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Supporting Sleep and Health of Employed Parents with Typical and Exceptional Care Demands

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Abstract

Employed parents of children with disabilities report higher than average levels of stress compared to working parents of children with typical development, making them at risk for sleep difficulties and physical health problems. Using secondary analysis of the 2016 National Study of the Changing Workforce (NSCW), employed parents giving disability care were compared to those providing typical care to determine how personal, family, and workplace resources affect sleep and physical health problems. Significant differences were found between the two groups on personal, family, and workplace characteristics, and their influence on sleep problems and health problems differed. While organizational support was the strongest predictor of sleep difficulties and physical health problems, job autonomy and coworker support moderated these outcomes for employed parents of children with disabilities. Practice implications include investing in the development of family supportive organizational cultures and targeted interventions aimed at supporting employed parents with exceptional care demands. Occupational social workers can assist with these efforts by ensuring that organizational health promotion and prevention initiatives include targeted interventions.

Keywords: Parenting children with disabilities, workplace supports, 2016 National Study of the Changing Workforce, sleep, physical health.

Supporting Sleep and Health of Employed Parents with Typical and Exceptional Care Demands

Exceptional care demands refer to the challenges of caring for a dependent with a disability who can be a child, spouse, sibling, or parent (Roundtree & Lynch, 2006). Parenting a child with a disability while engaging in paid work presents exceptional care demands tied to the intensity and complexity of the care and the need to coordinate resources in the community such as school and medical appointments (Brennan & Brannan, 2005; Moorman & MacDonald, 2012). Research on parents caring for children with disabilities finds a connection between exceptional caregiving, stress, and poor health compared to parents raising typically developing children (Earle & Heymann, 2011; Seltzer et al., 2010). Not well understood is the link between sleep and health and resources in the workplace or in communities for parents providing exceptional care, and how these resource needs compare to the needs of parents caring for children with typical care demands. Understanding these connections is critical given that both sleep problems and poor health are associated with a variety of work-related losses such as unintentional injury, accidents, ineffective problem-solving, and memory lapses (DePasquale et al., 2019; Masefield et al., 2020). Hence, the field needs a better understanding of the specific supports that may serve as protective factors for working parents of children with disabilities and chronic health conditions.

Data from the 2016 National Study of the Changing Workforce (NSCW) was used to investigate whether personal, family, and workplace supports differed for parents providing disability-related care compared to those providing typical family care and the influence of these supports on sleep and physical health problems. A moderation model tested the influence of type of child care demand (i.e., typical versus disability-related) and workplace supports (i.e., job

flexibility, work autonomy, organizational support, supervisor support, coworker support) on sleep problems and physical health problems.

Personal Characteristics

Research about gender differences regarding physical health and sleep is still limited, but Earle and Heymann (2011) reported that care demands had a greater impact on women's physical health than men's. Women acknowledged sleeping longer, but reported worse sleep quality (Crain et al., 2014). On the other hand, Mihayla and Hartley (2018) reported higher quality sleep for mothers of children with Autism Spectrum Disorder (ASD) than fathers. Seltzer and colleagues (2010) reported that mothers of adolescents with autism spectrum disorder had higher levels of cortisol (i.e., a primary stress hormone) compared to mothers of typically developing children. Race appears to be another personal characteristic that might affect both sleep quality and quantity (Berkman et al., 2010; Crain et al., 2014). In addition, racial health disparities and the connections of health outcomes to social, economic, and environmental conditions have been clearly established in the U.S. (National Center for Health Statistics, 2018; Hall et al., 2017). Workers with parenting responsibilities have reported insufficient sleep compared to those without children (Skinner & Dorrian, 2015).

Family Characteristics

Well-being of working parents can be negatively impacted by exceptional care demands such as more time required to provide direct and indirect child care, as well as the need for complex and specialized knowledge and skills (Moorman & MacDonald, 2012; Pousada et al., 2013; Stewart et al., 2018). Gaining access to critical services for their children such as therapeutic or medical care is often associated with substantial advocacy, which can exacerbate the already existing time burden of parenting (McManu et al., 2011). Parents caring for a child

with cerebral palsy were found to have more chronic health conditions than parents in the general Canadian population (Brehaut et al., 2004). Greater child behavior problems in this sample of children with cerebral palsy were associated with poorer physical health (Raina et al., 2005). In addition to the direct effects of disability on parental health, access to social services and social support were found to improve paternal health and family well-being. Families with exceptional care demands were doing well if they were able to access needed medical and therapeutic services, and felt supported by friends and family (Breitkreuz et al., 2014). Mothers caring for a child with ASD reported better mental health if they experienced their neighborhoods as supportive (Whitehead, 2017). Having more children in general and having more children with exceptional care needs negatively affected parental physical health and sleep (Crain et al., 2014; Earle & Heymann, 2011; Seltzer et al., 2004). Sleep deprivation experienced by parents with exceptional care responsibilities was found to be chronic, negatively affecting overall physical and emotional health and well-being (McCann, et al., 2015). Type of disability and care needs were relevant predictors of sleep quality and duration (McCann et al., 2015).

Greater family income can be another family resource that improves well-being for family members with exceptional care responsibilities (Hilbrecht et al., 2017; Sellmaier, 2019). Income can also act as a protective factor mitigating the effects of a child's disability on maternal physical health (Gabarski & Witt, 2012).

Workplace Characteristics

Family supportive supervisors (FSS) have been found to directly affect employee healthy sleep and physical health (Crain et al., 2014; Earle & Heymann, 2011; Hwang, 2019). One study found that workers with managers who were more open to, and more creative in addressing work-family balance, had lower cardiovascular risk factors and slept for more hours (Berkman et

al., 2010). Matthews et al. (2014) investigated the perceived well-being and work engagement of employees in a variety of industries in two studies. They found the resource of FSS facilitated workers' work engagement and sense of well-being, especially for those with higher caring demands and fewer formal family-friendly organizational supports. These workplace supports have also been found to positively affect health of caregivers with exceptional care responsibilities. Earle and Heymann (2011) found that supportive supervisors, paid sick leave, and paid family leave mitigated the negative effects of care demands on physical health for both mothers and fathers. The ability to adjust one's schedule was also found to have a positive effect on self-rated health for employees caring for children with special health care needs (Earle & Heymann, 2011). In summary, families with exceptional care demands who had supportive employers and the flexibility to meet care demands, such as attending medical visits, were able to thrive despite the increased responsibilities (Breitkreuz et al., 2014).

Theoretical background and hypotheses

Conservation of resources theory (COR; Hobfoll, 1989, 2011) and the continuum of dependent care model (Stewart et al., 2018) are useful for examining the influence of individual, family, and workplace supports on sleep and physical health for employed parents with typical and exceptional care demands. COR posits individuals aim to acquire, maintain, and protect resources to regulate the self, family, and social relations. This effort is guided by both individual and objective elements of life events that are shared within a culture and have a common level of impact (Hobfoll et al., 2018). Shared common events among employees caring for typically and exceptionally developing children are school holidays, breaks, and short-term illnesses that require parents to draw on personal, familial, and workplace resources to regulate increased demands from within the family. For employees who provide care for a young child with typical

development or for an older adult, workplace flexibility and health promotive workplace cultures and psychological resources like coworker and family supervisor support have been found to be linked to sleep and physical health (Almeida et al., 2018; Berkman et al, 2010). COR also specifies that resource loss occurs at a faster rate than resource gain and, at each iteration of the stress spiral, both individuals and organizations have fewer resources to offset resource loss (Hobfoll et al., 2018). These resource loss cycles heighten stress and further loss. Parents caring for a child with exceptional care demands experience greater loss of resources due to the crisis-oriented and recurring nature of their child care demands (Brennan et al., 2016). The continuum of dependent care model (Stewart et al., 2018) proposes that specific disability resources such as medical knowledge and skill related to the disability and/or knowledge and ability to coordinate health related services, are needed from the individual and family to meet disability care demands. When employed parents of children with exceptional care demands are able to meet these demands, they are able to achieve work-family fit (Moen, 2011). Should demand exceed resources, stress will occur (Hobfoll et al., 2011; Stewart et al., 2018) affecting sleep and health.

Based on these propositions we posit:

Ha^1: Employed parents of children with exceptional care demands will have higher levels of sleep problems than those giving typical care. They will also rate their health as poorer compared to parents with typical child care demands.

Ha^2: Having exceptional care demands is associated with sleep problems and physical health problems, when workplace supports are controlled.

Ha^3: Having exceptional child care demands will moderate the effects of workplace supports on reported levels of sleep problems and physical health problems.

Method

The secondary analysis used data from the 2016 Society for Human Resource Management (SHRM) and Families and Work Institute (FWI) National Study of the Changing Workforce. The NSCW resulted in a nationally representative sample of the U.S. workforce. The Data Recognition Corporation (DRC) Inc., was responsible for conducting the survey. Phone interviews based on a computer-assisted telephone interview program, and an online survey were used to collect NSCW data between October 1 and November 5, 2015. Original data collection did not produce a nationally representative sample and the sample was subsequently augmented through surveys collected from members of NORC and the Amerispeak panel (Society for Human Resource Management, 2020). The survey response rate was 16%. Similar workforce studies report response rates ranging between 5% through 15%. The overall study sample was N = 1,510. The current study was approved and monitored by the Institutional Review Board of [Blinded for review].

Participants

Eligibility requirements for the current study included: (1) working in government, for-profit, or non-profit sector, (2) having a minor child living at home at least half time; and (3) having complete data on the variables included in these analyses. After applying these criteria, the sub-sample used in these analyses was N = 472.

Employed parents providing typical or exceptional care were identified using two items. One item asked, “How many of your children have a chronic illness or medical condition, a disability or other notable health problems?” Additionally, the respondents answered “How many of your children had emotional or developmental problems in the past year?” Parents who reported 0 for both items were coded as having typical care demands (n = 343; 73%). Parents whose responses were greater than 0 on either item were coded as having exceptional care

demands (*n* = 129; 27%). Table 1 provides the descriptive results of the personal, family and work characteristics of the sample of parents with typical and exceptional care demands.

Measures

This study analyzed a subset of variables from the original data set. In this study, the outcomes of interest are sleep and physical health problems. Predictor variables included work-related factors, personal factors, and family factors.

Sleep and health outcome measures

Sleep problems. Participants were asked to indicate how frequently during the past month they had trouble sleeping to the point that it affected their performance on and off the job. They responded using a Likert-type scale ranging from 1 = *never* to 5 = *very often*.

Physical health problems. A well-established measure of physical health was used (Beutell, 2010; Pagnan et al., 2017) consisting of a single item: "How would you rate your current state of health? Participants rated their health using a Likert-type scale with values ranging from 1 = *excellent* to 4 = *poor*. In this study, higher scores indicate poorer physical health.

Work-related measures

Work-related measures used in primary analyses included job flexibility, job autonomy, organizational support, supervisor support, and co-worker support. Other work-related characteristics are reported for descriptive purposes including categorical single item questions such as **type of employer**, (i.e., government, for-profit, non-profit, single private household), ordinal single item questions such as **difficulty to take time off,** or interval level single item questions such as **average hours worked per week,** and **number of different jobs.** Three Likert-type scales were constructed to measure **job autonomy** (3 items, Winfield & Rushing,

2005; Cronbach alpha = .68), **organizational support** for work-life balance (3 items; Cronbach alpha = .80), and supervisor support (11 items, Winfield & Rushing, 2005; Cronbach alpha = .83). **Job flexibility** was constructed by recoding whether a parent responded no (0) or yes (1) to four flexible work options (difficulty taking time off, can choose start/stop times, can change start/stop times, can go full to part time) into a summative scale (1- 4) with high values indicating high job flexibility. **Co-worker support** was measured by a single Likert-type item.

Personal and family characteristics

Key personal characteristics drawn from both theory and prior research were included in this study. Personal employee variables included age, gender, race/ethnicity, and education. Family variables used in this study related to whether the respondent was engaged in typical or exceptional caregiving (see description of how this was determined under Participants), partner status (*currently married*, *cohabitating, previously married*, *never married*), number of children under 18 in the home, age of youngest child living in the household and total annual household income from all sources. We included the average number of hours worked per week by the respondent's partner as a measure of resource availability. Respondents with no live-in partners were assigned zero partner hours worked.

Analyses

The data file containing the variables of interest was screened for missing data. Bivariate analysis of study variables used ANOVA, t-tests, or chi-squares to assess for differences between typical and exceptional care demands groups. Correlation tests were conducted on the workplace supports (i.e., job flexibility, autonomy, organizational support, supervisor support, coworker support), sleep problems and physical health problems.

Personal, family, and workplace factors were then entered into two hierarchical regression models, with parent sleep and physical health problems serving as outcome variables. The influence of: (a) personal and family characteristics (step 1), (b) job characteristics including job flexibility, job autonomy, organizational support, supervisor work-family support, and coworker work-family support (step 2), and (c) moderation effects between type of care (typical, exceptional) and job characteristics (job flexibility, job autonomy, organizational support, supervisor work-family support, coworker work-family support) on employed parents' sleep problems, physical health problems were examined.

Results

Characteristics of Employed Parents with Typical and Exceptional Care Demands

Table 1 shows the frequencies, means, and standard deviations of the personal and family characteristics for employed parents with typical and exceptional care demands. Five significant differences between the two groups of participants were found. Being a parent of children with exceptional care demands was associated older parental age (*mean diff.* = 2.49; *d* = .38) compared to participants giving typical care. Additional significant differences were found between the two groups with those giving exceptional care having older youngest children on average (*mean diff.* = 1.43; *d* =.24) and having a spouse that worked fewer hours (*mean diff.* = -5.92; *d* = .85) compared to those providing typical care. Differences were found between the groups on marital status (X^2 (472) = 5.02, $p < .05$, Eta =.11) with those giving exceptional care been associated with single and having lower incomes compared to those giving typical care (mean diff. = .442; *d* = .25).

[Insert Table 1 here]

Workplace Characteristics of Employed Parents with Typical and Exceptional Child Care Demands

As reported in Table 2, 75% percent of parents worked in the private sector. Parents worked an average of 43.04 hours per week (*SD* = 13.14). A significant difference was found in the number of parents with exceptional care demands who reported difficulty taking time off for family reasons compared to parents with typical child care demands (X^2= 14.41, $p < .01$, Cramer's $V = .28$).

Sixteen percent of parents with exceptional care demands and 27% of parents with typical care demands reported that it was *not at all hard* to take time off. More than 74% of parents in both groups reported that they had a partner/spouse who worked for pay, with partners/spouses working approximately 25 hours per week on average across both groups. Parents of children with exceptional care demands reported significantly lower levels of job flexibility (*mean diff. = .2301*, $p < .05$, $d = .20$) and job autonomy (*mean diff. = .1736*, $p < .05$, $d = .21$). No significant difference was found for organizational support (*mean diff.* = .1063, $p < .16$). Differences between the two groups on supervisor support were also not significant (*mean diff.* = .0289, $p < .68$) and coworker support (*mean diff.* = .1216, $p < .14$). In line with Ha^1 employed parents of children with exceptional care demands reported having more sleep problems, (*mean diff.* = -.435, $p < .001$; $d = .40$). However, no significant differences were found between the two groups for average physical health ratings.

[Insert Table 2 about here]

Effects of Exceptional Care Responsibilities and Workplace Supports on Sleep and Physical Health Outcomes

Table 3 presents the correlations assessing the association between workplace characteristics and sleep and health outcomes for the entire sample. There were a number of strong associations between workplace supports and sleep problems and physical health problems, with higher levels of work supports being significantly negatively correlated with both sleep problems and physical health problems. Sleep and health problems were positively and significantly correlated.

(Insert Table 3 here)

Table 4 depicts the results from the regression models for sleep problems and physical health problems that investigated Ha^2 and $Ha^{3.}$. The main effects model accounted for 8% of the variance in sleep problems. None of the personal characteristics contributed to the main effects model. Having exceptional child care demands ($\beta = .19, p < .01$) was the only family predictor that significantly contributed to sleep problems. Job variables added in Step 2 significantly increased model fit for sleep problems (ΔF (5, 478) = 5.06; $\Delta R^2 = .05, p < .001$; Ha^2). Organizational support was negatively associated with sleep problems revealing that those with less organizational support reported greater sleep problems ($\beta = -.17, p < .001$). The moderated model significantly contributed to 2% of the variance in sleep problems (ΔF（5, 473) = 2.46; $\Delta R^2 = .02, p < .05$; Ha^3). Simple slopes tests demonstrated that for employed parents of children with typical child care demands, high job autonomy was associated with fewer sleep problems (t (17,494) = 4.20, $p < .001$) compared to parents of children with exceptional child care demands (t (17,494) = 0.30, $p < .76$).

[Insert Table 4 here]

The main effects model accounted for 9% of the variance in physical health problems. Two personal characteristics significantly contributed to greater reported physical health problems (Step 1): being younger ($\beta = -.15$, $p < .05$) and being less educated ($\beta = -.16$, $p < .001$; Ha[3]). In step 2, lack of organizational support was also associated with more health problems ($\beta = -.25$, $p < .001$; Ha[3]), as was age of the youngest child ($\beta = -.13$, $p < .05$). The interaction model in Step 3 significantly predicted physical health problems (ΔF (5, 453) = 2.77; $\Delta R^2 = .03$, p <05). A simple slopes test established that higher coworker support was related to better physical health for employed parents of children with exceptional care demands (t (17,474) = -2.46, p <.01*)* but not for parents of children with typical care demands (t (17,474) = 1.27, p *<.20*).

Discussion

Parents of children with exceptional care responsibilities reported significantly greater sleep problems than parents providing typical care, as expected. However, parents with exceptional care responsibilities did not rate their physical health substantially lower than those with children who did not require special care. When workplace supports were controlled through regression analysis, parental sleep and physical health problems were both strongly associated with lower levels of organizational supports. Moderation effects of job flexibility and job autonomy on sleep problems were also noted by care type. Finally, a substantial moderation effect of coworker support was noted by care type for parents' reports of their physical health.

Implications

It is crucial for organizations to develop focused supportive practices that reduce stress and improve the health of their employees providing exceptional care as parents of children and youth with disabilities. Targeting enhancement of organizational knowledge about challenges

faced by the substantial numbers of workers who are providing exceptional care for young people with disabilities may also increase the support they receive from human resource and employee assistance staff, supervisors, and co-workers (Rosenzweig et al., 2011). Crain et al. (2019) demonstrated that implementing an intervention that allows greater job autonomy and flexibility by focusing less on face-time and more on results improved worker sleep duration and quality. This was also true for increased supervisors' family supportive practices. Occupational social workers could also include topics like supervisory support and workplace flexibility in their work with employed parents outside of the specific organizational context (Jang, 2009).

Findings from the current study call for health promotion activities at the workplace that acknowledge the family demands of employees, including disability care. In line with issues identified through the U.S. Department of Occupational Health and Safety's Total Worker Health Initiative (Chari et al., 2018), we argue that organizations should incorporate this source of family diversity into their health promotion efforts that focus on improving worker well-being, and creating a "culture of health" at work that allows workers to thrive. To accomplish this shift, workplaces will need to "provide environments, resources and support systems that encourage healthy lifestyles and reinforce health as a shared value" (p. 592). In their review of work-life conflict's association with health behaviors, Hammer and Sauter (2013) advocated for health promotion interventions at the workplace designed to reduce work-related stressors and to support improvement of health behaviors on the part of employees. Pagnan et al. (2017) emphasize the importance of helping employees to achieve a fit between work and family responsibilities, including caregiving, in order to encourage their enacting health promoting behaviors.

It is also critical for service providers to acknowledge the complexities of the lives lived by families in their care. Research has demonstrated that parents are more likely to support the engagement of their children in therapeutic services if service providers spent time not only on addressing the child's behaviors, but on additional parental concerns beyond the immediate focus child (Fabiano & Caserta, 2018; Prinz & Miller, 1994). Service providers who acknowledge the challenges parents face at work and how this affects parental sleep and health can be more effective in their work with children. Taking a family-focused approach to services can also improve parental job-related outcomes in addition to helping with service engagement (Krivelyova & Stephens, 2005). Access to medical care and therapeutic services can also directly affect parental health and stress (Breitkreuz et al., 2014).). Social workers can also connect parents with family organizations that provide support to family members that are dealing with specific challenges due to their child's disability (Jackson, 2011; Vanegas & Abdelrahim, 2016). It is therefore critical that agencies provide services that are readily accessible, and that can be integrated with work obligations. For example, access to telehealth can reduce the burden related to shuttling children to services, or services available within the school setting can allow parents to continue their employment without compromising their children's health and well-being. (Knopf, 2013). Supporting parental health and sleep will also improve parents' positive outlook and decrease stress (Mihaila & Hartley, 2018), and help to deal more effectively with the demands of exceptional care responsibilities (Johnson & Mendoza, 2018).

Limitations and Future Research Directions

Although using a data set that is nationally representative of the U. S. workforce, the current study has two major limitations: it is based on a single data source, and the measure of sleep is limited. Since the goal of the present research was to examine the health status of a large

set of employed workers raising children with disabilities, we used data that were recorded from individual parents who were providing exceptional or typical care. There were no collateral measures from other parenting adults in the same family or from their supervisors or co-workers.

Future studies could get a more complete accounting of supportive versus unhelpful employer practices by collecting data from additional parenting adults in their families and supervisors and co-workers in their organizations. Researchers might also employ measures of sleep with greater precision to gain a more substantial picture of sleep quality and patterns. Related studies have included measures of sleep sufficiency and symptoms of insomnia have employed sleep monitor digital devices to gather precise data regarding sleep duration and interruption. (Barnes, 2012; Centers for Disease Control, 2011; Crain, 2019).

Clearly, as organizations strive to be “family friendly” future investigations are warranted to examine the health impact of programs that provide targeted supports for employed parents that are providing exceptional care to their children, including those fostering organizational and coworker supports.

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Table 1

Percentages, means, and standard deviations for personal demographics and family characteristics (N = 472)

Characteristics	*Total*		*Typical care demands*		*Exceptional care demands*	
	N	*%*	*N*	*%*	*N*	*%*
Gender						
Female	294	62	209	61	85	66
Male	178	38	134	39	44	34
Race/Ethnicity						
White non-Hispanic	321	68	231	67	90	69
Black non-Hispanic	59	13	41	12	18	14
Hispanic	76	1	59	17	17	13
Other non-Hispanic	16	3	12	4	4	3
Education						
High school/Technical	92	19	64	19	28	22
Some college	158	34	116	34	42	33
Bachelor degree	136	29	99	29	37	29
Professional/Masters degree	86	18	64	19	22	17
Marital status						
Married	323	68	245	71	78	61
Cohabitating	50	11	35	10	15	12
Never married	39	8	24	7	15	12
Previously married	60	13	39	11	21	16
Income						
<$25,000	68	14	43	13	25	14
$25,000 <$50,000	88	19	62	18	26	30
$50,000 <$75,000	86	18	63	18	23	18
$75,000 <$100,000	84	17	60	18	24	19
$100,000 <$125,000	76	16	58	17	18	14
$125,000 <$150,000	27	6	22	6	5	4
$150,000<	43	9	35	10	8	6
	M	*(SD)*	*M*	*(SD)*	*M*	*(SD)*
Age of parent[a]	41.33	(9.7)	40.65	(9.55)	43.15	(9.93)
Age of youngest child[b]	9.23	(7.22)	8.84	(7.26)	10.27	(7.02)
Number of children <18	1.58	(.95)	1.57	(.90)	1.69	(1.03)
Spouse work hours[c]	24.47	(20.63)	26.09	(20.24)	20.17	(21.09)

[a] t (470) = 2.50, p <.01.
[b] t (470) = 1.92, p <.05.
[c] t (470) = 2.80, p <.01.

Table 2

Percentages, Means and Standard Deviations of Job-related Characteristics by Type of Care Demand

Characteristics	All parents		Parents with typical care demands		Parents with exceptional care demands	
	N	%	*N*	%	*N*	%
Employer						
Government	118	25	85	25	33	26
For-profit	290	61	207	61	83	64
Non-profit	53	11	41	12	12	9
Single private household	6	1	5	1	1	<1
Allowed to work from home						
Yes	148	32	110	32	38	30
No	320	68	229	68	91	70
Paid vacation days						
Yes	374	80	275	81	99	77
No	94	20	64	19	30	23
5+ days/year for personal illness						
Yes	311	66	229	67	82	64
No	158	34	112	33	46	36
5+ days/year for sick child without penalty						
Yes	222	54	168	55	54	49
No	193	46	137	45	56	51
Difficulty taking time off: family reasons[a]						
Very hard	55	12	39	11	16	12
Somewhat hard	120	25	74	22	46	25
Not too hard	152	32	117	34	35	27
Not at all hard	114	24	93	27	21	16
It depends	31	7	20	6	11	9
Partner/spouse works for pay						
Yes	299	80	230	82	69	74
No	74	20	50	18	24	26
	M (*SD*)		*M* (*SD*)		*M* (*SD*)	
All hours worked/week in all jobs	43.04 (13.40)		42.65 (12.85)		44.08 (14.76)	
Regular hours worked by partner/spouse[b]	24.47 (20.62)		26.09 (20.24)		20.17 (21.24)	
Job flexibility[c]	2.09 (1.11)		2.16 (1.09)		1.93 (1.16)	
Job autonomy[d]	2.79 (.78)		2.83 (.77)		2.66 (.81)	
Organizational support	3.09 (.72)		3.12 (.71)		3.02 (.75)	
Supervisor support	3.24 (.69)		3.25 (.70)		3.22 (.69)	
Coworker support	3.15 (.79)		3.18 (.80)		3.06 (.78)	

Note. N varies.

[a] $X^2 = 14.41$, $p < .01$.

[b] $t\ (470) = 2.80$, $p < .01$.

[c] $t\ (470) = 2.00$, $p < .05$.

[d] $t\ (470) = 2.15$, $p < .05$.

Table 3

Correlations between work supports, sleep problems and physical health problems

	Variables	1	2	3	4	5	6	7
1	Job flexibility	1	.50***	.37***	.30***	.29***	-.18***	-.16***
2	Job autonomy		1	.48**	.35***	.33***	-.13***	-. 16***
3	Org support			1	.55***	.53***	-.24***	-.22***
4	Supervisor support				1	.48***	-.24***	-.12***
5	Coworker support					1	-.21***	-. 14***
6	Sleep problems						1	.29***
7	Physical health problems							1
M		2.11	2.79	3.09	3.24	3.13	2.25	3.02
SD		1.14	.78	.72	.71	.80	1.11	.72

Note. * $p < .05$ ** $p < .01$ p <.001.

Table 4

Hierarchical Regressions Predicting Sleep Problems and Physical Health Problems

	Sleep Problems						Physical health problems					
	Step 1 β	SE	Step 2 β	SE	Step 3 β	SE	Step 1 β	SE	Step 2 β	SE	Step 3 β	SE
Female	.04	.11	.06	.11	.07	.11	.02	.07	-.00	.07	.01	.07
Age	-.04	.00	-.07	.01	-.06	.01	**-.15***	.00	**-.18****	.00	**-.17****	.00
NH White	.00	.11	-.01	.12	-.01	.11	-.02	.07	-.05	.07	-.04	.07
Education	-.07	.05	-.06	.05	-.06	.04	**-.16*****	.04	**-.16****	.03	**-.15****	.03
Married	-.04	.14	.04	.13	-.03	.13	-.02	.09	-.02	.08	-.02	.08
Income	.07	.03	.-06	.03	-.05	.03	-.02	.02	.02	.02	.02	.02
Number of children <18	-.09	.06	-.06	.06	-.05	.06	-.07	.04	-.10^{T}	.04	.10^{T}	.04
Age of youngest child	-.03	.01	-.01	.01	-.02	.01	-.12^{T}	.00	**-.13***	.01	.12^{T}	.01
Has exceptional child care demands	**.19****	.11	**.18*****	.11	**.19*****	.11	.04	.07	.02	.07	.03	.07
Spouse work hours	.09	.00	.09	.00	.09	.00	.01	.00	.01	.00	.02	.00
Job flexibility			.03	.05	-.02	.06			-.02	.03	-.06	.04
Job autonomy			.04	.07	-.02	.09			-.03	.05	-.08	.06
Organizational support			**-.17*****	.08	**-.19*****	.09			**-.25*****	.06	**-.30*****	.07
Supervisor support			-.05	.07	-.04	.08			-.05	.05	.07	.06
Coworker support			-.07	.07	-.04	.09			-.02	.05	.08	.06
Care type x job flex					.10^{T}	.09					.09	.07
Care type x job autonomy					.11^{T}	.09					.07	.10
Care type x organizational support					.04	.20					.09	.12
Care type x supervisor support					-.04	.19					-.06	.12

	Sleep Problems						Physical health problems					
	Step 1 β	SE	Step 2 β	SE	Step 3 β	SE	Step 1 β	SE	Step 2 β	SE	Step 3 β	SE
Care type x coworker support					-.05	.16					**-.17****	.10
F ratio	3.23***		3.93***		3.61***		2.69***		4.10***		3.83***	
R^2	.04***		.08***		.10*		.03***		.09***		.11*	
Change R^2	.06***		.05***		.02*		.05***		.06***		.03*	

Note. **p* < .05 ***p* < .01 ****p* < .001. **Care type:** Typical child care demands = 0, Exceptional child care demands= 1.

Biographical Notes

Lisa M. Stewart is an Associate Professor of Social Work in the Department of Social Work at California State University, Monterey Bay. Her current work focuses on the challenges and supports of working families caring for children with disabilities. Her work aims to develop a workplace health intervention to promote improved communication between working parents with exceptional care demands and organizations so that this group of employees are better supported in meeting their work and care demands. Dr. Stewart's program of research includes cross-disciplinary work with national leaders in occupational health and clinical informatics.

Claudia Sellmaier is an Assistant Professor in the School of Social Work and Criminal Justice at the University of Washington Tacoma. Dr. Sellmaier's research examines economic stability and work life fit at the intersection of gender and disability with a specific focus on the role of community resources.

Ana Maria Brannan is an Associate Professor of Special Education in the Department of Curriculum and Instruction at the Indiana University School of Education in Bloomington, Indiana. Dr. Brannan's expertise is in examining the efficacy and challenges of child mental health service delivery and assessing the impact of caregiver strain among parents of children with behavioral and emotional disorders.

Eileen M. Brennan is a Research Professor of Social Work and the Principal Investigator of the Support for Working Caregivers project at the Regional Research Institute for Human Services at Portland State University, Portland, Oregon. Her current work builds on previous research that investigated the challenges and accomplishments of employed parents raising children and youth with mental health disorders or other types of disabilities. The focus of the research is to better understand the ways that those giving exceptional care manage both their work and family

responsibilities. Her research program has been guided by engaging with leaders in the field of family support, particularly family members providing peer support.