced to nonsignificance ($B = .02$, $SE = .02$), $t(42) = 0.99$, $p = .33$, but negative mood remained a significant predictor ($B = .16$, $SE = .03$), $t(42) = 5.84$, $p < .001$. When workload and negative mood were simultaneously entered in the prediction of self-reported daily marital withdrawal, the workload coefficient was reduced to nonsignificance ($B = .02$, $SE = .02$), $t(42) = 1.31$, $p = .20$, but the coefficient for negative mood remained significant ($B = .17$, $SE = .04$), $t(42) = 3.98$, $p < .001$.

Next we examined the associations between daily negative interactions at work and marital behavior. First, as shown in Table 2, husbands' and wives' descriptions of more negative social interactions at work predicted increases in their self-reported marital anger and withdrawal later that evening. Second, negative social interactions at work significantly predicted negative mood for husbands ($B = .57$, $SE = .09$), $t(42) = 6.51$, $p < .001$, and for wives ($B = .57$, $SE = .06$), $t(42) = 9.45$, $p < .001$. Finally, negative mood and negative interactions at work were entered simultaneously in the prediction of the two daily marital behaviors.

Of the four significant associations between negative interactions at work and marital behavior (two behaviors for husbands and wives), only the two predicting wives' behavior appeared to be mediated by negative mood. When wives' negative interactions at work and negative mood were simultaneously entered in the prediction of self-reported daily marital anger, the coefficient associated with negative interactions at work was reduced to marginal significance ($B = .08$, $SE = .04$), $t(42) = 1.74$, $p = .09$, whereas negative mood remained a significant predictor ($B = .13$, $SE = .04$), $t(42) = 3.38$, $p = .002$. When wives' negative interactions at work and negative mood were simultaneously entered in the prediction of self-reported daily marital withdrawal, the coefficient for negative interactions at work was reduced to nonsignificance ($B = .07$, $SE = .05$), $t(42) = 1.39$, $p = .17$, while negative mood remained a significant predictor ($B = .13$, $SE = .05$), $t(42) = 2.83$, $p = .008$. However, when husbands' negative interactions at work and negative mood were simultaneously entered in the prediction of daily marital anger, the coefficient associated with negative interactions at work was reduced to marginal significance ($B = .07$, $SE = .03$), $t(42) = 1.96$, $p = .06$, and the negative mood coefficient was nonsignificant ($B = .03$, $SE = .05$), $t(42) = 0.70$, $p = .49$. When husbands' negative interactions at work and negative mood were simultaneously entered in the prediction of self-reported daily marital withdrawal, the coefficient for negative interactions at work remained significant ($B = .16$, $SE = .04$), $t(42) = 3.82$, $p = .001$, whereas negative mood was no longer a significant predictor ($B = .03$, $SE = .03$), $t(42) = 0.95$, $p = .35$.

[1] We do not present mediation analyses for husbands' workload because their workload did not predict their self-reported marital anger or withdrawal.

Family-Difference Moderators

This study tested a two-level model of daily stressors and marital behavior. The Level 2 analyses examined whether the within-subject effects held equally across subjects or whether they were moderated by family differences. Three between-subjects moderators of the daily behavioral effects were tested: marital satisfaction, marital support, and family conflict. As in the Level 1 analyses, husband and wife data were estimated in the same model, yielding a total of twelve analyses (two job stressors, two marital behaviors, three moderators). Between-subjects effects were modeled at Level 2, with job stressor scores centered around the sample mean, using grand mean centering. Level 2 models were tested with self-reported marital behavior as the outcome variables. Marital support did not moderate the effects of daily job stressors on husbands' or wives' marital behavior, nor did marital satisfaction moderate the effects of daily stress on husbands' reports of their marital behavior. However, family conflict proved to be a very important moderator of the daily effects of job stressors on both husbands' and wives' behavior, and marital satisfaction was a significant moderator of wives' behavior.

The results of four analyses testing family conflict as a Level 2 moderator are presented in Table 3. As can be seen in the table, family conflict moderated the daily association between workload and marital anger among both husbands and wives. To illustrate these significant effects, coefficients for daily workload as a predictor of husbands' marital anger were estimated at one standard deviation above and below the mean level of family conflict (high family conflict, $B = .03$; mean family conflict, $B = .01$; low family conflict, $B = -.02$). The same analysis was performed for daily workload as a predictor of wives' marital anger (high family conflict, $B = .06$; mean family conflict, $B = .03$; low family conflict, $B = -.001$). The larger positive coefficients associated with high family conflict indicate that the same-day associations between workload and husbands' and wives' self-reported marital anger were strongest in high-conflict families.

Family conflict also moderated the daily association between workload and marital withdrawal for husbands, and there was a trend for family conflict to also moderate that association for wives. As above, to illustrate these effects, coefficients were estimated one standard deviation above and below the mean level of family conflict for marital withdrawal for husbands (high family conflict, $B = .04$; mean family conflict, $B = .01$; low family conflict, $B = -.01$) and for wives (high family conflict, $B = .07$; mean family conflict, $B = .05$; low family conflict, $B = .03$). The patterns indicate that the same-day associations between workload and marital withdrawal were strongest in high-conflict families.

There was a trend for family conflict to also moderate the association between negative workplace social interactions and marital anger among wives, but not among husbands. To illustrate this effect, coefficients were estimated one standard deviation above and below the mean level of family conflict for wives (high family conflict, $B = .17$; mean family conflict, $B = .15$; low family conflict, $B = .12$). Once again, the findings indicated that the same-day associations between negative social interactions and marital anger were strongest in high-conflict families.

Finally, family conflict moderated the daily associations between negative workplace social interactions and marital withdrawal for both husbands and wives. Coefficients were estimated one standard deviation above and below the mean level of family conflict for husbands (high family conflict, $B = .21$; mean family conflict, $B = .15$; low family conflict, $B = .08$) and for wives (high family conflict, $B = .20$; mean family conflict, $B = .15$; low family conflict, $B = .10$). The pattern of findings indicated that the same-day associations between negative social interactions at work and subsequent expressions of marital anger and withdrawal were strongest in high-conflict families. Overall, the findings from the Level 2 analyses reported in Table 3 were consistent with the hypothesis that a conflictual family environment exacerbates both mood spillover and social withdrawal as short-term responses to job stress.

Of the four analyses of marital satisfaction as a moderator of job stressors (two job stressors, two self-reported marital behaviors), only one suggested that daily responses to job stressors differed according to marital satisfaction. Marital satisfaction moderated the daily association between wives'

Table 3
Family Conflict as a Level 2 Moderator of the Daily Effects of Two Job Stressors on Self-Reported Marital Behavior

	Perceived workload			Negative social interactions at work		
Variable	Coefficient	*SE*	*p*	Coefficient	*SE*	*p*
Marital anger						
Husbands	.04	.02	.01	.05	.04	.21
Wives	.08	.02	< .001	.06	.04	.07
Marital withdrawal						
Husbands	.05	.02	.002	.13	.03	< .001
Wives	.05	.03	.07	.13	.04	.003

Note. $N = 43$ husbands and 43 wives, two-tailed. Husbands and wives described job stressors, mood, and marital behavior on 5 consecutive days. Each day was recorded as a row of data for each spouse. Listwise deletion yielded a total of 150 days of data for husbands and 139 days of data for wives.

daily workload and their self-reported marital withdrawal ($B = -.002$, $SE = .0008$), $t(41) = -2.48$, $p = .02$. Coefficients were estimated one standard deviation above and below the mean level of marital satisfaction for marital withdrawal (high marital satisfaction, $B = .02$; mean marital satisfaction, $B = .04$; low marital satisfaction, $B = .05$). These coefficients indicated that the same-day association between workload and marital withdrawal was weakest among wives with high marital satisfaction.

Discussion

The present study examined associations between job stressors and marital behaviors on 5 consecutive days, using HLM. Consistent with hypothesized effects, there were significant associations between perceived daily job stressors and later behaviors during marital interaction. Specifically, wives reported greater marital anger and withdrawal on days when they experienced a heavy workload, and husbands and wives reported greater marital anger and withdrawal on days when they experienced more negative social interactions at work. Husbands and wives appeared to have been more self-absorbed, to have been less responsive, and to have desired less social interaction on days of high job stress. However, there is also clear evidence that they were more likely to be impatient, critical, and tense, leading to more marital conflict on these days. In fact, we did not find any evidence in this sample of declines in marital anger on high-stress days, which have been reported in some previous research (Repetti, 1989; Schulz et al., 2004).

It is notable that our findings are consistent with the study reported by Schulz et al. (2004), in which there was some evidence suggesting that wives, but not husbands, were more likely to report expressing anger toward their partners following heavy workload days. Future work may begin to clarify the unique experiences of husbands and wives in the home while recovering from a stressful workday. It is possible that differences in men's and women's responsibilities for household chores and child care may contribute a greater reactivity among wives following a hectic workday.

We were interested in whether the effects that job stressors had on perceptions of one's own behavior would also extend to the partner's observations. Wives described their husbands as more angry and withdrawn following days of heavier workload, but neither husbands nor wives observed any other workday effects. This is consistent with previous research suggesting that partners have distinct perceptions of their marital interactions (e.g., Schulz et al., 2004). To date, the evidence for negative emotion spillover and withdrawal as a coping response to daily job stressors is primarily based on self-reported perceptions of marital behavior.

Role of Negative Mood as a Mediator of Daily Job Stressor Effects

Negative mood has been proposed as one mechanism by which daily stressors affect subsequent marital interactions. According to the mood spillover hypothesis, daily stressors generate negative emotions in the employed individual, which contribute to an atmosphere of conflict and irritability when directly carried into the home. The process of coping with a stressful workday may also affect marital interaction through increased withdrawal and self-focus, as individuals attempt to regulate their negative arousal following a stressful day. Negative afternoon mood was examined as a putative mediator between daily job stressors (workload and negative social interactions at work) and daily marital behaviors (anger and withdrawal). These analyses provided support for negative mood mediating the effects of heavy workload on wives' marital anger and withdrawal, as well as mediating the effects of wives' negative social interactions at work on marital anger and withdrawal. Thus, the evidence was consistent with models of both negative mood spillover and social withdrawal as a coping response. However, mood did not appear to mediate husbands' effects, suggesting that some other factor may be predisposing husbands to negative interactions with their wives following stressful workdays.

Moderators of the Short-Term Effects of Stressors on Marital Behavior

Three stable characteristics of marriages and families—family conflict, marital satisfaction, and marital support—were examined as potential moderators of the daily behavioral effects. Our data suggest that the individuals in families with social climates described as more conflictual were more reactive to daily job stressors. Both husbands and wives in higher conflict families were more likely to express anger and to withdraw from marital interaction on evenings following stressful workdays. Thus, spouses appeared to be more likely to bring feelings of irritability and frustration into the home in families where such expressions of anger were generally more accepted or commonplace. Spouses in these families also appeared more likely to withdraw from their partners on stressful days, perhaps in an attempt to avoid such unpleasant interactions. Likewise, wives with higher marital satisfaction appeared less likely to withdraw from marital interaction following busy workdays. It is notable that this was the only evidence of the buffering effects of positive relationship factors, as other research has indicated that such positive relationship factors buffer the effects of stressors over time (e.g., Cox et al., 1999).

In general, however, the pattern of results we obtained is consistent with findings from other studies in pointing to the promise of approaches that search for individual or family differences in the short-term effects of job experiences (Repetti & Wood, 1997a). There is no reason to expect that all families would be affected by job stressors in the same manner. Therefore, weak or nonsignificant associations between experiences at work and marital or family interaction may not always reflect a uniformly weak effect. Depending on family circumstances and individual characteristics, the daily effects of job stressors may range quite a bit. This suggests one reason why effect sizes in this area of research tend to be small: Effects that are substantial within a certain subgroup (e.g., high-conflict families) may appear weak in a random sample (Repetti, 2005).

Limitations and Directions for Future Research

Our findings must be considered in the context of several study limitations. First, although the sample size in our study is not small relative to other daily report studies, statistical power may have limited our ability to detect some of the effects that were hypothesized. For example, a larger sample may have uncovered more moderator effects at Level 2 or more significant findings based on partner reports. Second, the generalizability of these findings may be limited to middle-class couples in which both partners work outside the home. However, as indicated above, the use of a homogeneous sample may have improved our ability to detect effects with a relatively small sample. Third, the measures of marital behavior and job stressors were dependent on couples' descriptions of their experiences. One potential explanation for our findings is that negative mood following a stressful day at work temporarily biases social perception more than it changes actual behavior. Distinctions between the effects that daily job stressors may have on social behavior and on social perception can be made only through studies that include more objective measures of both daily stressors and behavior. All of these limitations must be acknowledged within the context of the extensive time and effort required by participants, who were asked to complete four daily diaries over 5 consecutive days. Whereas these extensive demands may have limited the sample size, the breadth of behavioral measurement, and the sample characteristics, this methodology allowed for daily within-subject comparisons of job stressors and behavior, as well as self-reports and partner reports of marital behavior. These strengths significantly contributed to our ability to observe an association between job stressors and marital behavior.

Our findings identify negative mood as one mechanism by which job stressors affect marital behavior, but further research is needed to identify other potential mechanisms. For example, individuals may be physically fatigued following a stressful workday. Fatigue has been linked to decreased involvement in household activities following a stressful workday (Crouter, Perry-Jenkins, Huston, & Crawford, 1989) and may also lead to other forms of behavioral withdrawal. In addition, individuals appear to be more physiologically aroused following a stressful and tiring workday, which may predispose them to more negative marital interactions on these days (Roberts & Levenson, 2001). Research that incorporates biological measures will help to specify the role of physiological stress mechanisms linking job stressors and social behaviors. Likewise, cognitive models underscore the potential for individuals' expectations regarding housework or marital interaction to affect conflict and withdrawal behaviors. Individuals may become more easily frustrated with their partners' contribution to household chores following a difficult workday, and they may withdraw from marital interaction if they have more negative expectations about their partners' responses. The role of gender in these expectations may provide a particularly fruitful direction for future study. Future research may also explore the differential predictors of daily stressors on anger versus withdrawal, specifying when the models of mood spillover versus withdrawal as a coping process are most likely to apply.

Further research is also needed to identify how associations between short-term stressors and marital functioning may be linked to long-term changes in marital quality over time. For example, marital withdrawal on stressful days may serve as a protective function in the short term (Repetti, 1989), but chronic marital withdrawal appears to damage marital quality over time (Heavey, Christensen, & Malamuth, 1995). Likewise, spouses whose family lives were characterized by conflict and open expressions of anger reported greater anger and withdrawal on stressful days in our study, but longitudinal research is needed to specify the direction of these effects. Family conflict may trigger marital anger and withdrawal on stressful days, or couples who respond to stressors with anger and withdrawal may become conflictual over time.

Conclusion

This study's findings add to a small but growing research literature on the influences that work experiences can have on the quality of marital interactions. On days of high workload, wives reported greater anger and withdrawal during interactions with their partners. On days of negative social interactions at work, husbands and wives reported greater anger and withdrawal during interactions with their partners. Tests of negative mood as a mediator of these effects provide support for mood spillover and withdrawal as a coping response. Level 2 analyses demonstrated that individuals in high-conflict families were especially likely to express anger and to withdraw from marital interaction following a stressful workday. By examining the proximal effects of stressors on marital functioning, daily diary studies can identify the distinct effects of stressors on different marital behaviors, specify the role of negative mood in this process, and begin to identify factors that may put couples at risk for the negative effects of stressors on their marriage.

References

Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51,* 1173–1182.

Bolger, N., DeLongis, A., Kessler, R. C., & Wethington, E. (1989). The contagion of stress across multiple roles. *Journal of Marriage and the Family, 51,* 75–183.

Bryk, A. S., Raudenbush, S. W., & Congdon, R. T. (1996). *HLM: Hierarchical linear and nonlinear modeling with HLM/2L and HLM/3L programs.* Chicago: Scientific Software International.

Clarkberg, M., & Moen, P. (2001). Understanding the time-squeeze: Married couples' preferred and actual work-hour strategies. *American Behavioral Scientist, 44,* 1115–1136.

Conger, R. D., Rueter, M. A., & Elder, G. H., Jr. (1999). Couple resilience to economic pressure. *Journal of Personality and Social Psychology, 76,* 54–71.

Cox, M. J., Paley, B., Burchinal, M., & Payne, C. C. (1999). Marital perceptions and interactions across the transition to parenthood. *Journal of Marriage and the Family, 61,* 611–625.

Crouter, A. C., Bumpus, M. F., Head, M. R., & McHale, S. M. (2001). Implications of overwork and overload for the quality of men's family relationships. *Journal of Marriage and the Family, 63,* 404–416.

Crouter, A. C., Perry-Jenkins, M., Huston, T. L., & Crawford, D. W. (1989). The influence of work-induced psychological states on behavior at home. *Basic and Applied Social Psychology, 10,* 273–292.

Dunkel-Schetter, C., Feinstein, L., & Call, J. (1986). *UCLA Social Support Inventory.* Unpublished manuscript, University of California, Los Angeles.

Gottman, J. M., & Levenson, R. W. (1986). Assessing the role of emotion in marriage. *Behavioral Assessment, 8,* 31–48.

Heavey, C. L., Christensen, A., & Malamuth, N. M. (1995). The longitudinal impact of demand and withdrawal during marital conflict. *Journal of Consulting and Clinical Psychology, 63,* 797–801.

Helgeson, V. S. (1993). Two important distinctions in social support: Kind of support and perceived versus received. *Journal of Applied Social Psychology, 23,* 825–845.

Hughes, D. L., & Galinsky, E. (1994). Work experiences and marital interactions: Elaborating the complexity of work. *Journal of Organizational Behavior, 15,* 423–438.

Hughes, D. L., Galinsky, E., & Morris, A. (1992). The effects of job characteristics on marital quality: Specifying linking mechanisms. *Journal of Marriage and the Family, 54,* 31–42.

Karney, B. R., & Bradbury, T. N. (1995). The longitudinal course of marital quality and stability: A review of theory, methods, and research. *Psychological Bulletin, 118,* 3–34.

Larson, J. H., Wilson, S. M., & Beley, R. (1994). The impact of job insecurity on marital and family relationships. *Family Relations: Interdisciplinary Journal of Applied Family Studies, 43,* 138–143.

Laurenceau, J. P., & Bolger, N. (2005). Using diary methods to study marital and family processes. *Journal of Family Psychology, 19,* 86–97.

Moos, R., & Moos, B. (1981). *Family Environment Scale.* Palo Alto, CA: Consulting Psychologists Press.

Perry-Jenkins, M., Repetti, R. L., & Crouter, A. C. (2000). Work and family in the 1990s. *Journal of Marriage and the Family, 62,* 981–998.

Repetti, R. L. (1989). Effects of daily workload on subsequent behavior during marital interaction: The roles of social withdrawal and spouse support. *Journal of Personality and Social Psychology, 57,* 651–659.

Repetti, R. L. (1992). Social withdrawal as a short-term coping response to daily stressors. In H. S. Friedman (Ed.), *Hostility, coping, and health* (pp. 151–165). Washington, DC: American Psychological Association.

Repetti, R. L. (1993). Short-term effects of occupational stress on daily mood and health complaints. *Health Psychology, 12,* 125–131.

Repetti, R. L. (1994). Short-term and long-term processes linking job stressors to father–child interaction. *Social Development, 3,* 1–15.

Repetti, R. (2005). A psychological perspective on the health and well-being consequences of parental employment. In S. M. Bianchi, L. M. Casper, & R. B. King (Eds.), *Work, family, health and well-being* (pp. 245–258). Mahwah, NJ: Erlbaum.

Repetti, R. L., & Wood, J. (1997a). Effects of daily stress at work on mothers' interactions with preschoolers. *Journal of Family Psychology, 11,* 90–108.

Repetti, R. L., & Wood, J. (1997b). Family accommodating to chronic stress: Unintended and unnoticed processes. In B. H. Gottlieb (Ed.), *Coping with chronic stress* (pp. 191–220). New York: Plenum Press.

Roberts, N. A., & Levenson, R. W. (2001). The remains of the workday: Impact of job stress and exhaustion on marital interaction in police couples. *Journal of Marriage and the Family, 63,* 1052–1067.

Schulz, M. S., Cowan, P. A., Cowan, C. P., & Brennan, R. T. (2004). Coming home upset: Gender, marital satisfaction and the daily spillover of workday experience into couple interactions. *Journal of Family Psychology, 18,* 250–263.

Shapiro, A. F., Gottman, J. M., & Carrere, S. (2000). The baby and the marriage: Identifying factors that buffer against decline in marital satisfaction after the first baby arrives. *Journal of Family Psychology, 14,* 59–70.

Spanier, G. B. (1976). Measuring dyadic adjustment: New scales for assessing the quality of marriage and similar dyads. *Journal of Marriage and the Family, 38,* 15–28.

Story, L. B., & Bradbury, T. N. (2004). Understanding marriage and stress: Essential questions and challenges. *Clinical Psychology Review, 23,* 1139–1162.

Straus, M. A. (1990). Social stress and marital violence in a national sample of American families. In M. A. Straus & R. J. Gelles (Eds.), *Physical violence in American families: Risk factors and adaptations to violence in 8,145 families.* New Brunswick, NJ: Transaction Publishers.

Touliatos, J., Perlmutter, B. F., & Straus, M. A. (1990). *Handbook of family measurement techniques.* Newbury Park, CA: Sage.

Weiss, R. L., & Perry, B. A. (1983). The Spouse Observation Checklist: Development and clinical applications. In E. E. Filsinger (Ed.), *Marriage and family assessment: A source book for family therapy* (pp. 65–84). Beverly Hills, CA: Sage.

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