# Relieving the Time Squeeze? Effects of a White-Collar Workplace Change on Parents 

Rachelle Hill, Eric Tranby ${ }^{*}$, Erin Kelly**, and Phyllis Moen ${ }^{* *}$<br>Rachelle Hill: hill0896@umn.edu<br>Department of Family Medicine and Community Health, University of Minnesota, 717 Delaware St. SE, Minneapolis, MN 55414<br>*Department of Sociology and Criminal Justice, 325 Smith Hall, 18 Amstel Ave., Newark, DE 19716<br>**Department of Sociology, University of Minnesota, 909 Social Sciences Building, 267 19th Ave. South, Minneapolis, MN 55455


#### Abstract

Employed parents perceive a time squeeze even as trends from the 1960s show they are spending more time with their children. Work conditions (e.g., hours and schedule control) would seem to affect both parents' time with children and perceived time squeeze, but most studies rely on crosssectional data that do not establish causality. The authors examined the effects of the introduction of a workplace flexibility initiative (Results Only Work Environment [ROWE]) on changes in mothers' and fathers' perceptions of the adequacy of their time with children and actual time spent with children ( $N=225$ ). Baseline data show the importance of work conditions for parents' sense of perceived time adequacy. Panel data show that mothers (but not fathers) in ROWE report increased schedule control and improved time adequacy, but no change in actual time spent with children, except that ROWE increases evening meals with children for mothers sharing few meals at baseline.


## Keywords

gender; interventions; parent - child relationships; parenting; work
Many parents experience a time squeeze - that is, feeling rushed, stressed, or otherwise pressed for time (Clarkberg \& Moen, 2001) - when attempting to combine employment with the demands of parenting. Inflexible workplaces (e.g., Moen \& Roehling, 2005; Williams, 2000) and cultural expectations for high parental involvement, especially for mothers (Hays, 1996; Townsend, 2002), exacerbate these challenges. Nevertheless, studies of trends in time use from the 1960s on show that working parents - especially mothers, but also fathers - are spending more time with their children (Bianchi, Robinson, \& Milkie, 2006; Craig, 2006; Craig \& Mullan, 2010; Sayer, Bianchi, \& Robinson, 2004). This disjuncture between parents' perceived time squeeze and their actual allocations of time with their children calls for dynamic models that examine changes in both over time, as well as the role of organizational policies and practices in shaping perceptions and time-related behavior.

Although workplace polices (e.g., telecommuting and flextime) have been implemented in hopes of easing the time squeeze, there is little research documenting the impact of those policies on either or both parents' sense of being squeezed for time or the time parents actually spend with their children. Flexible workplaces are assumed to make it easier for
parents to manage their multiple responsibilities and spend more time with their children. Yet research demonstrates that organizational policies "on the books" do not necessarily benefit employees, because employees may not be able to utilize them, or else the policies do not fully address family needs (Blair-Loy \& Wharton, 2002; Eaton, 2003).

In this research, we investigated whether parents' perceived time adequacy (which is the opposite of a subjective time squeeze) and time spent with children changed when a workplace underwent an initiative aimed at providing employees greater latitude over when and where they work. The workplace initiative we investigated is the Results Only Work Environment (ROWE), described in more detail below. The study population was whitecollar workers at the corporate headquarters of a Fortune 500 company we refer to as Streamline, including employees in groups that experienced ROWE and employees in groups that continued operating under traditional work rules and expectations. We investigated four outcomes; two are related to time allocations (time spent with children, number of evening meals with children), and two are related to the time squeeze (perceived time adequacy with children, perceived time adequacy with family). In recognition of gender differences in cultural expectations and family responsibilities for women and men (Hays, 1996; Moen \& Roehling, 2005; Townsend, 2002; Williams, 2010), we fit separate models for mothers and fathers.

First, we modeled the four outcomes for mothers and fathers at baseline to investigate whether existing work conditions - in particular, work hours, schedule control, and telecommuting - are important predictors of both time allocations and the time squeeze, above and beyond family characteristics. Second, we analyzed whether participating in ROWE increased mothers' and fathers' sense of control over when and where they work (which we call schedule control) and their telecommuting behavior. Third, we modeled the effects of ROWE and associated changes in schedule control and telecommuting on parents' time with children and time adequacy, again separately by gender.

These analyses extend other studies that found that ROWE increased employees' sense of schedule control and reduced work - family conflict (Kelly, Moen, \& Tranby, 2011); reduced turnover and turnover intentions (Moen, Kelly, \& Hill, 2011); and improved some health behaviors, such as sleep before work nights and exercise frequency (Moen, Kelly, Tranby, \& Huang, 2011) in that broader sample. The current study is unique in that it focused on parents and outcomes not reported in previous publications: time spent caring for children, number of evening meals eaten with children, parents' perceived adequacy of time spent with children, and parents' perceived adequacy of time spent with family more generally.

## The Importance of Work Conditions for Time With Children and Perceived Time Adequacy

Time With Children
Work time is a major determinant of the time parents spend with children (Sayer et al., 2004; Yeung, Sandberg, Davis-Kean, \& Hofferth, 2001). Scholars have found that longer work hours are related to parents spending less time with children under 18 (Milkie, Mattingly, Nomaguchi, Bianchi, \& Robinson, 2004). Married mothers who are employed full time, and fathers with a spouse employed full time, spend less time in child-centered activities such as eating dinner with their children and spending time with them (Milkie, Raley, \& Bianchi, 2009). But gender moderates the effects of work hours; even when both parents work full time, mothers spend more time with their children than do fathers (Craig, 2006). In addition, when a spouse works 35 or more hours, the other parent spends more
focused time with children, though it is not clear how such results might vary by gender or other work conditions (Milkie et al., 2004). Parents' work hours are also negatively related to frequency of eating the main meal with children (Milkie et al., 2004). Eating meals together seems to be related to children's healthy food intake and positive socioemotional development (Larson, Branscomb, \& Wiley, 2006), although causality has not been established (Musick \& Meier, 2012).

Work hours are conceptualized as a type of work demand in demands - resources models of the work - family interface (Schieman, Milkie, \& Glavin, 2009; Voydanoff, 2004), but parents may also benefit (or suffer) from other work conditions. Schedule control and a supportive organizational culture are two work resources that may facilitate managing the needs of work and family. Using a Dutch sample, Roeters, van der Lippe, and Kluwer $(2009,2010)$ examined the link between work conditions such as a family-unfriendly organizational culture, job security, and work hours for various parent - child activities. They found that when mothers are employed in an organization with a family-unfriendly culture, fathers tend to spend more interactive time with children. Fathers' work hours decrease fathers' interactive (e.g., reading with a child) and routine time (e.g., dressing a child) while increasing mothers' interactive time with children. Mothers' work hours and employment status also increase fathers' time in interactive activities with children and mothers' paid work hours decrease their own time spent in interactive and routine activities with children. Mothers' nonstandard work hours and work engagement of both mothers and fathers predict more parent - child interactions (Roeters et al., 2010). These findings suggest that nonstandard schedules and work engagement may support more parental time with children. Little research has focused on the link between specific work conditions (other than work time) and family meals, but Allen, Shockley, and Poteat (2008) examined this question with a small snowball sample of parents working at least 20 hours a week. They found that employees with more supportive supervisors typically eat more dinners with their families and that employees working off site (usually at home) purchase fewer fast food dinners for their children.

## Perceived Time Adequacy

Work hours also influence parents' sense of a time squeeze, in terms of their reports of time adequacy or inadequacy (Milkie et al., 2004, 2009). Almost half of parents in a national survey reported spending "too little" time with their children; working parents were more likely than those not employed, and fathers were more likely than mothers, to report inadequate time with children (Milkie et al., 2004). Fathers' time inadequacy reflects increased work hours over time (Milkie et al., 2004) and cultural expectations that men will be breadwinners in increasingly intensive jobs (Williams, 2010). Married mothers employed full time and fathers with a spouse employed full time report less time adequacy with children (Milkie et al., 2009). In fact, parents' work hours predict their perceptions of inadequate time with their children independently of the actual time parents spend with children regardless of gender, suggesting that work hours and possibly other work conditions affect parents' sense of time adequacy above and beyond actual time spent with children. Also, parents whose spouses work longer hours are less likely to report "too little" time with children (Milkie et al., 2004, p. 758), suggesting some time trade-offs between parents based on who works the longest hours. Accordingly, we examine both parents' work hours in our investigation of mothers' and fathers' sense of time adequacy.

In contrast to the effects of work hours, little is known about the effects of other work conditions for parents' perceived time adequacy, but one can look to the findings on work family conflict. A decomposition analysis showed that changes in autonomy, meaningful work, time pressure, dual-earner mothers, and employed single mothers between 1977 and 1997 contributed to the increase in work - family conflict (Nomaguchi, 2009). In addition,
employees' schedule control has a strong impact on work - family conflict or balance (Hill, Hawkins, Ferris, \& Weitzman, 2001; Moen, Kelly, \& Huang, 2008; Thomas \& Ganster,

## The Mismatch Between Time with Children and Perceived Time Adequacy

Research examining the total time spent with children (Bianchi et al., 2006; Sayer et al., 2004) and feelings of a time squeeze (Milkie et al., 2004, 2009) has arrived at apparently conflicting conclusions (Milkie et al., 2004); that is, although mothers and fathers have increased the time spent with children since the 1960s (Bianchi et al., 2006; Gauthier, Smeeding, \& Furstenberg, 2004; Sayer et al., 2004), mothers and fathers continue to feel a time squeeze and report feeling that time spent with their children is inadequate (Milkie et al., 2004, 2009). Most studies are unable to examine how or why there is a disconnect between time use and the time squeeze. Milkie and colleagues (2004) found that time with children is not related to perceived time inadequacy, whereas eating with children decreases a sense of inadequate time with children. Such findings suggest that parents may be oriented toward certain family events, like meals, that are socially expected, and potentially associated with quality family interactions, as much as the total time they spend with their children.

## How to Relieve the Time Squeeze for Mothers and Fathers?

This evidence on the importance of work conditions for parents' time with children and time adequacy suggests the value of finding ways to change workplace policies and practices to make a difference for parents. Many scholars and practitioners have called for increased workplace flexibility as a resource for managing dual responsibilities (Schieman et al., 2009; Voydanoff, 2004). More flexibility may benefit parents by increasing their sense of schedule control or actually shifting where or when they work (Singley \& Hynes, 2005). Increasing the availability and use of telecommuting allows working parents to care for younger children when outside care falls through, and to monitor older children. Schedule control may allow workers to deal with a variety of unexpected circumstances, such as illness or weather-related school closings that require occasional schedule adjustments. Being able to respond in such situations should increase parents' time adequacy and, potentially, affect their time with children.

Nevertheless, more flexibility over when and where work is done may negatively affect parents' time and perceived time squeeze if work boundaries become more permeable (Roeters et al., 2010; Schieman et al., 2009) and parents feel compelled to be available and continually engaged with work demands even during "nonwork" time. Little research has examined schedule control (or "flexibility") and the time squeeze specifically. Much research has found that employees with more flexibility report less work - family interference, but a recent study showed the reverse: that employees with more control over their schedules tend to have greater interference between work and nonwork (Schieman et al., 2009). Moreover, the pull of workplaces coupled with the demands of home life may lead parents to spend more time at work, thereby increasing feelings of strain (Hochschild, 1997).

Furthermore, work - family policies or initiatives that aim to increase employees' flexibility are experienced differently by mothers and fathers because of the unequal division of labor in the home (Bittman, England, Sayer, Folbre, \& Matheson, 2003), different expectations for women's and men's parental involvement (Hays, 1996; Townsend, 2002), and different implications of motherhood versus fatherhood for careers (Budig \& Hodges, 2010; Correll, Bernard, \& Paik, 2007). Qualitative evidence suggests that men and women approach workplace flexibility initiatives differently (Kelly, Ammons, Chermack, \& Moen, 2010),
and so the effects of a given initiative may differ as well. Moms may be more likely to use new opportunities either to meet their children's occasional needs (e.g., picking up a child early from an after-school program and telecommuting when a child is mildly ill) because of expectations about women's role as the primary parent. In addition, fathers' involvement in routine and urgent care (e.g., a sick child or children home from school because of a storm) varies widely (Maume, 2008). This differential response may be particularly important in white-collar workplaces, because fathers in such an environment may be more likely to feel the pressure of white-collar masculinities that prioritize careers (Connell, 2005; Kelly et al., 2010; Shows \& Gerstel, 2009; Williams, 2010). Although the demands for fathers' family time are also increasing (Milkie et al., 2004; Milkie \& Peltola, 1999), the differences in parenting and workplace expectations led us to investigate the effects of workplace policies on parents' time use and time squeeze experiences separately by gender.

## ROWE: A New Workplace Initiative

ROWE was rolled out at the headquarters of a large corporation - Streamline - located near Minnesota's Twin Cities. The ROWE initiative was developed inside the organization by human resources personnel at the suggestion of some executives who were disappointed in their employee satisfaction and engagement scores on a company survey (C. Ressler \& J. Thompson, personal communication, September 14, 2005). The human resources personnel took the opportunity presented by this organizational problem to develop an innovative approach that they believed would not only respond to employees' needs but also be accepted by management as good for the organization. It was piloted in the department with the troubling survey results and then rolled out across the corporate headquarters. We gathered data through the middle part of the roll-out in departments that included workers doing a wide variety of jobs, including accounting, purchasing, advertising, web development, market analysis, and clerical work. In March 2013, after this article was accepted for publication, the company announced that ROWE was ending. Our data were collected in 2006-2008. We do not have information on employees' experiences or management decisions after that point.

ROWE claims to reorient the organization toward measurable results while deemphasizing where and when work is completed and the amount of "face time" employees spend in the office (Moen, Kelly, \& Chermack, 2009; Ressler \& Thompson, 2008). ROWE differs from more common flexible work arrangements in several important ways. ROWE is framed as a collective effort to change the organizational culture rather than an individual "accommodation" in which select employees are allowed to shift their hours or telecommute. ROWE attempts to shift the culture so that the norm is flexibility regarding when, where - and, to some extent, how - employees do their work. ROWE was implemented at Streamline's corporate headquarters through four participatory training events lasting approximately 5 hours. In addition, managers participated in a leadership orientation lasting about 1.5 hours. The first session oriented employees to the ROWE philosophy and the process of change in their team. This was followed by a second session that critically examined the current organizational culture and the way it affected work practices and interactions, and developed a vision of the desired future state for the team. For example, in this session, employees role-played by sharing comments that arise from the current culture (e.g., "Just getting in?" "Your kid is sick again?") and practiced responding to them in ways that did not reinforce the old expectations about time norms (e.g., "Is there something you need?"). In the third session, employees were also prompted to clarify the outcomes (the "results") they are tasked with and to identify "low-value" work activities that do not contribute to the team's performance. Employees were encouraged to identify strategies for meeting business goals that would simultaneously give employees more control over their work time. A final session brought together employees from multiple
teams to brainstorm about any problems they had encountered and to publicize new practices that were working well.

## Method

Data
We drew on data from an organizational sample to investigate parents' time allocations and perceptions of a time squeeze, asking which work conditions were associated with these outcomes and whether ROWE changed the work environment and these time outcomes. We collected data both before and after the ROWE initiative was rolled out to employees in different departments, which permitted us to use employees in the later-adopting divisions as a comparison group. For employees in departments launching ROWE, the first survey (Wave 1) occurred about 1 month before ROWE training began, and the second survey (Wave 2) occurred 5 months after the first; the comparison group did not receive ROWE training between Wave 1 and Wave 2. Data were collected in 2006 and 2007 (during the spring and fall). Wave 1 of the survey had an $80 \%$ response rate, and $92 \%$ of those who completed the first survey also completed Wave 2 . Response rates were similar between the ROWE and comparison groups, with a Wave 1 response rate of $78 \%$ and a $93 \%$ retention rate for the ROWE group and a Wave 1 response rate of $81 \%$ and a retention rate of $90 \%$ for the comparison group.

We were not able to randomize departments to the two conditions; instead, the decision to participate in ROWE was made by executives. The departments that transitioned to ROWE included primarily professionals within this white-collar workplace. Few baseline demographic characteristics were significantly related to the likelihood of participating in ROWE for the parents' subsample (results not shown). Parents in groups moving into ROWE reported higher levels of schedule control and higher job security and assessed the company as less supportive of families at baseline. Also, parents in groups moving into ROWE were more likely to report telecommuting and worked more full days off site than the comparison group at Wave 1.

To examine the unique challenges faced by parents, our sample was limited to employees with children under age 18 living in the home. The analytic sample was further limited to employees who participated in both waves of the study. Finally, we excluded one case with an extreme change in time spent in child care between waves due to its disproportionate influence on the results. All other missing data were imputed using multiple imputation in Stata 12 in order to reduce potentially biased estimates (Graham, 2009; Little \& Rubin, 2002). Our analytic sample included 225 respondents: 107 mothers and 118 fathers.

## Measures

We examined four outcomes: two capturing parents' sense of a time squeeze and two capturing time spent with children. Time adequacy with children was measured by asking, "To what extent is there enough time to be with the children you live with?" Time adequacy with family was measured by asking, "To what extent is there enough time for your family to be together?" Responses ranged from 0 (not at all adequate) to 10 (almost always adequate). Time spent caring for children was assessed by asking, "On average, how many hours do you spend per week where caring for the child(ren) you live with is your main activity?" and was top coded at 100 hours. The number of days eating dinner with child(ren) was captured by asking, "On average, how many days per week do you eat dinner with the child(ren) who live with you?"

We theorized that ROWE affects parents because it changes their work conditions and practices; hence, we investigated changes in and subsequent effects of schedule control and telecommuting using three measures. The schedule control scale was modified from Thomas and Ganster (1995). Telecommuting included beginning to telecommute and number of full days working off site. Beginning to telecommute was a dummy variable that identified respondents who did not work at home or another off-site location at all at Wave 1 but reported telecommuting by Wave 2. The number of full days working off-site was captured by asking "Thinking of a 7-day week, how many days per week do you do a full day's work at home or at another location?" We use the terms telecommuting and working off site as synonymous in this article, but we focus primarily on the number of full days worked off site because most employees did some work off site at baseline.

Other work conditions included in our analyses were participation in ROWE, managerial status, work hours, work engagement, family supportive company culture, decision latitude, and job security. Employees were considered ROWE participants if their department participated in the ROWE training between Wave 1 and Wave 2 and they were currently assigned to a ROWE group. Managerial status was captured by a dummy variable that equals 1 for respondents who supervised one or more employees. Time spent at work was measured by asking, "How many hours per week do you usually work at your Streamline job? Please include all hours worked at all locations." Work engagement was modified from Rothbard's (2001) work engagement measure. The family supportive company culture scale was modified from Allen (2001). Decision latitude was a combination of Karasek's (1985) skill discretion and decision authority subscales. Job security was assessed with a two-item scale that included "My job security is poor" and "It is always difficult to predict what will happen in this economy, but what do you think the chances are that you will lose your job (be laid off or terminated) at Streamline in the next few years?"; a higher score indicated greater job security. The family and demographic measures in the analyses were age, spouse's work hours, age of youngest child, number of children, respondent's education, and whether or not the respondent spends time caring for an adult.

## Analytic Plan

First, we examined cross-sectional relationships at baseline between parents' time with children and perceived time adequacy as predicted by family characteristics, work hours, and work environment. Each of the analyses used ordinary least squares (OLS) regression and was estimated separately by gender. Significant differences between mothers and fathers (as determined by Chow and Wald tests) are noted below. Second, we examined how a change in the workplace - ROWE - was related to changes in schedule control and telecommuting behavior. We used a first-differences approach, also called change score modeling (Johnson, 2005), and OLS or logistic regression, depending on the dependent variable. A plausible alternative modeling strategy is to use a lagged dependent variable technique. The use of these models (not shown) produces substantively identical results to the models presented below. Third, we investigated the relationship among ROWE, schedule control, telecommuting, and parent's time use and perceptions of a time squeeze. Again, we used a first-differences approach and OLS or logistic regression.

Given results in the second and the third analytical steps, we tested for mediating pathways among ROWE, changes in schedule control and telecommuting, and the time squeeze in analyses not presented here. Nevertheless, we did not find evidence of such pathways in our data. Instead, our analyses showed an indirect (only) effect of ROWE on the time squeeze. In other words, there was no direct effect of ROWE on parents' perceptions of time adequacy, but there were indirect effects in which ROWE changed schedule control and, in
turn, changed parents' assessments of time adequacy. (See Hayes, 2009, pp. $413-415$, for more discussion on the distinction between mediated and indirect effects.)

## Results

Descriptive statistics for dependent and independent variables in Wave 1 are presented in Table 1, separately for mothers and fathers. On average, our sample was primarily White ( $92 \%$ of mothers and $94 \%$ of fathers) and highly educated ( $77 \%$ of mothers and $80 \%$ of fathers had a college degree or higher). Many were managers ( $46 \%$ of mothers and $60 \%$ of fathers supervised at least one employee). Note that although these data provide a unique opportunity for investigating how workplace changes affect professional parents' time with children and perceived time adequacy, additional research on parents with less economic privilege is obviously needed before one can generalize beyond this particular population.

There were statistically significant gender differences among parents, with mothers and fathers working a mean of 47 and 49 hours at baseline, respectively; their spouses also worked different number of hours (a mean of 33 hours for women's husbands and 29 for men's wives). Fathers were more likely to be managers and to report higher levels of decision latitude; fathers also perceived a more family supportive company culture. Mothers spent more time caring for children than fathers in both waves and spent more full days working off site at baseline.

## Patterns of Time Use and Time Squeeze at Baseline

Our first research question was whether, net of family and demographic measures, work conditions are associated with mothers' or fathers' sense of a time squeeze and actual time spent with children in the cross-section. Table 2 shows that few family and personal characteristics were related to perceived time adequacy with child or with family in this highly educated employed sample. But work conditions were associated with both mothers' and fathers' time squeeze, especially for mothers' perceived time adequacy with family. Work conditions were less clearly tied to parents' time with children but were related to frequency of mothers' dinners with children. We compared the estimated $R^{2}$ for models including only family and demographic characteristics with the models that added work conditions (shown in Table 2) and found notable increases in the $R^{2}$ for time adequacy with children, time adequacy with family, and mothers' dinners with children. Likelihood ratio tests confirmed that including work conditions improved model fit for these models.

When we looked at each outcome in the cross-section, we noted intriguing effects of work on a time squeeze and time use, and these often differed by gender. Mothers who were managers reported less time adequacy with children and with family, whereas greater levels of job security for mothers and greater levels of family supportive company culture for fathers were positively related to time adequacy with family. Wald tests confirmed that managerial status had a different effect for mothers and fathers, and Chow tests showed differences in mothers' and fathers' time adequacy for children and family. Although employees with older children - both mothers and fathers - reported less time spent caring for children, some gender differences were apparent in the time use models. Fathers whose wives worked longer hours spent more time with children. Mothers with more schedule control at baseline had more dinners with their children, suggesting that mothers took advantage of workplace flexibility to eat meals as a family.

## Relationship Among ROWE, Schedule Control, and Telecommuting

Our second research question was whether participation in ROWE changed parents' sense of schedule control and their telecommuting patterns by Wave 2 . Table 3 includes models
examining changes (over 6 months) in schedule control, number of full days working off site, and beginning to telecommute by ROWE participation. We found that ROWE increased mothers' schedule control, but not the number of full days working off site or beginning to telecommute. In comparison, ROWE was positively related to the number of full days that fathers work off site, but not to fathers' schedule control or whether they began to telecommute. Chow tests confirmed that there were significant gender differences in models predicting schedule control and number of full days working off site. Moreover, Wald tests confirmed that the coefficient for ROWE was significantly different for mothers and fathers in models predicting schedule control and the number of full days working off site. The implication is that ROWE led mothers to feel more control over when and where they worked, whereas fathers in ROWE were more likely to actually change their behavior by working more full days off site. This difference may have been due to gendered expectations that led fathers to feel less able to work off site in a more traditional work environment, in part because using flexible work arrangements signals one is not living up to the ideal worker norm (Williams, 2000, 2010). In addition, mothers may have found working at home routinely challenging if they or family members expected them to do more domestic work while there (Michandani, 1998). The introduction of ROWE would therefore have different effects, by gender, for perceived schedule control and working off site.

## Relationship Among ROWE, Time Adequacy, and Time Use With Children

Our third question was whether participation in ROWE and corollary changes in schedule control and the number of full days working off site improved parents' sense of time adequacy and parents' time with children. The first two panels of Table 4 show models predicting perceived time adequacy with children and with family, first for mothers and then for fathers. Increases in mothers' schedule control were related to increases in their perceived time adequacy with children and family. For mothers, a 1-SD increase in schedule control was related to nearly a $0.5-S D$ increase in time adequacy with family. Participating in ROWE increased schedule control for mothers; in turn, greater schedule control increased mothers' perceived time adequacy. This is not a true mediation effect, because ROWE did not directly change time adequacy, but it is an indirect effect in that ROWE predicted changes in schedule control that then enhanced mothers' perceived time adequacy. In contrast, changes in schedule control did not change fathers' reports of time adequacy. Increases in working off site did not predict time adequacy change for either mothers or fathers.

The second two panels of Table 4 estimate changes in actual time with children, in terms of time spent caring for children and number of days eating dinner with children. There were no positive effects of ROWE, changes in schedule control, or changes in number of days working off site for mothers' or fathers' time with children.

The evidence summarized thus far suggests that ROWE had no impact on parents' time with children. It did, however, indirectly reduce mothers' time squeeze, in that mothers whose schedule control increased perceived greater adequacy in their time with children and family. In other words, although time spent caring for children and meals with children did not change, mothers' subjective sense of a time squeeze - being pressed for time with children and family - was somewhat relieved. Note, however, that this is a privileged sample that likely accepts the middle-class cultural expectation of extensive time with children and close monitoring of their activities, either in person or by paid proxy (Lareau, 2003). We thus examined possible moderating effects to assess whether ROWE, changes in schedule control, and changes in telecommuting had greater impacts on parents with low baseline levels of both time allocated to children and time adequacy with children. We found only one moderating effect (see Figure 1) for mothers who at baseline ate few evening meals
with children. As illustrated in Figure 1, mothers who ate fewer than three evening meals on average with their children per week in Wave 1 and then participated in ROWE reported a statistically significant increase in the number of dinners eaten per week with their children. In other words, mothers who previously ate fewer meals with their children appeared to change their meal routines following ROWE, whereas those who already were eating the majority of their evening meals with their children may have found it difficult to increase family meal frequency. It is important to note that, in contrast to mothers in the ROWE group, comparison group mothers who ate fewer than three dinners per week with their children at Wave 1 did not see any increase in family meals by Wave 2.

## Discussion

A growing number of cross-sectional studies show that work conditions are associated with parents' time with children and may also be related to parents' sense of a time squeeze (Allen et al., 2008; Hill et al., 2001; Moen et al., 2008; Nomaguchi, 2009; Roeters et al., 2009, 2010; Thomas \& Ganster, 1995). Our cross-sectional analysis found this was also the case in this small and highly educated sample. The major contributions of this study are in showing that (a) ROWE increased mothers' schedule control and fathers' number of full days working off site and (b) increases in schedule control were related to mothers' increased perceived time adequacy with children and family. Contrary to expectations, neither ROWE nor related changes in schedule control and working off site changed parents' time spent with children, although ROWE increased the number of evening meals mothers ate with their children by Wave 2 among those who had fewer than three dinners with children at baseline ( $14 \%$ of mothers).

These results point to the difference between a subjective sense of a time squeeze and the actual time parents spend with children, suggesting that perceptions may be more malleable through flexibility initiatives than the amount of time with children. Parents, and especially mothers, are finding ways to spend time with their children despite working in a highly demanding white-collar workplace. This reinforces previous scholarship on the high value placed on children as well as the broad increase in time with children since the 1960s by parents and by mothers in particular (Bianchi et al., 2006; Gauthier et al., 2004; Sayer et al., 2004).

The indirect effects of ROWE in reducing mothers' time squeeze shows that subjective time pressures can be reduced. Mothers with increased schedule control as a result of ROWE reported increased time adequacy with their children and their families and thus a reduction in the time squeeze. But their time spent with children was not changed by ROWE. ROWE encourages individuals to organize their time in the way that is most productive for them. Although these mothers may not have spent more time with their children, the time may have been more of the type they value most. For example, ROWE may enable mothers to linger over breakfast with their children or be home when the bus drops them off from school. Unfortunately, our data did not provide enough detail on how mothers organized their time or on the types of activities spent with children to fully investigate these possible mechanisms. ROWE might also enable couples as a unit to better organize and trade off time with their children, but we lacked data on spouses necessary to test ROWE effects on such couple-level strategies.

The increased schedule control for ROWE mothers and their subsequent reductions in the time squeeze, along with the more limited changes for fathers, confirms the gendered nature of parenting and paid work (Hays, 1996; Moen \& Roehling, 2005; Townsend, 2002; Williams, 2000, 2010). Given cultural expectations about women's role as the primary parent, mothers in ROWE may have used the new workplace policy to meet their greater
home demands and relieve the time squeeze. Fathers responded to ROWE but did so in a larger cultural context that judges them on their career achievements (Kelly et al., 2010; Williams, 2010). Additional research is needed to fully investigate how officially genderneutral initiatives such as ROWE affect employees' careers and their decisions about work and family time over a longer period.

Despite the strengths and unique findings of our study, it is important to acknowledge its limitations. In particular, we had a small sample from a single large, white-collar organization in the Midwest. It is unclear how an initiative like ROWE may work in other types of organizations with more diverse employees. Also, we were unable to randomize groups to the ROWE initiative or the status quo management practices. Certainly, future research is needed to replicate the workplace initiative and investigate its effects in other settings with a more diverse employee population, different types of work, and different managerial practices at baseline. There are also open questions with regard to the sustainability of initiatives like ROWE, given cultural expectations of intensive work. Because of the 6-month time frame of the study, there are also important questions about the sustainability of the effects found here and the institutionalization of employees' control over work time within this workplace and across organizations. In addition, the types of activities parents included in their response to the question regarding time spent caring for children are unclear. Although time diary studies often separate care time from interactive time with children, the average amount of time mothers and fathers reported caring for their children here may suggest a broader conceptualization than used in time diary studies. Finally, we were unable to assess the quality of the relationship with children and children's preferences for spending time with parents; thus, we were unable to determine whether children felt that they were spending sufficient and quality time with their parents.

## Contributions

To summarize, our findings extend research in four ways. First, we investigated the time squeeze and time spent with children using similarly situated employees from an organizational sample. Prior research has focused on broad samples with extensive variation in job and workplace characteristics; these data allow for generalization to broader populations but ignore the fact that employees are selected - by employers and through self-selection - into certain jobs and organizations. These selection processes make it difficult to untangle the effects of work resources from the traits of the people who make it into those jobs and organizations, particularly when data are cross-sectional.

Second, we demonstrated the importance of including detailed work conditions when investigating the time squeeze. Excluding work conditions limited our ability to understand how the time squeeze is created or experienced, and focusing primarily on family and personal characteristics encouraged us to focus on possible solutions only within that domain. We found that variations in work conditions - even in a single white-collar organization - were associated with the time squeeze at baseline. Although work hours and employment status are the most viable measures for a nationally representative sample, detailed measures of work conditions are important predictors of parents' experience of a time squeeze.

Third, prior research has not examined the effect of workplace changes on time use and time adequacy for parents and the relative impact of perceptions and behaviors on a time squeeze experienced by working parents. Although some research has raised questions about the possible negative effects of flexibility and schedule control (Roeters et al., 2010; Schieman et al., 2009), this work has not examined changes in work conditions for working parents. In contrast to this prior work, we found that increases in schedule control over time increased time adequacy among these white-collar parents.

Fourth, we developed a deeper understanding of the distinction between time spent with children and the time squeeze. Both mothers and fathers reported changes following ROWE, though along different dimensions. Mothers reported higher schedule control, and fathers reported a greater number of full days working off site. But time adequacy changed for mothers only; neither total time with children nor fathers' time adequacy shifted. Such findings raise questions about how we conceptualize time spent with children: Is it total time, how time is organized, or the quality of time that matters to parents, and how can scholars capture such differences in our research? The natural experiment and longitudinal data we analyzed in this project allowed us to begin investigating changes in the workplace and parents' time with children, but more research on these questions is clearly needed.

## Acknowledgments

This research was conducted as part of the Work, Family and Health Network (http://
www.workfamilyhealthnetwork.org), which is funded by a cooperative agreement through the National Institutes of Health and the Centers for Disease Control and Prevention: Eunice Kennedy Shriver National Institute of Child Health and Human Development (Grant \#U01HD051217, U01HD051218, U01HD051256, U01HD051276), National Institute on Aging (Grant \#U01AG027669), Office of Behavioral and Social Sciences Research, and National Institute for Occupational Safety and Health (Grant \#U01OH008788, U01HD059773). Grants from the National Heart, Lung, and Blood Institute (Grant \#R01HL107240), William T. Grant Foundation, Alfred P. Sloan Foundation, and the Administration for Children and Families, and the National Cancer Institute (Grant \#R25CA163184) have provided additional funding. The contents of this publication are solely the responsibility of the authors and do not necessarily represent the official views of these institutes and offices. Special acknowledgement goes to Extramural Staff Science Collaborator, Rosalind Berkowitz King, Ph.D. and Lynne Casper, Ph.D. for design of the original Workplace, Family, Health and Well-Being Network Initiative.

## References

Allen TD. Family-supportive work environments: The role of organizational perceptions. Journal of Vocational Behavior. 2001; 58:414-435.10.1006/jvbe.2000.1774
Allen TD, Shockley KM, Poteat LF. Workplace factors associated with family dinner behaviors. Journal of Vocational Behavior. 2008; 73:336-342.10.1016/j.jvb.2008.07.004
Bianchi, SM.; Robinson, JP.; Milkie, MA. Changing rhythms of American family life. New York: Russell Sage Foundation; 2006.
Bittman M, England P, Sayer LC, Folbre N, Matheson G. When does gender trump money? Bargaining and time in household work. American Journal of Sociology. 2003; 109:186214.10.1086/378341

Blair-Loy M, Wharton AS. Employees' use of work - family policies and the workplace social context. Social Forces. 2002; 80:813-845.10.1353/sof.2002.0002
Budig MJ, Hodges MJ. Differences in disadvantage. American Sociological Review. 2010; 75:705728.10.1177/0003122410381593

Clarkberg M, Moen P. Understanding the time-squeeze: Married couples' preferred and actual workhour strategies. American Behavioral Scientist. 2001; 44:11151136.10.1177/0002764201044007005

Connell RW. Hegemonic masculinity: Rethinking the concept. Gender \& Society. 2005; 19:829859.10.1177/0891243205278639

Correll SJ, Bernard S, Paik I. Getting a job: Is there a motherhood penalty? American Journal of Sociology. 2007; 12:1297-1338.10.1086/511799
Craig L. Does father care mean fathers share? A comparison of how mothers and fathers in intact families spend time with children. Gender \& Society. 2006; 20:259281.10.1177/0891243205285212

Craig L, Mullan K. Parenthood, gender and work - family time in the United States, Australia, Italy, France, and Denmark. Journal of Marriage and Family. 2010; 72:1344-1361.10.1111/j. 1741-3737.2010.00769.x

Eaton SC. If you can use them: Flexibility policies, organizational commitment, and perceived performance. Industrial Relations: A Journal of Economy and Society. 2003; 42:145-167.10.1111/1468-232X. 00285

Gauthier AH, Smeeding TM, Furstenberg FF. Are parents investing less time in children? Trends in selected industrialized countries. Population and Development Review. 2004; 30:647-671.10.1111/j.1728-4457.2004.00036.x

Graham JW. Missing data analysis: Making it work in the real world. Annual Review of Psychology. 2009; 60:549-576.10.1146/annurev.psych.58.110405.085530
Hayes AF. Beyond Baron and Kenny: Statistical mediation analysis in the new millennium. Communication Monographs. 2009; 76:408-420.10.1080/03637750903310360
Hays, S. The cultural contradictions of motherhood. New Haven, CT: Yale University Press; 1996.
Hill EJ, Hawkins AJ, Ferris MS, Weitzman M. Finding an extra day a week: The positive influence of perceived job flexibility on work and family life balance. Family Relations. 2001; 50:49-58.10.1111/j.1741-3729.2001.00049.x

Hochschild, AR. The time bind: When work becomes home and home becomes work. New York: Metropolitan Books; 1997.
Johnson D. Two-wave panel analysis: Comparing statistical methods for studying the effects of transitions. Journal of Marriage and Family. 2005; 67:1061-1075.10.1111/j. 1741-3737.2005.00194.x
Karasek, RA. Job Content Questionnaire And User's Guide. Lowell: University of Massachusetts, Department of Work Environment; 1985.
Kelly EL, Ammons SK, Chermack K, Moen P. Gendered challenge, gendered response: Confronting the ideal worker norm in a white-collar organization. Gender \& Society. 2010; 24:281303.10.1177/0891243210372073 [PubMed: 20625518]

Kelly EL, Moen P, Tranby E. Changing workplaces to reduce work - family conflict: Schedule control in a white-collar organization. American Sociological Review. 2011; 76:265290.10.1177/0003122411400056 [PubMed: 21580799]

Lareau, A. Unequal childhoods: Class, race, and family life. Berkeley: University of California Press; 2003.

Larson RW, Branscomb KR, Wiley AR. Forms and functions of family mealtimes: Multidisciplinary perspectives. New Directions for Child and Adolescent Development. 2006; 111:1-15.10.1002/cd. 152 [PubMed: 16646496]
Little, RJA.; Rubin, DB. Statistical analysis with missing data. 2. Hoboken, NJ: Wiley-Interscience; 2002.

Maume DJ. Gender differences in providing urgent childcare among dual-earner parents. Social Forces. 2008; 87:273-297.10.1353/sof.0.0101
Michandani K. Protecting the boundary: Teleworker insights on the expansive concept of "work". Gender \& Society. 1998; 12:168-187.10.1177/089124398012002004
Milkie MA, Mattingly MJ, Nomaguchi KM, Bianchi SM, Robinson JP. The time squeeze: Parental statuses and feelings about time with children. Journal of Marriage and Family. 2004; 66:739-761.10.1111/j.0022-2445.2004.00050.x

Milkie MA, Peltola P. Playing all the roles: Gender and the work - family balancing act. Journal of Marriage and the Family. 1999; 61:476-490.10.2307/353763
Milkie MA, Raley SB, Bianchi SM. Taking on the second shift: Time allocations and time pressures of U.S. parents with preschoolers. Social Forces. 2009; 88:487-517.10.1353/sof.0.0268

Moen, P.; Kelly, EL.; Chermack, K. Learning from a natural experiment: Studying a corporate worktime policy initiative. In: Crouter, AC.; Booth, A., editors. Work - life policies that make a real difference for individuals, families, and organizations. Washington, DC: Urban Institute Press; 2009. p. 97-131.

Moen P, Kelly EL, Hill R. Does enhancing work-time control and flexibility reduce turnover? A naturally occurring experiment. Social Problems. 2011; 58:69-98.10.1525/sp.2011.58.1.69 [PubMed: 21532909]

Moen P, Kelly EL, Huang Q. Work, family and life-course fit: Does control over work time matter? Journal of Vocational Behavior. 2008; 73:414-425.10.1016/j.jvb.2008.08.002 [PubMed: 19430546]
Moen P, Kelly EL, Tranby E, Huang Q. Changing work, changing health. Journal of Health and Social Behavior. 2011; 52:404-429.10.1177/0022146511418979 [PubMed: 22144731]
Moen, P.; Roehling, P. The career mystique: Cracks in the American dream. Lanham, MD: Rowman \& Littlefield; 2005.
Musick K, Meier A. Assessing causality and persistence in associations between family dinners and adolescent well-being. Journal of Marriage and Family. 2012; 74:476-493.10.1111/j. 1741-3737.2012.00973.x [PubMed: 23794750]
Nomaguchi KM. Change in work - family conflict among employed parents between 1977 and 1997. Journal of Marriage and Family. 2009; 71:15-32.10.1111/j.1741-3737.2008.00577.x
Ressler, C.; Thompson, J. Why work sucks and how to fix it: No schedules, no meetings, no joke The simple change that can make your job terrific. New York: Penguin Group; 2008.
Roeters A, van der Lippe T, Kluwer ES. Parental work demands and the frequency of child-related routine and interactive activities. Journal of Marriage and Family. 2009; 71:1193-1204.10.1111/j. 1741-3737.2009.00663.x
Roeters A, van der Lippe T, Kluwer ES. Work characteristics and parent - child relationship quality: The mediating role of temporal involvement. Journal of Marriage and Family. 2010; 72:1317-1328.10.1111/j.1741-3737.2010.00767.x

Rothbard NP. Enriching or depleting? The dynamics of engagement in work and family roles. Administrative Science Quarterly. 2001; 46:655-684.10.2307/3094827
Sayer LC, Bianchi SM, Robinson JP. Are parents investing less in children? Trends in mothers' and fathers' time with children. American Journal of Sociology. 2004; 110:1-43.10.1086/386270
Schieman S, Milkie MA, Glavin P. When work interferes with life: Work -nonwork interference and the influence of work-related demands and resources. American Sociological Review. 2009; 74:966-988.10.1177/000312240907400606
Shows C, Gerstel N. Fathering, class, and gender: A comparison of physicians and emergency medical technicians. Gender \& Society. 2009; 23:161-187.10.1177/0891243209333872
Singley SG, Hynes K. Transitions to parenthood: Work - family policies, gender, and the couple context. Gender \& Society. 2005; 19:376-397.10.1177/0891243204271515
Thomas LT, Ganster DC. Impact of family-supportive work variables on work -family conflict and strain: A control perspective. Journal of Applied Psychology. 1995; 80:6-15.10.1037/0021-9010.80.1.6

Townsend, NW. The package deal: Marriage, work, and fatherhood in men's lives. Philadelphia: Temple University Press; 2002.
Voydanoff P. The effects of work demands and resources on work-to-family conflict and facilitation. Journal of Marriage and Family. 2004; 66:398-412.10.1111/j.1741-3737.2004.00028.x
Williams, JC. Unbending gender: Why family and work conflict and what to do about it. New York: Oxford University Press; 2000.
Williams, JC. Reshaping the work - family debate: Why men and class matter. Cambridge, MA: Harvard University Press; 2010.
Yeung WJ, Sandberg JF, Davis-Kean PE, Hofferth SL. Children's time with fathers in intact families. Journal of Marriage and Family. 2001; 63:136-154.10.1111/j.1741-3737.2001.00136.x


Figure 1.
Moderating Effect of Eating Fewer than Three Evening Meals at Baseline for Mothers.
Note: W2 = Wave 2; ROWE = Results Only Work Environment.

Table 1
Descriptive Statistics of Mothers and Fathers ( $\mathrm{N}=225$ )

|  | Mothers ( $n=107$ ) |  | Fathers ( $n=118$ ) |  |
| :---: | :---: | :---: | :---: | :---: |
| Wave and variable |  |  |  |  |
| Wave 1 (W1) | M/\% | SD | M/\% | $S D$ |
| Female | 100\% |  | 0\% |  |
| Age | 35.63 | 6.17 | 36.31 | 6.23 |
| Spouse's work hours | 32.65* | 20.53 | 28.56* | 20.05 |
| Age of youngest child | 5.10 | 4.74 | 4.56 | 4.33 |
| Number of children | 1.63 | 0.68 | 1.77 | 0.95 |
| College degree or higher | 76.6\% |  | 80.3\% |  |
| Time spent caring for an adult | 9.32\% |  | 5.61\% |  |
| Holds position of manager | 45.8\%* |  | 60.2\%* |  |
| Work hours | $46.57^{* *}$ | 6.07 | 49.10** | 6.08 |
| Schedule control | 3.47 | 0.77 | 3.41 | 0.71 |
| Telecommuting | 68.2\% |  | 74.6\% |  |
| Work engagement | 3.86 | 0.57 | 3.87 | 0.63 |
| Family Supportive Company Culture Scale | 3.25 * | 0.80 | 3.48* | 0.65 |
| Decision latitude | 2.94 * | 0.43 | 3.05* | 0.43 |
| Job security | 2.73 | 0.64 | 2.92 | 0.74 |
| Full days working off site | 0.38* | 1.02 | 0.14* | 0.54 |
| Time squeeze |  |  |  |  |
| Time adequacy with child | 4.59 | 2.38 | 5.01 | 2.22 |
| Time adequacy with family | 4.46 | 2.19 | 4.78 | 2.17 |
| Time use |  |  |  |  |
| Number of days eating dinner with children | 4.93 | 2.00 | 4.74 | 1.98 |
| Time caring for children | 34.10* | 21.21 | 28.49 * | 20.25 |
| Wave 2 (W2) |  |  |  |  |
| ROWE participation | 62.6\% |  | 51.7\% |  |
| Time squeeze |  |  |  |  |
| Time adequacy with child (W2) | 5.18 | 2.44 | 5.42 | 2.17 |
| Time adequacy with family (W2) | 4.95 | 2.26 | 5.19 | 2.06 |
| Time use |  |  |  |  |
| Number of days eating dinner with children (W2) | 4.66 | 2.07 | 4.80 | 1.81 |
| Time caring for children (W2) | 36.42 *** | 19.62 | $26.68 * * *$ | 19.35 |
| Schedule control (W2) | 3.66 | 0.81 | 3.56 | 0.81 |
| Telecommuting (W2) | 83.4\% |  | 77.9\% |  |
| Beginning to telecommute (between W1 \& W2) | 19.8\% |  | 13.5\% |  |


|  | Mothers $(\boldsymbol{n}=\mathbf{1 0 7})$ |  | Fathers $(\boldsymbol{n}=\mathbf{1 1 8})$ |  |
| :--- | :---: | :---: | :---: | :---: |
| Full days working off site (W2) | 0.70 | 1.19 | 0.49 | 1.01 |

$$
\begin{aligned}
& \text { Note: ROWE = Results Only Work Environment. Asterisks indicate statistically significant differences between mothers and fathers. } \\
& \begin{array}{l}
* \\
p<.05 \\
* * \\
\quad p<.01 \\
* * * \\
\quad p<.001 .
\end{array}
\end{aligned}
$$

|  | Time adequacy with child ${ }^{a}$ |  |  |  | Time adequacy with family ${ }^{\text {a }}$ |  |  |  | Time spent caring for children |  |  |  | Number of days eating dinner with children |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mothers |  | Fathers |  | Mothers |  | Fathers |  | Mothers |  | Fathers |  | Mothers |  | Fathers |  |
|  | Coef. | SE | Coef. | SE | Coef. | SE | Coef. | SE | Coef. | SE | Coef. | SE | Coef. | SE | Coef. | SE |
| Age | 0.07 | 0.04 | 0.01 | 0.05 | $0.94 * *$ | 0.03 | $-0.01{ }^{\text {b }}$ | 0.05 | 0.53 | 0.47 | -0.49 | 0.43 | -0.02 | 0.04 | -0.03 | 0.04 |
| Spouse's work hours | $0.02{ }^{\text {b }}$ | 0.01 | $-0.01{ }^{\text {b }}$ | 0.01 | -0.01 | 0.00 | 0.01 | 0.01 | $0.08{ }^{\text {b }}$ | 0.12 | $0.27^{*} b$ | 0.10 | 0.01 | 0.01 | 0.01 | 0.01 |
| Age of youngest child | 0.12* | 0.05 | -0.01 | 0.06 | 0.11* | 0.04 | 0.02 | 0.06 | $-1.88^{* *}$ | 0.57 | -1.55 ** | 0.55 | -0.09 | 0.04 | -0.04 | 0.06 |
| Number of children | -0.32 | 0.32 | -0.19 | 0.25 | -0.54* | 0.25 | -0.15 | 0.24 | -3.62 | 3.31 | 0.87 | 2.27 | 0.03 | 0.28 | 0.21 | 0.23 |
| College degree or higher | 1.21 | 0.59 | $-0.06$ | 0.55 | $1.36{ }^{*}{ }^{\text {b }}$ | 0.46 | $0.20{ }^{\text {b }}$ | 0.54 | 5.47 | 5.95 | -5.71 | 5.07 | -0.22 | 0.51 | -0.35 | 0.50 |
| Time spent caring for adult | 0.23 | 0.97 | 0.30 | 0.77 | -0.45 | 0.76 | 0.52 | 0.76 | 5.72 | 9.61 | -4.75 | 6.78 | 0.08 | 0.84 | 0.07 | 0.70 |
| Manager | $-1.98 * * * b$ | 0.53 | $-0.24{ }^{\text {b }}$ | 0.52 | $-1.67{ }^{* * *} b$ | 0.42 | $-0.16^{\text {b }}$ | 0.51 | -2.10 | 5.71 | 0.68 | 4.73 | -0.14 | 0.46 | -0.62 | 0.47 |
| Work hours | -0.10* | 0.04 | -0.05 | 0.04 | $-0.14{ }^{* * *}$ | 0.03 | -0.04 | 0.03 | -0.44 | 0.43 | -0.06 | 0.35 | -0.09* | 0.03 | -0.03 | 0.04 |
| Schedule control | 0.27 | 0.33 | 0.58 | 0.37 | 0.31 | 0.26 | 0.09 | 0.30 | -1.56 | 3.37 | 0.19 | 3.34 | $0.58 * b$ | 0.29 | $0.22{ }^{\text {b }}$ | 0.33 |
| Telecommuting | 1.32* | 0.52 | -0.25 | 0.51 | 1.66*** | 0.41 | -0.25 | 0.50 | 3.07 | 5.32 | 1.02 | 4.61 | 0.67 | 0.45 | -0.17 | 0.46 |
| Work engagement | 0.36 | 0.41 | -0.08 | 0.36 | 0.21 | 0.32 | -0.13 | 0.35 | 1.12 | 4.23 | 1.11 | 3.24 | 0.12 | 0.36 | 0.18 | 0.32 |
| Family supportive company culture | -0.09 | 0.30 | $0.65{ }^{\text {b }}$ | 0.34 | $-0.03{ }^{\text {b }}$ | 0.24 | 0.80 * ${ }^{\text {b }}$ | 0.33 | -0.20 | 3.13 | 4.14 | 3.00 | $-0.27^{\text {b }}$ | 0.26 | $0.37{ }^{\text {b }}$ | 0.30 |
| Decision latitude | 0.27 | 0.58 | 0.39 | 0.59 | 0.66 | 0.45 | 1.04 | 0.58 | 3.46 | 5.96 | -1.31 | 5.30 | -0.11 | 0.50 | -0.12 | 0.54 |
| Job security | 0.56 | 0.34 | -0.08 | 0.33 | $0.71{ }^{*} b$ | 0.27 | $0.03{ }^{\text {b }}$ | 0.33 | -0.01 | 3.51 | -2.57 | 2.98 | 0.22 | 0.30 | -0.01 | 0.31 |
| Constant | 0.28 | 2.96 | 2.87 | 3.27 | 0.64 | 2.33 | 1.47 | 3.62 | 33.24 | 30.82 | 43.18 | 28.64 | 8.03 ** | 2.58 | 5.56 | 2.98 |
| $n$ | 107 |  | 118 |  | 107 |  | 118 |  | 107 |  | 118 |  | 107 |  | 118 |  |
| $R^{2}$ | . 33 |  | . 14 |  | . 49 |  | . 13 |  | . 21 |  | . 27 |  | . 27 |  | . 11 |  |
| $\Delta$ in $R^{2}$ | . 24 * |  | .13* |  | . $37^{* * *}$ |  | . $12{ }^{*}$ |  | . 02 |  | . 02 |  | .13* |  | . 06 |  |

[^0]
## Table 3

Results Only Work Environment (ROWE) and Changes in Mothers' and Fathers' Schedule Control and Telecommuting

| Variables | Mothers |  | Fathers |  |
| :--- | :---: | :---: | :---: | :---: |
| Schedule control $\Delta^{a}$ | Coef. | $S E$ | Coef. | $S E$ |
| ROWE | $0.33^{* b}$ | 0.15 | $-0.04^{b}$ | 0.12 |
| Constant | -0.01 | 0.12 | 0.17 | 0.09 |
| $n$ | 107 |  | 118 |  |
| $R^{2}$ | 0.04 |  | 0.00 |  |
| Full days working off site $\Delta^{a}$ |  |  |  |  |
| ROWE | $0.08^{b}$ | 0.26 | $0.46^{*} b$ | 0.21 |
| Constant | 0.28 | 0.20 | 0.11 | 0.15 |
| $n$ | 107 |  | 118 |  |
| $R^{2}$ | 0.00 |  | 0.04 |  |
| Beginning to telecommute |  |  |  |  |
| ROWE | 0.66 | 0.52 | 0.19 | 0.49 |
| Constant | $-1.74^{* * *}$ | 0.44 | $-1.68^{* * *}$ | 0.36 |
| $n$ | 107 |  | 118 |  |
| $R^{2}$ | .00 |  | .04 |  |

[^1]Results Only Work Environment（ROWE）and Changes in Mothers＇and Fathers＇Time Squeeze and Time Spent With Children

| 年 | $\begin{aligned} & \text { N } \\ & \text { ভ } \\ & \text { dy } \end{aligned}$ | W |  | $\stackrel{\text { con }}{ }$ |  | $\bigcirc$ | ¢ٌ |  |  |  | $\stackrel{\sim}{\circ}$ |  | $\bigcirc$ | ત̃． |  |  |  | $\stackrel{\sim}{\sim}$ |  | $\stackrel{\text { 乌 }}{\sim}$ | $\stackrel{\text { c }}{\text { i }}$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | \|ï゙ |  | $\underset{i}{ \pm}$ |  | $\because$ | $\stackrel{\text {＇}}{\text { f }}$ | $\stackrel{\infty}{=}$ | $\bar{\square}$ |  | $\stackrel{\sim}{0}$ |  | $\stackrel{\infty}{\circ}$ | तิ | $\stackrel{\infty}{=}$ | $\bar{\square}$ |  | $\stackrel{\substack{i \\ i}}{ }$ |  | $\stackrel{\rightharpoonup}{f}$ | $\underset{\substack{\mathrm{O}}}{\text { O}}$ | $\stackrel{\infty}{=}$ | O̧ |  |  |  |
|  | 흘 | W |  | $\underset{o}{0}$ | $\stackrel{\substack{0}}{ }$ |  | Nọ |  |  |  | $\stackrel{\sim}{0}$ | ત̌ |  | No |  |  |  | N্লু | $\stackrel{\sim}{n}$ |  | $\stackrel{\sim}{\sim}$ |  |  |  | $\stackrel{\bigcirc}{\circ}$ | － |
|  |  | نiّ |  | לo. | $\underset{0}{\mathscr{G}}$ |  | సें | $\stackrel{\infty}{\approx}$ | \％ |  | Ọ | $\stackrel{ल}{0}$ |  | $\underset{\sim}{\mathrm{O}}$ | $\stackrel{\infty}{\approx}$ | Õ |  | $\underset{i}{\underset{i}{~}}$ | $\underset{i}{\Uparrow}$ |  | $\stackrel{\varrho}{i}$ | $\stackrel{\infty}{=}$ | $\stackrel{\rightharpoonup}{\square}$ |  | ¢ | $\stackrel{m}{i}$ |
| $\begin{array}{\|l\|l} \frac{n}{2} \\ \frac{4}{4} \\ \frac{0}{2} \end{array}$ | $\begin{aligned} & \text { N } \\ & \stackrel{\rightharpoonup}{0} \\ & \text { Ben } \end{aligned}$ | W |  | $\underset{0}{\mathcal{G}}$ |  | $\stackrel{\infty}{0}$ | $\stackrel{\infty}{\infty}$ |  |  |  | $\stackrel{q}{0}$ |  | $\frac{n}{0}$ | $\underset{\sim}{\tilde{o}}$ |  |  |  | $\stackrel{\infty}{\stackrel{\infty}{\infty}}$ |  | $\stackrel{\sim}{\stackrel{\sim}{\sim}}$ | $\underset{i}{\underset{i}{i}}$ |  |  |  | ç |  |
|  |  | 苂 |  | － |  | $\stackrel{\circ}{\circ}$ | for | $\stackrel{\rightharpoonup}{0}$ | 8 |  | 气. |  | $\stackrel{\text { to }}{0}$ | $\underset{0}{\ddagger}$ | $\stackrel{\rightharpoonup}{\text { ® }}$ | 8 |  | $\underset{\substack{\mathrm{i}}}{\stackrel{\rightharpoonup}{2}}$ |  | $\underset{\substack{\text { i } \\ \underset{1}{c}}}{ }$ | $\stackrel{*}{2}$ | $\stackrel{\rightharpoonup}{2}$ | d |  | $\stackrel{\circ}{\circ}$ |  |
|  | $\begin{aligned} & \overline{3} \\ & \stackrel{y}{0} \\ & \stackrel{y}{0} \end{aligned}$ | 4 |  | $\stackrel{\infty}{\substack{\infty \\ \hline}}$ | oे |  | ふ̀ |  |  |  | ले | No |  | $\overline{\mathrm{m}}$ |  |  |  | $\stackrel{\infty}{\infty}$ | ત̀ |  | $\underset{\text { i }}{\text { i }}$ |  |  |  | ¢ ${ }_{\circ}$ | － |
|  |  | \|í |  | సे |  |  | fo | $\stackrel{\text { ¢ }}{ }$ | \％ |  | $\frac{9}{i}$ |  |  | $\begin{aligned} & 0 \\ & 0 \end{aligned}$ | $\stackrel{\text { ¢ }}{ }$ | $\stackrel{\circ}{\circ}$ |  | $\underset{i}{i}$ | $\stackrel{\rightharpoonup}{i}$ |  | సे | $\stackrel{\rightharpoonup}{0}$ | O̧． |  | on | － |
|  |  |  |  |  |  |  |  | $=$ | \＃ |  | $\underbrace{\mathrm{M}}_{0}$ |  |  |  | $=$ | \＃ |  | $\begin{aligned} & \text { n } \\ & 0 \\ & 0 \end{aligned}$ | $\begin{aligned} & 4 \\ & \stackrel{\rightharpoonup}{0} \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & 0 . \\ & \stackrel{0}{0} \\ & \stackrel{0}{n} \end{aligned}$ |  |  | $=$ | $\approx$ |  |  | $\square$ $\square$ 0 0 0 0 0 $\vdots$ 0 0 0 0 |


| Variables | Mothers |  |  |  | Fathers |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Model 1 |  | Model 2 |  | Model 1 |  | Model 2 |  |
|  | Coef. | $\boldsymbol{S} \boldsymbol{E}$ | Coef. | $\boldsymbol{S E}$ | Coef. | $\boldsymbol{S} \boldsymbol{E}$ | Coef. | $\boldsymbol{S E}$ |
| Full days working off site $\Delta$ |  |  | -0.18 | 0.14 |  |  | -0.06 | 0.15 |
| Constant | -0.54 | 0.29 | -0.49 | 0.30 | 0.10 | 0.24 | 0.09 | 0.24 |
| $n$ | 107 |  | 107 |  | 118 |  | 118 |  |
| $R^{2}$ | .02 |  | .03 |  | .00 |  | .00 |  |

[^2]
[^0]:    Note: Change in $R^{2}$ is the difference in $R^{2}$ between initial models with personal and family characteristics only (gender, age, spouse's work hours, age of youngest child, education) and models adding work conditions (manager, work hours, schedule control, telecommuting, work engagement, family supportive company culture scale, decision latitude, job security). Coef. $=$ coefficient.
    ${ }^{a}$ Statistically significant differences between models for mothers and fathers using Chow tests.
    ${ }^{b}$ Statistically significant differences between coefficients for mothers and fathers using Wald tests.

[^1]:    Note: Coef. = coefficient.
    ${ }^{a}$ Statistically significant differences between models for mothers and fathers using Chow tests.
    ${ }^{b}$ Statistically significant differences between coefficients for mothers and fathers using Wald tests.

    * $p<.05$.
    *** $p<.001$.

[^2]:    Note: Coef. $=$ coefficient.
    ${ }^{a}$ Statistically significant differences between models for mothers and fathers using Chow tests.
    ${ }^{b}$ Statistically significant differences between coefficients for mothers and fathers using Wald tests.
    

