

**Time Demands and Child Mental Health:
The Role of Family Characteristics and Stressful Life Events**

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INTRODUCTION

The American family underwent significant change during the last half of the twentieth century. Transformations in family life has been characterized by increasing time pressures coincident with dramatic increases in rates of divorce and single parenthood, dual-earner families, and work hours. So endemic is the pattern that hectic schedules have become American cultural ideals that symbolize economic and social success (Hochschild 1989; Roxburgh 2002). Americans, and the social scientists who study them, have concluded that the U.S. population feels overworked, and indeed is working more hours and has fewer hours to engage in leisurely pursuits (Galinsky, et al. 2001; Schor 1992). Americans also report feeling more pressured for time. For instance, the percentage of adults who say they “always feel rushed” increased from 24% in 1965 to a peak of 38% in 1992 (Robinson and Godbey 1998).

Time pressures are not evenly distributed, in nature or extent. Divorced women, working women, and women with small children tend to feel more time pressure than others (Bianchi 2000; Milkie, et al. 2002; Robinson and Godbey 1998). Convergent trends to increased participation in the workforce by women, to increased proportions of working women with small children, and increases in divorce and single parenthood likely exacerbate the factors contributing to time pressure in mothers. The percentage of females in the labor force has steadily increased from 43.3% in 1970 to 60.1% in 2001 (Bureau of Labor Statistics 2001). Since 1960, rates of labor participation by married mothers of children under six have strongly increased, to 60% in 1992, at the time of the outset of the study reported here (Census 1993).

The nature and scheduling of labor has changed as well (Bond, et al. 1998). According to the Current Population Survey, in 1997 only 29.1% of employed U.S. citizens worked a standard 35-40 hour workweek (Presser 1999). Barely half of those surveyed worked a fixed daytime schedule (Presser 1999). These changes have had and will continue to have profound effects on the lives of families (Presser 2000; Waite and Nielson 2001). The American middle-class “time bind” has received tremendous recent attention within the sociological and psychological literatures (Bronfenbrenner and Crouter 1982; Brown and Booth 2002; Hochschild 1997; Maume and Bellas 2001), which report that time pressure acts as a major stressor in American families (Maume and Bellas 2001; Tausig and Fenwick 2001). Although the effects of the time bind on marriage and on the mental health of working parents, particularly mothers, have been subject to numerous studies (Fenwick and Tausig 2001; Frone 2000; Frone, et al. 1997), fewer have examined the impact of increased parental labor burden on the mental health of children despite consistent reports that parent’s mental health exerts a large effect on that of their children (Angold and Costello 2001).

The research that does focus on consequences for children tends to examine social and cognitive outcomes, such as social competence or school achievement (Bogenschneider and Steinberg 1994; Parcel and Menaghan 1994). What about the effects on child psychological well being? We have suggested that increased parental labor demands along with childcare and education needs contribute to greatly increased scheduling complexity for families, and further that income and social support can moderate the burden of scheduling on family life by providing or purchasing services to meet family maintenance needs (Worthman, et al. 2002). Factors that increase scheduling burden or decrease capacity to manage that burden may contribute to schedule fragility, disrupt family routines, and erode parental capacity to create desired and desirable experience for their children.

This analysis draws upon a large epidemiologic study to examine the effects of family time

demands on child well being in a longitudinal sample of 1420 children measured over 7 years. We use these data to probe the proximal sources of stress within American families, specifically ascertaining whether child social support, family income, and depression in the primary caregiver modify the effects of family stress on child well being.

BACKGROUND

Many studies on time pressure focus only on family composition or parental work, yet the time bind likely is created by multiple sources. For example, family composition affects oppositional behavior in children, and parental work pressure has been shown to affect children's cognitive test scores (Cooksey, et al. 1997). Predictably, the effects of work stress and family stress are linked. In a study on parental work pressure and adolescent well-being, Crouter and colleagues (Crouter, et al. 1999) found that parental role overload, as measured by parents feeling overwhelmed by multiple commitments and not having enough time for themselves, mediated the effects of job pressure on adolescent depressive symptoms and general self-worth. "...pressure in the workplace can be thought of as the first domino in a series of interconnected work and family processes. High levels of work pressure were associated with heightened feelings of role overload for mothers and fathers" (Crouter, et al. 1999, p.1458). Of the reports that do consider the effects of multiple sources of time pressure, most show significant effects of both family structure issues as well as parental work issues, often in combination with each other. For example, Parcel and Menaghan (Parcel and Menaghan 1994) examine the importance of family composition in the relationship between parental employment and children's well-being and find a significant interaction between family composition changes and parental employment, such that paternal overtime hours only have a detrimental affect when an additional child is born into a family.

We base our index of time demands on prior studies that have found larger family sizes (Menaghan and Parcel 1991), single parenthood (Conger et al. 1984, Crouter et al. 1984), preschool-aged children (Dunn, et al. 1999), increases in parental work hours (Bluestone and Rose 1997, Schor 1991), and life transitions such as divorce or birth of child (Menaghan and Parcel 1995) negatively affect home environments and may have adverse effects on child well-being. Additionally, we test the moderating effects of family income (Duncan and Brooks-Gunn 1999), child's social support (Colarossi and Eccles 2003; Rigby 2000), and depression in the primary caregiver (Goodman and Gotlib 2002). Although each of these variables has been shown to have direct effects of child mental health, each may buffer or exacerbate the effects of time demands on mental health as well. Time demands may have less of an impact on psychological well-being in the case of higher income, as income can be used essentially to buy time by paying for services such as housecleaning or food preparation, for example. Social support has been shown to buffer the effects of chronic stress on mental health (Galaif, et al. 2003), while parental depression has been shown to moderate the effects of stress on child well-being (Oliver 2002).

While many researchers and policy makers have speculated on the consequences of increased family time demands for children, the empirical results are often contradictory, situation dependent and limited by methodological problems. Common limitations include the use of small or convenience samples which limit generalizability (Parcel and Menaghan 1994), the use of cross-sectional data to describe a longitudinal process (Frone, et al. 1997; Menaghan and Parcel 1991), and lack of systematic measures of part and full-time employment (Parcel and

Menaghan 1994). Additionally, many studies focus on only one aspect of the time bind (e.g., maternal work), without considering the combined effect of multiple factors.

In this study, we evaluate the combined effects of various sources of time demands by creating an index of time demands. Looking at them all individually while controlling for the others may overlook the increased effects each demand has, as would a simple two-way interaction, because for example it may not matter which two time demands are experienced, just that two are experienced at the same time. We hypothesized that the more time demands a family experiences, the greater the impact on child well being. Further, we expected that social support and income would mitigate the impact of time demands, and parental depression would exacerbate it.

METHODS

Study Design and Sample

A full description of the setting, sample, and data collection methods can be found elsewhere (Costello, et al. 1996). The Great Smoky Mountains Study (GSMS) is a longitudinal study of the development of psychiatric disorder and need for mental health services in rural youth. A representative sample of three cohorts of children, age 9, 11, and 13 years at intake, was recruited from 11 counties in western North Carolina. Potential participants were selected from the population of some 20,000 children using a household equal probability, accelerated cohort design (Schaie 1965). In an accelerated cohort design, each cohort reaches a given age in a different year over several years of data collection, which controls for cohort effects (Willett, et al. 1998).

We used a two-phase process to select the final sample for the longitudinal study. A screening questionnaire was administered by telephone or in person to a parent of the first stage random sample ($N=3,896$; 95% of those contacted). The questionnaire consisted mainly of the externalizing (behavioral) problems scale of the Child Behavior Checklist (Achenbach and Edelbrock 1981), and was completed by the biological mother in over 90% of the families. All children scoring above a predetermined cutpoint (the top 25% of the total scores, in this case it was a score of 20) plus a 1-in-10 random sample of the remaining 75%, were recruited for detailed interviews. Eighty percent of those recruited agreed to participate. The contribution of each participant was weighted by the inverse of their selection probabilities, stratified by age and gender, to provide accurate prevalence estimates for the population of the study area (Cochran 1995). Families were re-interviewed annually until the child was 16, and every 2-3 years thereafter. The data presented here, based on the first eight annual waves of the study (1993-2000), comprise 4285 interviews with 972 non-Hispanic White participants and their parents, 357 interviews with 87 African American participants and their parents, and 1591 interviews with 346 American Indians and their parents.

Procedures

Two interviewers visited the family each year, either at home or in a location convenient for them. Before the interviews began, parent and child signed informed consent forms. They were then interviewed in separate rooms. Each parent and child was paid \$10 after the interview.

Measures

Time Demands We focus on 5 situations that have been shown to increase time demands on families: single parent, 5 or more children in the household, preschool-age children, either parent working two or more jobs, and a recent life transition. Life transitions (parental divorce, parental

separation, and new child in the home) are structural changes in the family that may increase the time pressures to which it is subject. We summed the scores on these items to form a single construct measuring number of time demands on families. The resulting variable is a three-level categorical variable for no, one, and two or more time demands.

Acute Child Stress The measure of acute stress used in this study consists of a count of life events that have occurred within the last three months. The life events include high magnitude events such as fire or sexual abuse, along with low-magnitude events such as breakup with boyfriend/girlfriend and termination of pregnancy. See Appendix A for a full list of items. Recent life events are added together, and the variable is truncated at 4.

Psychiatric Symptoms Psychiatric symptoms were assessed using the *Child and Adolescent Psychiatric Assessment* (CAPA), a psychiatric interview for children aged 9 through 17 (Angold and Costello 2000). The CAPA is an interviewer-based interview, a format that combines the advantages of clinical interviews with those of highly structured epidemiologic interview methods. While using a highly structured format of questions and probes, the interviewer-based approach trains the interviewer to ensure that the parent or child being interviewed understands the construct under review, and provides enough detail and examples for a clear rating of the clinical severity of each symptom to be made. A detailed glossary provides the operational rules for identifying a clinically significant level of severity for each symptom.

The CAPA interviews parent and child separately, using different interviewers. The presence of a symptom can be determined on the basis of information from a single respondent, or using the either/or rule common in clinical practice. For these analyses, we counted a symptom as present if reported by either parent or child or both. The time frame of the CAPA for determining the presence of most psychiatric symptoms is the past three months. For this analysis, we use a variable that measures the total number of DSM-IV psychiatric symptoms.

Mediators and Moderators Potential mediators and moderators of the relationship between parental time demands and psychopathology included in these analyses were family income, child social support, and depression in the primary caregiver. Family income is categorized from 0-13, with the first category being no income, categories 1-12 increasing in \$5,000 increments, and category 13 being \$60,000 and above. Child's social support is a dichotomous variable where zero equals child having no to one, and one represents having two or more of the following: a best friend, a confidante among peers, a confidante among family, and regular peer contact. Depression in the primary caregiver is assessed with the Mood and Feelings Questionnaire (Angold and Costello 1987).

Interviewers and Interviewer Training

Interviewers were residents of the area in which the study took place. All had at least bachelor's level degrees. They received one month of training and constant quality control, maintained by post-interview reviews of each schedule, notes, and tape recordings by experienced interviewer supervisors and study faculty. Interviewers also were trained by Department of Social Services staff in the State requirements for reporting abuse or neglect.

Data Management and Analysis

Scoring programs for the CAPA, written in SAS, combine information about the date of onset, duration, and intensity of each event and symptom to create scale scores. Significant differences were calculated using a design-based Pearson χ^2 with a second-order correction converted to an F statistic. For this analysis we used Generalized Estimating Equations, which are an extension of generalized linear models that take into account correlation among observations, as in the case of panel data. The GEE models were run using Poisson models with

the log link function and the modified sandwich estimate of variance with the Stata program xtgee. The use of multi-wave data with the appropriate sample weights capitalized on the availability of multiple observation points over time, while controlling for the effect on variance estimates of repeated measures on the same child, for overlapping cohorts, and for design effects.

We ran two models for each dependent variable, child stress and psychiatric symptoms. The first model contains only main effects, while the second includes interaction terms with social support, income, and depression in the primary caregiver to test for moderating relationships. We ran one final model on psychiatric symptoms that includes acute stress as a predictor variable to determine if stress mediates the effects of time demands on psychiatric symptoms.

RESULTS

Table 1 shows the descriptive statistics for the variables in the analysis. Families in this

Table 1. Descriptive Statistics

Variable	Unweighted		Weighted		
	N	Mean or %	Std. Dev.	Min	Max
Time demands	6237	0.49	0.65	0	4
P1 depression	6012	6.00%		0	1
Child social support	6237	2.44	0.85	0	3
Family income	5666	7.74	3.70	0	13
Either P No HS diploma	6031	30.96%		0	1
Age of child, years	6237	13.13	2.19	9	17
Child is male	6237	51.09%		0	1
African American	6237	6.32%		0	1
American Indian	6237	3.76%		0	1
Recent life events	6237	0.35	0.66	0	4
Psychiatric symptoms, #	6237	3.46	4.32	0	50

sample experienced a mean number of 0.5 time demands: 59.4% have none, 32.9% have only one, while 7.7% have two or more time demands. MDQ scores of 9 or more occurred in 6% of primary caregivers. Children's mean number of sources of social support was 2.4: 18.0% of children had 0-1 source of social support, while 82.0% had 2-3. Mean income was 7.74, which corresponds with an income between \$30,001 and \$35,000. Almost 31% of the sample had one or more parents with no high school diploma. Mean number of recent life events was 0.35, while mean number of psychiatric symptoms was 3.5.

Table 2 provides a breakdown of parental time demands by child characteristics to examine how time demands are distributed in the sample. Children of parents with two or more jobs do not differ significantly on any characteristic except age from children in families with no time

Table 2. Percentage or mean number of children whose parents have each time demand, by child characteristic.

Child Characteristic	Parental Time Demands					
	no time demands	2+ Jobs	5+ kids	Preschool kids	Single Parent	Transition
	%	%	%	%	%	%
Total	60.6	5.0	3.2	15.4	21.3	4.1
Sex						
Female	49.9	57.0	64.0	48.8	44.2	52.8
Male	50.1	43.0	36.0	51.2	55.8	47.2
Race						
White	93.1	93.0	82.0**	84.9**	82.3**	84.2**
African American	4.4	3.4	6.5	7.8	12.2	8.1
American Indian	2.5	3.5	11.5	7.3	5.6	7.7
Child Age, years	12.9	13.1*	14.1*	12.6*	13.2*	12.9
Household Income	8.8	7.5	6.3*	6.9*	4.8*	6.7*
Parental Education - P1						
<HS	9.3	7.7	24.5*	15.9	10.0	18.8*
HS Diploma	33.7	32.0	26.7	38.6	39.1	30.4
Some College	27.9	36.0	42.0	26.1	34.1	34.0
College Degree	29.2	22.7	6.8	19.4	16.8	16.7
Parental Education - P2						
<HS	11.6	12.2	9.7**	15.8	21.2	23.5**
HS Diploma	32.7	34.4	63.0	36.1	51.7	34.6
Some College	21.9	26.6	9.8	23.8	6.6	14.9
College Degree	33.8	26.8	17.6	24.2	20.5	27.0
Social Support						
0-1	17.4	21.9	11.4	16.6	17.4	18.0
2-3	82.6	78.1	88.6	83.4	82.6	82.0
P1 Depression	3.9	7.1	14.1*	8.7*	9.8**	12.9**

*p<.05, **p<.01, a star indicates that entire variable was significantly different from those who do not have that time demand

demands. Children who have four or more siblings were more likely to be African American or American Indian, older and have lower household incomes, parents with lower levels of education, and higher rates of depressive symptoms among their primary caregivers. They do not differ significantly on levels of social support. Children with preschool-age siblings were more likely to be younger, African American or American Indian, have lower household incomes, and substantially higher rates of depressive symptoms among their primary caregiver. Children who come from single parent families were more likely to be African American or American Indian, be older, have much lower household incomes, and substantially higher rates of depressive symptoms among their primary caregiver. Children whose families experienced a life transition in the past year were more likely to be African American or American Indian, have lower household incomes, parents with lower levels of education, and higher levels of depression in the primary caregiver.

In the multivariate models, time demands significantly predicted both psychiatric symptoms and acute child stress (Table 3). The negative effects of time demands on children appear to increase as time demands increase such that the coefficients for 2 or more time demands are almost twice as large as the coefficients for having 1 time demand for both dependent variables. Time demands and depressive symptoms in the primary caregiver increased the risk for psychiatric symptoms and recent life events, while increased income and being American Indian lowered the risk. Being male was associated with an increased risk for psychiatric symptoms, but a decreased risk for recent life events. Age was associated with a decrease in psychiatric symptoms. Social support and parental education did not significantly predict either dependent variable.

After running the models with direct effects, we tested moderating relationships between time demands and depression in the primary caregiver, time demands and social support, and time demands and income to see if the deleterious effects of time demands were magnified by parental depression or offset by child social support and family income. Results show that child's social support appeared to exacerbate the effects of 2 or more time demands on psychiatric symptoms, while parental depression magnified the effects of moderate time demands on recent life events. Income did not moderate the effects of time demands on either outcome.

Table 3. The association between family time demands and child mental health outcomes

Independent Variables	Dependent Variable			
	Psychiatric Syntoms	Recent Life Events		
Time demands - 1	0.14 (0.055)*	0.36 (0.085)**		
Time demands - 2+	0.22 (0.087)**	0.67 (0.128)**		
P1 Dep	0.37 (0.093)**	0.44 (0.153)**		
Social support	-0.06 (0.047)	-0.1 (0.097)		
Income	-0.05 (0.010)**	-0.05 (0.013)**		
Parental education	0.02 (0.068)	-0.004 (0.094)		
Age	-0.04 (0.012)**	0.01 (0.019)		
Male	0.14 (0.067)*	-0.22 (0.089)*		
African American	-0.17 (0.097)	0.17 (0.133)		
American Indian	-0.14 (0.071)*	-0.18 (0.086)*		
time demands 1*p1dep	-0.12 (0.192)	-0.75 (0.272)**		
time demands 2+ * p1dep	-0.04 (0.257)	-0.67 (0.404)		
time demands 1*socsupp	-0.04 (0.094)	-0.05 (0.206)		
time demands 2+ * socsupp	0.34 (0.137)*	-0.03 (0.293)		
time demands 1*income	0.008 (0.016)	-0.02 (0.024)		
time demands 2+ * income	-0.02 (0.024)	0.01 (0.033)		
Constant	1.92 (0.193)**	1.94 (0.195)**	-0.94 (0.288)**	-1.02 (0.305)**
Observations	5635			
Participants	1377			

* p<.05; ** p<.01, Standard errors in parentheses

Table 4. The mediational effects of life events on the relationship between family time demands and psychiatric symptoms

Independent Variables	Psychiatric Symptoms
Recent life events	0.20 (0.036)**
Time demands - 1	0.11 (0.054)*
Time demands - 2+	0.15 (-0.087)
Social support	-0.06 (0.05)
P1 depression	0.32 (0.096)**
Household income	-0.04 (0.010)**
Male	0.17 (0.065)**
African American	-0.18 (0.092)*
American Indian	-0.12 (0.07)
Child age	-0.04 (0.012)**
Parental education	0.02 (0.07)
Constant	1.80 (0.193)**
Observations	5635
Participants	1377

* $p < .05$; ** $p < .01$; Standard errors in parentheses.

Lastly, we ran two final models of psychiatric symptoms that included life events as an independent variable to determine if life events mediate the effects of time demands on psychiatric symptoms. Results (Table 4) show that life events do mediate the effects of 2 or more time demands on psychiatric symptoms, but not the effects of 1 time demand. Income and depression in the primary caregiver remain significant. Being male remains a significant predictor of psychiatric symptoms. Being African American becomes significant, while being American Indian loses significance. The results of the moderating model do not change with the inclusion of life events as a predictor and have therefore been omitted. Social support continues to exacerbate the effects of 2 or more time demands on psychiatric symptoms.

DISCUSSION

The purpose of this study was to assess the impact of increasing family time demands on the psychological well being of children and adolescents. With escalating time pressure in American families, and the documented effects of this increase on marriages and adult well being, the possible concomitant impact on children merits consideration. The findings largely support the hypothesis that increasing time demands negatively affect the well being of children. Children in families with 1 time demand were at increased risk of psychiatric symptoms and acute stress. Children in families that experience 2 or more time demands were at an even greater risk of experiencing these adverse outcomes. There was some evidence that social support magnified the effects of time demands on psychiatric symptoms. This unanticipated finding warrants thoughtful consideration, for the usual view of social support is that it will reduce the impact of stressors on psychological well being. However, social support may also be social burden. For instance, the larger social networks (and hence, the greater the social support) of women than men translates into greater risk of negative events in and emotional burden from the network, which in turn explains the greater risk of depression in women than men (Costello 1991). Also in adults, likelihood of discussing a problem with others increases with level of social support, but actually increases depression (Ross and Mirowsky 1989).

We furthermore observed that parental depression exacerbated the effects of moderate but not of heavy time demands on child experiences of acute stress. At moderate time demand, depression in the primary caregiver makes it more likely that the child will experience stressful life events, perhaps by reducing parental capacity for buffering the child against risk of life events under increased time demand. But at higher time demands, caregiver depression makes no difference for the increased risk of child life events, possibly because impact of greater burden on all parents is large enough to displace any effect of depression on parental capacity to buffer children against life events. In this case, by buffering we refer to the parent's capacity to create and maintain conditions of family life in a manner so as to minimize child risk of life events. Contrary to our expectations, income had no buffering effect. Moreover, results show that recent life events mediate the effects of heavy time demands on psychiatric symptoms, such that high levels of time demand lead to an increase in acute stress and a consequent increase in psychiatric symptoms, while at low levels of time demand, impact on psychiatric symptoms is direct.

The mediating role of recent life events in the pathway from time demands to psychiatric risk in children concurs with parental models about the structure of daily family life. Parents prioritize ecologies and practices that minimize probability of acute stressors for children, including maintenance of routines and continuous supervision of children. In a separate study of families in Atlanta, we have found that parents both value and strenuously strive to provide stable daily schedules for children, viewing them as important for child well being (DeCaro and Worthman 2003).

These analyses contribute to a body of literature that identifies the growing work-family tension in American families as a significant threat to child well being. Our findings about the negative impact of family time demands on psychiatric symptoms is consistent with existing reports, although it is unique in its focus on acute stress and psychiatric symptoms in general and in its operationalization of the concept of time demands. The study is also unique in its testing of moderating relationships with income, social support, and parental depression.

The interest of the significant findings reported here must be tempered by consideration of the several limitations of this study. First, is the issue of imputing causal directions from correlational analysis in cross-sectional data. Several authors using cross-sectional data have speculated that underlying emotional or behavioral problems of the child may be a factor that has kept a parent (typically a mother) out of the workforce (Rogers, Parcel and Menaghan 1991). While our data are longitudinal, the study began with children at age 9. Thus, it is possible that parents have already left the workforce because of a child's problem. If this is the case, then children with the most severe behavioral problems likely do not have both parents in the workforce, much less working 2 or more jobs. The same limitation applies to other time demands as well. It is possible that parents of children with psychiatric problems are more likely to divorce, less likely to have additional children, and so forth. The possible non-recursive relationships between the dependent and independent variables that are not addressed in this study, should be in the future.

A second related limitation has to do with our modeling of the data. Despite the fact that we have longitudinal data, we examine the contemporaneous effects of time pressure on child psychological well being. While assessing the contemporaneous effects has important implications for child mental health, future studies should assess the impact of time demands on children and adolescents over time. Are there cumulative effects? If so, what buffers the cumulative impact?

Third, the issue of family time demands is complex and its effect on children may be modified by many factors that are not included in this analysis. For example, some of the pressure created by multiple time demands could be reduced by the use of paid services such as housecleaning or by assistance from extended family. We could not assess those types of relationships with our data, however the impact is likely substantial. Similarly, the type of job parents' hold has been shown in prior research to have substantial effects. For example, cite a study or two on job control and job demands. We do not have information on the level of control or demands involved in the jobs of the parents, although ideally an index of time demands would include both working excessive hours and working highly demanding jobs.

Finally, one should consider critically what the components of our time demand scale represent, and address the heterogeneity it subsumes. For example, having 2+ jobs can mean different things. Nearly one fifth (19.4%) of primary caregivers report holding 2+ jobs, but for the economically struggling single parent, multiple employment can be the product of absolute necessity, while for the affluent married woman, it can represent energy, opportunity, or high functioning. Our data provide weak but persistent evidence of such heterogeneity. At $p < .10$, children of part-time employed P1s in dual parent households have more symptoms as income goes up and those with 2 or more jobs have fewer symptoms as income increases. Among single parents above the poverty line, family functioning decreases as income increases among part-timers, but family functioning increases and child psychiatric symptoms decrease as income increases among those with 2 or more jobs.

In sum, time demands exert effects on child mental health, both directly and indirectly, by increasing risk of acute stressors represented by child life events. Conditions of parent (depression) and child (social support) moderate that relationship, but income does not. Thus, our expectation that income would buffer the impact of increasing time demands was not met, though the limitations of our dataset with regard to type of employment, job stress and satisfaction, and fragility of family schedule curtail the interpretability of our findings.

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Appendix A - Recent Life Events

diagnosis of physical illness
serious accident
fire
war, terrorism
exposure to noxious agent
cause of death or severe harm
victim of physical violence
victim of physical abuse by family member
captivity
sexual abuse
rape
coercion
natural disaster
witness to life event
learned about life event
parental arrest
forced separation from home
death of a loved one
death of a sibling/peer
made aware of pregnancy
termination of pregnancy
childbirth
placement of own child
upset around childbirth
moving house
change of school
loss of best friend through move
breakup with best friend
breakup with boyfriend/girlfriend
lives in unsafe environment
reduction in standard of living