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TAKING ITS TOLL: THE INFLUENCE OF PAID AND UNPAID WORK ON WOMEN'S WELL-BEING

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ABSTRACT

This paper examines gender differences in the impact of paid and unpaid productive activities on well-being. Using recent Canadian data, we examine the time spent by prime-age women and men (25–54) on paid work, childcare, eldercare, household work, volunteering, and education, and then assess its impact on stress and work-life balance. Using multivariate analyses, we show that women's greater hours of unpaid work contribute to women experiencing more stress than men, and of that work, hours spent on eldercare and housework are more stressful than those spent on childcare. We also examine the influence of job characteristics and spouses' paid and unpaid work time on stress. Neither spouse's unpaid work nor most job characteristics alleviate stress, once work hours are controlled. However, the evidence suggests that women, more so than men, use strategies such as self-employment to improve work-life balance.

KEYWORDS

Stress, work-life balance, unpaid work, women's health, caregiving, intra-household inequality

JEL Codes: I1, J16, J22

INTRODUCTION

While attention has long been paid to the double day for women in the workforce and its impact on labor market outcomes, its effect on health and quality of life have only recently been considered (Maria Floro 1995). In Canada, as in most industrialized countries, it is now the norm for both spouses to be in the labor market. The management of caregiving has therefore become critically important for most Canadian families and for Canadian society. Issues of work-family balance are gaining increasing attention. This has given new visibility to the ongoing unpaid work done in the home and community, which has traditionally been unrecognized and not considered as "work." While love may motivate caregiving, it still takes time, physical exertion, and emotional effort, just as paid work does. Like all jobs, caregiving poses physical health and safety risks and can be stressful, especially when time and resources are insufficient for the work at

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hand. Using a health determinants framework, there are many aspects of physical and mental health hypothesized to be related to the amount and conditions of work, both paid and unpaid (Health Canada 1999).

In this paper we focus on outcomes related to stress. Stress has known impacts on both emotional and physical well-being. We are interested in the cumulative and separate effects of hours of paid and unpaid work and caregiving on stress. Are hours spent on childcare as stressful as those spent on eldercare, housework, volunteer activities, or in paid jobs? How do time pressures relate to other factors, such as income and family responsibilities, which are also known to create stress? We are particularly interested in gender differences in both the hours of work and the stress-related outcomes, given that women still perform the majority of caregiving and juggling of work in the family. Our focus is the relationship of unpaid work to stress, both on its own and in combination with other forms of work. As most prime-age women in Canada combine paid and unpaid work responsibilities, our research also links directly to the literature on work-family balance. In this paper we limit our analysis to this prime-age group (25–54).

BACKGROUND

This research draws on the substantial literature on unpaid work and caregiving, work-family conflict, and social determinants of health. Considerable progress has been made both empirically and conceptually in the study of unpaid work. An international campaign to revise national accounting systems to measure and value unpaid work (including subsistence production, domestic labor, and volunteer activities) has resulted in UN endorsement of satellite accounts to augment standard measures of GNP (Marilyn Waring 1988; Lourdes Benería 1992, 2001). Statistics Canada has played a leading role in developing methods of data collection and measurement to facilitate such accounts (Statistics Canada 1993, 1994, 1998; Meg Luxton and Leah Vosko 1998). At a macro level, these data show the contribution of unpaid work to the overall economy. For example, GPI Atlantic estimates that the value of unpaid housework and childcare in Nova Scotia ranges from C$8.5 billion to C$10.5 billion, depending on the evaluation method, which represents 42–51 percent of GDP (Ronald Colman 1998: 95).

Feminist economists have been struggling to conceptualize the relationship between reproduction and production at this macro level and thus "engender" macroeconomics and social policy analysis (Nilufer Cagatay, Diane Elson, and Caren Grown 1995; Nancy Folbre 1995, 2001; Isabella Bakker 1998; Diane Elson and Nilufer Cagatay 1999; Beneria 2001). At the macro level, there is concern that globalization and an emphasis on market production are creating a growing crisis in reproduction and caring labor, a

crisis that needs to be made visible and redressed (UNDP 1999; Folbre 2001). By not recognizing and valuing caring labor, we are in danger of running out, and, as Folbre says, you "can't buy more at the corner store" (Folbre 1995: 85). Feminist economists argue that macro policies, such as cutbacks in health and social services, have assumed an infinite capacity on the part of households to absorb the costs of reproduction, and they draw attention to the feedback effects from overburdening the unpaid caregiving sector (Cagatay, Elson, and Grown 1995; Pat and Hugh Armstrong 2001).

This squeeze on caring labor, of concern at a macro level, is experienced day to day in the micro world of households. It is at this level that we can see the stress and other uncounted "costs" of caregiving. Whether one's concern is for the ongoing provision of this work or for the well-being of the providers, it is crucial to document the conditions, costs, and distribution of costs of unpaid caregiving. Conceptually, household models have to take account of time-use components, such as work intensity, and their impact on well-being. Maria Floro has pioneered such modeling, introducing both the length of the working day and work intensity (overlapping tasks) into the utility function (1995: 11).

Data on unpaid work is equally critical to address microeconomic questions related to household economics and gender inequality in the labor market. Economists have tended to focus on traditional "economic" issues of household labor allocation and wage determination, showing the impact of women's continued responsibility for unpaid work on their total workload and their labor market status. As women increase their paid work time, they do not achieve a corresponding one-to-one reduction in their unpaid work hours. Nor have men increased their share of unpaid work at the same rate that women have increased their share of paid work (Colman 1998; Carmen Sirianni and Cynthia Negrey 2000). Canadian data from 1990 show that in most full-time dual-earner families, the wife has primary responsibility for housework, and only 10 percent of the couples share housework equally (Katherine Marshall 1993). Fathers employed full-time spend only 65 percent as much time on unpaid household work and childcare as mothers employed full-time (Judy Frederick 1995). Continued responsibility for caregiving reduces women's capacity to compete equally with men in the labor market, resulting in ongoing gender wage inequality. Neither the division of workload at home nor the "male career model" for success on the job has changed, putting women at a disadvantage in the workplace (Sirianni and Negrey 2000).

In addition to inequality in wage-related outcomes, we expect there to be health-related outcomes for women who try to keep up with their male counterparts in the workplace while shouldering the burden of unpaid caregiving. While anecdotal evidence of the burned-out supermom certainly exists, population data on paid and unpaid hours of work enable a systematic study of this issue. A recent review of work-family balance by

two of Canada's leading researchers on the topic finds that work-life conflict increased markedly over the decade of 1991–2001. "Workers have become more stressed, physical and mental health has declined and so has satisfaction with life" (Linda Duxbury and Chris Higgins 2001: vi, in comparing findings of 1991 and 2001 surveys). While men are also affected, women continue to experience the most difficulty in balancing work and family. Duxbury and Higgins find that employees who experience role overload are more likely to report stress, burnout, or poor physical or mental health. They also make more use of the healthcare system (p. viii).

While work-family pressure is often associated with professional women (Duxbury and Higgins, for example, find role overload to be higher for professionals than nonprofessionals and highest for professional women), it is not limited to this group. Duxbury and Higgins also find higher role overload for women than men regardless of job type. Randy Albelda argues that while upper middle-class working moms are the poster women for the work-family bind, welfare moms are under at least as much pressure (Albelda 2001). Indeed, Duxbury and Higgins find that while nonprofessional women are less overloaded than their professional counterparts, they experience the most stress and depression. Women in nonstandard employment also experience high stress, according to a recent study for Status of Women Canada (Isik Zeytinoglu, Josefina Moruz, M. Bianca Seaton, and Waheeda Lillevik 2003), as unpredictable schedules and little control at work further complicate efforts to juggle home and family (see also Karen Johnson, Donna Lero, and Jennifer Rooney 2001). A recent American study also confirms the importance of work stressors for women in lower status jobs (Ronald Burke 2002).

In these examples, stress related to income as well as time likely comes into play. It is thus important to examine the independent and interdependent stress effects of time and money pressures. Daily caregiving and provisioning are likely more labor intensive for lower-income families (Floro 1995). An example would be the extra time involved in getting groceries by bus or in cooking rather than eating out. Duxbury and Higgins, for example, find that work-family conflict is more problematic for families where money is an issue than where it is not: "While money cannot buy happiness, it can sure help people cope with work-life conflict" (Duxbury and Higgins 2001: 61). Other factors and supports in the family, community, and workplace have also been found to mediate the health impacts of juggling paid and unpaid work. Examples include extended family, job satisfaction, control at work, and employer programs (Duxbury and Higgins 2001; Judy Frederick and Janet Fast 2001; Johnson, Lero, and Rooney 2001).

The health hazards related to stress are becoming increasingly well recognized, including heart disease, migraines, stomach problems, and musculoskeletal disorders, as well as emotional health problems. Stress is

also being recognized as an occupational illness, affected by diverse factors such as effort, workload, and control over work (Karen Messing 1997; Isik Zeytinoglu, Margaret Denton, Maroussia Hajdukowski-Ahmed, and Mary O'Connor 1997). Studies show strong correlations between documented work stressors, reported stress, and measured health outcomes such as days of illness or use of the health system (Duxbury and Higgins 2001; Burke 2002). Similarly, research on unpaid caregiving emphasizes stress-related outcomes (Janet Fast and Norah Keating 2000). Finally, when faced with stress due to time constraints, individuals may forgo healthy behavior such as regular exercise or sleep, compounding health problems. Nutrition may also be sacrificed as quick, processed foods or fast food may be favored over healthier choices. Stressors linked to excessive paid and unpaid work, whether separately or in combination, can be dangerous for one's health.

Given the gender division of labor at home and in the labor market, the stress-related risks and outcomes for women and men are likely quite different. Until recently, the literature on work stress and health was based mainly on the experiences of men (Burke 2002). A 1980s American study of changes in female health related to market and nonmarket work finds that market work, by itself, contributes positively to changes in self-reported health status, while the demands of unpaid work contribute negatively, as do dual-role time demands (Barbara Wolfe and Robert Haveman 1983). A later US study also finds that paid work is positively related to self-reported health status, as is time helping others, while time spent on housework is negatively related (Chloe Bird and Allen Fremont 1991). In this study, childcare hours had an insignificant impact on health. The authors conclude that men gain health advantages as well as direct economic benefits from the gender division of social roles (p. 126).

DETERMINANTS OF STRESS

In traditional income-leisure models, "work" is a necessary evil to get income, while "leisure" is associated with positive intrinsic benefits. However, work is also an important source of self-fulfillment and self-esteem, and some leisure activities are drudgery. For most people paid work and unpaid housework and childcare each have elements of both pleasure and pain. The literature from many countries suggests that it is not simply total hours of work that add to stress and work-family conflict, but the intensity and combination of demands and responsibilities (Niall Bolger, Anita DeLongis, Ronald Kessler, and Elaine Wethington 1989; Floro 1995; Susan Field and Ros Bramwell 1998). This is true of both paid and unpaid work (not all eight-hour days at work are equally stressful, nor are all hours spent caring for children). Furthermore, in combining paid and unpaid work, the potential for conflicting demands and role overload increases.

In the first part of our analysis, we examine how stress in Canada is affected by total hours of work, paid and unpaid, and by separate components of unpaid work (childcare, housework, and eldercare). *A priori*, it is not clear whether we should expect paid or unpaid work to be more stressful – the degree of control exercised over paid work and working conditions affects stress, and this will differ significantly among workers. Similarly, unpaid work could be stress reducing (e.g., cooking a gourmet dinner to unwind) or stress enhancing (e.g., cooking dinner for hungry children after a long day at the office). Thus, other factors (rigidity of work demands, for example) affect the extent to which a certain number of hours of work are stress inducing. One important difference between paid and unpaid work is that for most people in Canada total paid work hours are quite rigid, at least in the short term – most people cannot choose to work more hours on a good day and fewer on a bad day. While some unpaid work is not a matter of choice, there is more flexibility – children must be fed, but on a difficult day they can be served a quick meal made from processed food, reducing unpaid work hours, and similarly the dusting can be put off until life calms down. Of course, the quality of unpaid work "output," and hence presumably well-being, also falls (it is more pleasant to live in a dust-free house), although standards (e.g., a taste for cleanliness) can differ enormously across individuals. On the basis of more rigid demands, we might expect that paid work hours are more stress inducing than unpaid hours. Among different kinds of unpaid work, one also might expect that childcare hours, which are less flexible, induce stress more than, say, housework, even though childcare hours may induce more pleasure as well.

We hypothesize that gender affects both the absolute number of hours of work undertaken and the stress-related conditions of that work, as Floro emphasizes in her model of work intensity and well-being (1995). In the cooking example above, the person getting the dinner on the table in a hurry, day after day, is more likely to be a woman. As noted earlier, Canadian studies consistently show that women's hours of unpaid work are higher than men's, as are their total work hours. We expect Canadian women to be more stressed, given their longer hours and their mix of paid and unpaid work, which creates a greater potential for conflicting demands and responsibilities. We expect these different stress levels, reflecting gender roles and the gender division of labor, to be particularly pronounced in the sandwich generation – those with simultaneous caregiving responsibilities for both children and elders. We also expect unpaid housework and caregiving hours to be more stress inducing for women than men because gender roles place more responsibility on them. Women retain the stress-related management role in this work even when the tasks may be more equitably shared, and they also face more potential conflicts in their paid and unpaid work responsibilities. They also perform

more of the day-to-day unpaid tasks that have little flexibility (cooking, bathing children), while men perform more flexible tasks (mowing the lawn) and more enjoyable caregiving activities (playing with the kids). We are interested as well in the extent to which the work of one spouse contributes to the stress of the other spouse. We expect that an increase in unpaid work by one spouse would lower the stress of the other spouse – certainly if men increased their unpaid work, this would reduce the double day experienced by women. However, the process of negotiating a bigger role for men in unpaid work may also be stressful, especially if women feel the ultimate responsibility for that work. Whether stress increases or falls may depend on the type of unpaid work – the nagging factor may be higher for housework than for childcare, for example. The organizational psychology literature refers to the impact of one spouse's work stress on the other spouse as "crossover stress" (Bolger *et al.* 1989). This is usually discussed in terms of the impact of workplace stress on the spouse of the stressed person. Research has found that spouses, mainly women, increase their unpaid work (and stress) in response to work stress experienced by the other spouse (Bolger *et al.* 1989; Joe Pittman, Catherine Solheim, and David Blanchard 1996). As the work patterns adjust over time, the dynamic relationship between stress and the spouse's unpaid work becomes clear.

Just as a supportive spouse may help alleviate the stress of the double day, so too may a supportive workplace. The considerable literature on work-family balance is devoted to identifying workplace policies that do just that. Workers may choose among jobs to better manage stress – for example, choosing a job with a flexible schedule or choosing self-employment to better handle work and family responsibilities. However, stress is only one factor affecting a worker's choice of paid work – and the choice may be highly constrained. Moreover, the job characteristics associated with stress are not independent of each other; flexible hours that might lower stress are commonly found in managerial and professional jobs with other sources of stress (and rewards), while self-employment, with its enhanced control, also carries a stress-inducing burden of responsibility. It may be hard to disentangle the impacts of job characteristics on stress.

In our study we examine the impact of employment characteristics on both time-related stress and satisfaction with work-family balance. The two are conceptually related but distinct: the success of the supermom at balancing work and family may come at a high cost in terms of stress, and the self-employed person may find better work-family balance, but not a reduction in stress as she works late into the night to meet deadlines. Given gender role pressures, we expect women to be less satisfied with their work-family balance than men, especially if they have children. Mothers may not be able to win, given the multiple demands they face – both more paid work and more caregiving work can leave them dissatisfied, feeling one is at the expense of the other or the hours are never enough.

DATA

The data set used for our analysis is Cycle 12 of the Statistics Canada General Social Survey (GSS), which was collected from February 1998 until January 1999, inclusive. Trained Statistics Canada employees contacted respondents by telephone and interviewed them using computer-assisted telephone interviewing techniques.[1] The response rate for the survey was 77.6 percent, leading to a full sample of 10,749 individuals. When appropriate sample weights are applied, the survey is representative of Canadians aged 15 and older with the exception of those living in the Yukon or Northwest Territories or in institutions.

As noted above, we focus our analysis upon prime-age men and women (25 to 54 years old). These are typically the years of heaviest commitment to the labor force, since most people in Canada have finished their educations by age 25 and do not consider early retirement until age 55. For our purposes, then, these are the years during which women and men are most likely to experience a double burden resulting from the combination of paid and unpaid work responsibilities, which may be detrimental to their health. Our total sample of prime-age women is 3,304; our total sample of prime-age men is 2,947.

The measure of stress upon which we focus in this research is derived from a question that asks: "Do you feel that you are constantly under stress, trying to accomplish more than you can handle?" Possible answers are simply "yes" or "no."[2] Despite controversy in the occupational psychology literature about the validity of self-reported measures of stress, evidence suggests that "objective" measures of stress by observers are at least as subject to bias and measurement error (Norbert Semmer, Dieter Zapf, and Siegfried Greif 1996: 305). A recent study concludes that estimating latent job stressors on the basis of self-reports yields highly valid measurements, though there is an upper limit of about 0.30 to 0.40 for the correlation between work stressors and perceived strain, given individual differences in perceptions of well-being (Semmer, Zapf, and Greif 1996: 305). Studies also find a consistent correlation between self-reports of stress and health measures (sick days, use of health services), as noted above.

We are also interested in studying the satisfaction with work-life balance for men and women with some paid work. In the GSS, respondents were asked: "Are you satisfied or dissatisfied with the balance between your job and home life?" Respondents simply answered "yes, I'm satisfied" or "no, I'm dissatisfied."

Descriptive information is presented in Table 1 for all men and women by paid work status (full-time for the full year; part-time or part of the year; and not in the labor force).[3] For prime-age women, working full-time full-year is now most likely (50.3 percent of our sample), working part-time or part-year is second most likely (30.4 percent), and being entirely outside

Table 1 (continued)

	All		FTFY		PT		Not Employed		Married only	
	Females	*Males*	*Females*	*Males*	*Females*	*Males*	*Females*	*Males*	*Females*	*Males*
Childcare hours where > 0	47.9	23.3	36.8	22.5	54.9	25.1	60.4	29.9	50.6	23.6
	(37.1)	(20.1)	(28.8)	(18.5)	(40.2)	(22.9)	(41.6)	(33.0)	(37.3)	(19.7)
Eldercare hours/week	1.9 (6.6)	1.3 (5.4)	1.6 (5.2)	1.1 (5.1)	2.1 (7.2)	1.6 (5.9)	2.5 (8.1)	2.4 (6.4)	1.66	1.27
									(5.3)	(5.5)
Positive eldercare hours	24.7%	21.0%	24.2%	19.4%	25.2%	26.1%	26.3%	27.7%	23.9%	21.8%
	(43.1)	(40.7)	(42.8)	(39.5)	(43.4)	(43.9)	(44.0)	(44.8)	(42.6)	(41.3)
Eldercare hours where > 0	7.8	6.2	6.5 (9.1)	5.8	8.4	6.0	9.5	8.5 (9.6)	6.9 (9.0)	5.8
	(11.5)	(10.5)		(10.5)	(12.3)	(10.3)	(13.5)			(10.6)
Positive child and eldercare hours	14.5%	11.0%	12.1%	10.4%	16.3%	14.9%	18.4%	10.4%	15.3%	13.4%
	(35.2)	(31.3)	(32.6)	(30.5)	(37.0)	(35.6)	(38.7)	(30.5)	(36.0)	(34.0)
Volunteer hours/month	4.4	4.2	4.1	4.4	5.1	5.0	5.6	3.8 (9.5)	4.53	4.52
	(11.9)	(10.3)	(10.2)	(10.4)	(11.7)	(12.1)	(14.3)		(11.3)	(10.5)
Positive volunteer hours	33.4%	31.2%	35.6%	34.3%	37.5%	32.3%	32.7%	26.2%	34.8%	33.8%
	(47.2)	(46.3)	(47.9)	(47.5)	(48.4)	(46.8)	(46.9)	(44.0)	(47.6)	(47.3)
Volunteer hours/month where > 0	13.1	13.2	11.3	12.7	13.4	15.3	16.9	14.3	12.9	13.2
	(16.2)	(14.8)	(14.4)	(14.3)	(15.7)	(17.2)	(20.8)	(13.7)	(16.0)	(14.5)
Age	39.1	39.0	39.3	39.2	38.3	37.8	39.8	41.3	39.6	40.2
	(8.202)	(8.200)	(8.103)	(8.014)	(8.486)	(8.522)	(7.967)	(9.050)	(7.906)	(7.764)
Low income	14.0%	9.8%	6.1%	4.1%	13.2%	21.9%	38.4%	65.8%	9.4%	8.6%
	(34.7)	(29.7)	(24.0)	(19.7)	(33.9)	(41.4)	(48.6)	(47.4)	(29.2)	(28.0)
Single	25.5%	26.6%	30.0%	23.2%	22.5%	35.5%	22.5%	41.5%	–	–
	(43.8)	(44.2)	(45.8)	(42.2)	(14.7)	(47.9)	(41.7)	(49.3)		
Has a child 0–4 in household	18.0%	19.1%	11.2%	20.0%	21.9%	16.9%	28.0%	11.6%	21.6%	25.8%
	(38.5)	(39.3)	(31.5)	(40.0)	(41.3)	(37.5)	(44.9)	(32.0)	(41.2)	(43.8)
Has a child 5–12 in household	32.7%	28.4%	27.9%	29.8%	37.0%	25.2%	37.0%	14.8%	37.8%	37.3%
	(46.9)	(45.1)	(44.9)	(45.7)	(48.3)	(43.4)	(48.3)	(35.5)	(48.5)	(0.484)
Has a child 13–18 in household	25.3%	20.4%	25.8%	21.1%	21.7%	16.2%	27.5%	18.7%	28.5%	26.0%
	(43.5)	(40.3)	(43.8)	(40.8)	(41.2)	(36.8)	(44.7)	(39.0)	(45.1)	(43.9)

(continued)

Table 1 (continued)

	All		*FTFY*		*PT*		*Not Employed*		*Married only*	
	Females	*Males*	*Females*	*Males*	*Females*	*Males*	*Females*	*Males*	*Females*	*Males*
Has a child 19–24 in household	12.7%	9.7%	12.8%	10.2%	11.9%	5.4%	13.4%	10.2%	14.8%	12.3%
	(33.3)	(29.6)	(33.4)	(30.3)	(32.4)	(22.6)	(34.1)	(30.2)	(35.5)	(32.8)
Number of children	1.2 (1.2)	1.1 (1.2)	1.0 (1.1)	1.1 (1.2)	1.3 (1.1)	0.9 (1.1)	1.5 (1.2)	0.76	1.38	1.41
								(1.1)	(1.1)	(1.1)
Has < secondary school	15.3%	17.9%	10.4%	13.7%	12.9%	24.9%	25.6%	28.5%	15.1%	18.7%
	(36.0)	(38.3)	(30.6)	(34.4)	(33.6)	(43.2)	(43.6)	(45.2)	(35.8)	(39.0)
Has secondary school	36.6%	33.8%	34.9%	34.1%	38.1%	33.1%	40.9%	38.3%	37.1%	32.4%
	(48.2)	(47.3)	(47.7)	(47.4)	(48.6)	(47.1)	(49.2)	(48.6)	(48.3)	(46.8)
Has a certificate/diploma	26.6%	23.1%	28.0%	25.0%	27.8%	19.9%	22.4%	16.5%	27.9%	22.3%
	(44.2)	(42.2)	(44.9)	(43.3)	(44.8)	(39.9)	(41.7)	(37.1)	(44.8)	(41.6)
Has a university degree	21.5%	25.2%	26.6%	27.2%	21.2%	22.1%	11.1%	16.7%	20.0%	26.6%
	(41.1)	(43.4)	(44.2)	(44.5)	(40.9)	(41.5)	(31.4)	(37.3)	(40.0)	(44.2)
Is > 35 with a parent in the house	1.8%	1.9%	1.9%	1.6%	0.9%	2.1%	2.4%	3.8%	0.42%	1.3%
	(13.3)	(13.6)	(13.7)	(12.4)	(9.6)	(14.2)	(15.4)	(19.2)	(6.5)	(11.2)
School hours last month	2.3	1.5	0.98	0.73	3.5	2.6	4.2	8.5	1.74	1.09
	(15.858)	(11.510)	(6.841)	(6.873)	(19.216)	(16.785)	(25.081)	(26.807)	(14.147)	(9.479)
Not employed in past year	19.1%	5.6%	–	–	–	–	–	–	20.1%	4.4%
	(39.3)	(23.0)							(40.1)	(20.6)
Full-time, full-year	50.3%	77.5%	–	–	–	–	–	–	47.8%	80.9%
	(50.0)	(41.7)							(49.9)	(39.3)
Part-time	30.4%	16.8%	–	–	–	–	–	–	32.0%	14.6%
	(46.0)	(37.4)							(46.6)	(35.4)
Owns home	70.7%	71.2%	72.9%	74.9%	71.7%	61.3%	64.3%	52.9%	80.1%	78.5%
	(45.5)	(45.3)	(44.5)	(43.4)	(45.0)	(48.7)	(47.9)	(49.9)	(39.9)	(41.1)
Born outside of Canada	20.6%	21.4%	21.0%	21.7%	18.2%	18.7%	23.2%	28.4%	20.7%	21.9%
	(40.5)	(41.0)	(40.7)	(41.2)	(38.6)	(39.0)	(42.2)	(45.1)	(40.5)	(41.4)
Limited in activities	13.9%	9.5%	10.1%	6.2%	13.3%	13.1%	24.6%	43.2%	12.6%	8.3%
	(34.6)	(29.3)	(30.1)	(24.1)	(34.0)	(33.7)	(43.1)	(49.5)	(33.2)	(27.5)

(continued)

Table 1 (continued)

	All		*FTFY*		*PT*		*Not Employed*		*Married only*	
	Females	*Males*	*Females*	*Males*	*Females*	*Males*	*Females*	*Males*	*Females*	*Males*
Self-employed	–	–	9.9%	18.3%	12.3%	21.2%	–	–	–	–
			(29.9)	(38.6)	(32.9)	(40.9)				
Works regular day shifts	–	–	77.7%	69.9%	46.7%	40.8%	–	–	–	–
			(41.6)	(45.9)	(49.9)	(49.2)				
Works regular evening shifts	–	–	4.6%	5.2%	5.0%	6.0%	–	–	–	–
			(20.9)	(22.1)	(21.8)	(23.6)				
Works irregular hours	–	–	17.7%	25.0%	19.5%	24.2%	–	–	–	–
			(38.2)	(43.3)	(39.6)	(42.8)				
Has flexible work hours	–	–	30.7%	40.3%	23.6%	28.7%	–	–	–	–
			(46.1)	(49.0)	(42.5)	(45.2)				
Works multiple jobs	–	–	7.4%	6.3%	6.0%	5.2%	–	–	–	–
			(26.1)	(24.4)	(23.8)	(22.2)				
Spouse has long-term illness	–	–	–	–	–	–	–	–	2.1%	2.3%
									(14.3)	(14.9)
Paid hours/week – spouse	–	–	–	–	–	–	–	–	39.5	22.9
									(20.523)	(19.627)
Unpaid hours/week – spouse	–	–	–	–	–	–	–	–	18.6	46.7
									(21.478)	(39.693)
Housework hours/week – spouse	–	–	–	–	–	–	–	–	4.7	20.0
									(6.868)	(16.682)
Yard work, car/house repair – spouse	–	–	–	–	–	–	–	–	4.4	3.0
									(7.249)	(6.187)
Childcare hours/week – spouse	–	–	–	–	–	–	–	–	9.4	23.4
									(16.920)	(29.200)

Notes: [a]The question asked is: "Do you feel you're constantly under stress trying to accomplish more than you can handle?" [b]The question asked is: "Are you satisfied or dissatisfied with the balance between your job and home life?" A "yes" repsonse indicates satisfaction and a "no" response indicates dissatisfaction.

the paid labor force for the full survey year is least likely (19.1 percent of our sample). As Table 1 indicates, a very clear pattern showing that women with more paid work are most likely to report high stress is evident. Specifically, 51.2 percent of women with full-time/full-year employment report themselves to be "constantly under stress"; 43.3 percent of those with part-time or part-year paid work report themselves to be "constantly under stress"; and 39.6 percent of women outside the labor force report constant stress, which is still a rather high proportion.

For prime-age men, although we provide the same breakdowns by employment status for comparison with the women, it should be kept in mind that full-time/full-year employment is the far more likely case (77.5 percent). Part-time or part-year employment is reported by 16.8 percent of prime-age men, while only 5.6 percent report being entirely outside the labor force. In interesting contrast to the patterns observed for women, the percentage of men who report being "constantly under stress" varies little with paid work commitments. Thus, 41.6 percent of full-time/full-year paid working men report being constantly stressed (much lower than the 51.0 percent of full-time/full-year women); 43.1 percent of male part-time or part-year workers report constant stress; and 36.6 percent of men who are entirely outside the paid labor force report constant stress (only slightly lower than the 39.6 percent of women who report being constantly stressed in the equivalent situation). An important point to note in Table 1 is that, in our sample, prime-age women do on average 10.4 more hours of work in total than men (75.4 versus 65.0).

For some respondents in the GSS, total work hours exceed 24 hours per day, seven days per week (since they were asked about each type of work separately). An advantage is that this allows for multitasking (e.g., doing housework and childcare at the same time). A disadvantage is that this could in some cases represent reporting error. We have tested the robustness of our results by excluding individuals reporting more than 168 hours per week (24×7) and by capping reported hours at 168 hours per week. Neither test made any noticeable difference to our results and hence we simply accept reported hours as given.

Table 1 also indicates that despite the dramatic changes in men's and women's work behavior over the last half century, Canadian women still do over twice as much unpaid work (an average of 48.2 hours per week versus 22.4), while men still do substantially more paid work (42.3 hours on average versus 26.8 hours). In the GSS, "housework" includes any unpaid housework, yard work, or home maintenance for members of the respondent's household or others. We derive our measure of weekly childcare hours from the question: "Last week, how many hours did you spend looking after one or more of your own children or the children of others without pay?" Thus, childcare hours include time when the respondent was doing another activity while also looking after children,

time when someone else was helping to look after the children, and time when the child was taking a nap. Childcare hours do not include hours the child spent sleeping during the night or time when the child was at school, at a friend's house, or in organized activities. Finally, we derive eldercare hours from the question: "Last week, how many hours did you spend providing unpaid care or assistance to one or more seniors?" Note that we do not have an explicit measure of hours spent giving care to ill or disabled nonchild, nonelderly family members (for example, caring for a spouse with a temporary illness or injury), though additional responsibilities in the form of cooking, cleaning, etc., would be measured.

Dramatic gender differences in the overall means for specific unpaid work tasks in our sample are apparent. Prime-age women do, on average, 17.5 hours of housework per week, while men do 9.1 hours; women do 28.6 hours of childcare, while men do 12.1; women do 1.9 hours of eldercare, while men do 1.3 hours (the smallest difference is apparent for eldercare). These averages are for all respondents, regardless of whether or not they did *any* hours of work in a particular category. Almost everyone does some housework every week: 95.9 percent of women and 90.3 percent of men reported at least some housework time. However, doing either childcare or eldercare involves having a child or elderly person who needs such care. In our sample of prime-age adults, 59.6 percent of women and 52.0 percent of men reported some childcare; 24.7 percent of women and 21.0 percent of men reported some eldercare. Notice, therefore, that differences between men and women in doing *any* work in particular categories are smaller than differences in the *amount* of time spent on each activity. For women who do any childcare, the mean weekly hours of work are 47.9 (23.3 hours for men); for women who do any eldercare, the mean weekly hours are 7.8 (6.2 hours for men). Thus, the smallest difference between men and women is in the category of eldercare.

Finally, we also measure hours of volunteer work and hours devoted to studying in for-credit courses. Average volunteer hours for men and women are very similar (4.4 hours per month for women and 4.2 hours per month for men), as are the proportion of men and women who do *any* volunteer work (33.4 percent of women and 31.2 percent of men).

MULTIVARIATE ANALYSIS

Our multivariate work has three stages. In the first, we explore the associations between reported stress and hours of work, asking whether it is simply the total commitment to work (paid or unpaid) that is important, or whether different kinds and combinations of work have different associations with experienced stress. In the second stage, we examine married respondents and the role of spouses/partners as potential sources of both support and/or additional responsibility. The third stage of the

multivariate work focuses particularly upon respondents potentially facing a double workday of both paid and unpaid work. That is, we select a sample of individuals who have reported some paid work in the past year. For this group we are able to consider satisfaction with the balance between paid and unpaid work, as well as the "stressed" variable. In this final stage of the multivariate work, we examine the extent to which certain characteristics of paid work might help to alleviate the stress of additional hours (flexible hours, shift-work, multiple paid jobs, self-employment).

Is every hour, kind, and combination of work equally stress inducing?

For our full sample, we present two probit models of the correlates of "feeling constantly under stress" to examine the possibly different associations between various kinds and combinations of work and perceived levels of individual stress. In the first specification, our key explanatory variables are weekly[4] hours of paid and unpaid work, included separately to allow for the possibility that paid and unpaid work have different associations with perceived stress levels (see Table 2). In this specification, we include controls for the presence of individuals within the household who might be expected to require caring labor. Specifically, we include dummies for the presence of children in different age categories (0 to 4, 5 to 12, 13 to 19, and over 19) and a dummy to indicate the presence of an elder living within the home (less than 2 percent of either men or women). We only include this dummy for respondents aged over 35 years to avoid the possibility that the parent is a means of support rather than a dependant (e.g., a 25-year-old living with his/her parents may be receiving rather than providing support). We also include a sandwich generation dummy for respondents who report *both* childcare and eldercare responsibilities (14.5 percent of women; 11.0 percent of men). The hypothesis investigated here is that coping with these two sets of responsibilities at the same time may be more stressful than a simple tally of the total hours of work involved would indicate.

The second specification reported in Table 2 disaggregates hours of unpaid work by type: hours of housework, childcare, and eldercare are distinguished to examine the possibility that even within the category of unpaid work, some types of work are more stressful than others. Notice that when we disaggregate unpaid work by type, we exclude the controls for presence of children and/or elders, given that these variables are very highly correlated.

In addition to these key explanatory variables, we also control, in both specifications, for household poverty status (14.0 percent of female respondents; 9.8 percent of male respondents) and for home ownership status, which might be regarded as a proxy for household wealth (70.7 percent of women own their homes; as do 71.2 percent of men).[5] Having

Table 2 Probit regression – the probability of stress[a] for females and males 25–54 (standard errors in parentheses)

Variable	*Specification 1*		*Specification 2*		*Specification 3 (married only)*	
	Females	*Males*	*Females*	*Males*	*Females*	*Males*
Paid hours/week	0.013***	0.010***	0.014***	0.010***	0.014***	0.010***
	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
Unpaid hours[b]/week	0.003***	0.001	–	–	–	–
	(0.001)	(0.001)				
Housework hours/week	–	–	0.008***	0.005*	0.069***	0.002
			(0.002)	(0.003)	(0.002)	(0.004)
Childcare hours/week	–	–	0.004***	0.002	0.004***	− 0.001
			(0.001)	(0.002)	(0.001)	(0.002)
Eldercare hours/week	–	–	0.018***	0.003	0.015**	0.008
			(0.005)	(0.005)	(0.007)	(0.231)
Volunteer hours/month	0.004	0.005**	0.004*	0.005*	0.006**	0.009***
	(0.002)	(0.003)	(0.002)	(0.003)	(0.003)	(0.003)
Dummy = 1 if low income	0.210**	0.329***	0.245***	0.362***	0.161	0.346**
	(0.095)	(0.104)	(0.094)	(0.102)	(0.137)	(0.142)
Dummy = 1 if single	− 0.004	0.015	− 0.0002	− 0.080	–	–
	(0.075)	(0.076)	(0.073)	(0.069)		
Dummy = 1 if kids 0–4 present	0.097	0.188*	–	–	–	–
	(0.109)	(0.103)				
Dummy = 1 if kids 5–12 present	0.288***	0.126	–	–	–	–
	(0.103)	(0.105)				
Dummy = 1 if kids 13–18 present	0.046	0.069	–	–	–	–
	(0.099)	(0.098)				
Dummy = 1 if kids 19–24 present	− 0.020	0.152	–	–	–	–
	(0.116)	(0.120)				
Number of kids in household	− 0.055	− 0.021	–	–	–	–
	(0.059)	(0.057)				

(continued)

Table 2 (continued)

Variable	Specification 1		Specification 2		Specification 3 (married only)	
	Females	*Males*	*Females*	*Males*	*Females*	*Males*
Dummy = 1 if elder and childcare	0.164**	0.121	–	–	–	–
	(0.084)	(0.091)				
Dummy = 1 if > 35 years and a parent in household	0.695***	− 0.225	–	–	–	–
	(0.257)	(0.264)				
Spouse has long-term illness	–	–	–	–	− 0.004	0.645**
					(0.269)	(0.255)
Paid hours/week – spouse	–	–	–	–	0.001	0.001
					(0.002)	(0.002)
Housework hours – spouse	–	–	–	–	0.011**	0.005**
					(0.006)	(0.003)
Other housework (yard, car, etc.) – spouse	–	–	–	–	− 0.006	0.005
					(0.005)	(0.006)
Childcare hours – spouse	–	–	–	–	− 0.004	0.003*
					(0.002)	(0.002)
Observations	2,299	2,182	2,299	2,182	1,373	1,235
Pseudo-R^2	0.085	0.064	0.079	0.059	0.101	0.093

Notes: *** Statistically significant at 99%; ** statistically significant at 95%; * statistically significant at 90%. Control variables not shown include education, region, home ownership, activity limitation, and foreign-born, as well as age of respondent and school hours per month. [a]The question asked is: "Do you feel you're constantly under stress trying to accomplish more than you can handle?" [b]Includes housework (cooking, cleaning, yard work, etc.), childcare, and eldercare.

financial pressures seems very likely to add importantly to time stress (e.g., commuting to work or going for groceries on a bus take longer). Women in poor households are "likely to experience high work intensity in long duration" (Floro 1995: 8).

We also include a dummy variable indicating that the respondent has an "activity limitation" that prevents them from doing some activities of daily living (13.9 percent of women; 9.5 percent of men).[6] If day-to-day tasks are more difficult to perform, then we might expect higher time stress for the same reported hours of work.

Cultural background might also influence both role expectations and attitudes toward time. Unfortunately, we have no information about ethnicity available in our data. We do know whether the respondent was born in Canada and so we control for immigrant status, acknowledging that this control is far from ideal.[7] Other controls include marital status, the age and education level of the respondent, and the region of residence.

Estimated coefficients for all models are reported in Tables 2 and 4. However, since these tables indicate only statistical significance, and do not provide any indication of the magnitude of associations and hence their economic importance, we also provide, in Tables 3 and 5, calculated effect sizes for each statistically significant variable. We do not provide such calculations for statistically insignificant variables since, on the basis of our work, we are unable to say anything about them other than that they are not different from zero. While it is certainly possible that our data do not always entirely capture the concept we are hoping to model, given our relatively large samples (never less than 1,000 observations and usually more than 2,000 observations), it is unlikely that lack of statistical significance merely indicates imprecision.

Turning to our principal results, we find that paid and unpaid hours have different associations with reported stress (see Table 2). For women, stress increases with increases in either form of work, though the size of the association is much larger for *paid* hours. The probability of time stress is 5 percentage points higher if paid hours per week are 10 hours above the sample mean (for all women); the probability of time stress is 1.3 percentage points higher if unpaid hours exceed the sample mean by 10 hours, other things equal.[8] (Table 3 shows, for relevant variables, marginal effects on stress based on the specifications in Table 2.) For men, stress is positively associated with paid hours (the probability of stress is 3.7 percentage points higher if paid hours are 10 above the base case). However, we find no statistically significant relationship between unpaid hours and the probability of stress reported by men. This seems an important gender difference.

Our indicators of "increased need for caregiving" (i.e., the dummy variables indicating the presence of children in various age categories as well as the "elder present" dummy) are seldom statistically significant.

Table 3 Probability of stress – change in point estimate probability

	Specification 1		Specification 2		Specification 3 (married)	
	Females	Males	Females	Males	Females	Males
Baseline[a] probability of stress	40.6	34.1	45.1	39.3	41.5	33.7
Increase of paid work by 10 hours per week (from base)	5.0	3.7	5.5	4.0	5.4	3.6
Increase of unpaid work by 10 hours per week (from base)	1.3	ns	–	–	–	–
Increase of housework hours by 10	–	–	3.3	2.0	2.7	ns
Increase of childcare hours by 10	–	–	1.5	ns	1.6	ns
Increase of eldercare hours by 10	–	–	7.2	ns	6.0	ns
Household is poor	8.3	12.7	9.7	14.3	ns	13.3
A child 0–4 is present	ns	6.3	–	–	–	–
A child 5–12 is present	9.2	ns	–	–	–	–
A child 13–18 is present	ns	ns	–	–	–	–
A child 19–24 is present	ns	ns	–	–	–	–
A parent lives in the home	27.0	ns	–	–	–	–
Elder and childcare hours are positive	6.5	ns	–	–	–	–
Spouse is disabled	–	–	–	–	ns	25.2
Increase of spouse housework hours by 10	–	–	–	–	4.3	1.9
Increase of spouse childcare hours by 10	–	–	–	–	ns	1.2

Note: [a] The base case scenario is constructed from averages for all women. Thus, the base is a 36-year-old single individual with no children. He/she has 25.8 hours of paid work per week, has 58.2 hours of unpaid work per week, volunteers 4.4 hours per month, and has 2.3 hours of school time per month. The individual lives in Ontario, is not poor, rents, is not limited in activity, and was born in Canada. For specification 2, the individual does 17.5, 28.6 and 1.9 hours of housework, childcare, and eldercare, respectively, per week. For specification 3, the base case is 25.5 hours of paid work, 19.4 hours of housework, 32.8 hours of childcare, and 1.7 hours of eldercare per week, and 4.5 volunteer hours and 1.74 school hours per month. ns = variable is not statistically significant

Certainly, the presence of children in the household does mean more unpaid work is done (women without children do, on average, 18.2 hours per week versus an average for all women of 48.2 hours). Women with children aged 0–4, 5–12, 13–18, and 19–24 do 96.4, 78.5, 52.5, and 34.7 hours, respectively. For men with the same-age children, average hours are 40.0, 35.5, 24.8, and 18.1. However, once we have controlled for how many hours of unpaid work are done, the dummy variables indicating presence of a child in a particular age category are rarely significant, suggesting that children do not generate time stress except insofar as they generate extra work. (Note, however, that if we exclude hours spent on childcare from the estimating model, then the child dummies are large and statistically significant.)

For women, the two exceptions are that having children ages 5 to 12 years[9] or having an elder present in the household is associated with a higher probability of reporting constant stress. The probability of constant

Table 4 Probit regression – the probability of stress[a] and satisfaction with the work-home balance,[b] females and males 25–54 with some paid employment in the past year (standard errors in parentheses)

	Constantly under stress		*Satisfaction with work-home balance*	
Variable	*Females*	*Males*	*Females*	*Males*
Paid hours/week	0.019***	0.015***	− 0.026***	− 0.027***
	(0.003)	(0.002)	(0.003)	(0.003)
Housework hours/week	0.010***	0.003	− 0.000004	− 0.007*
	(0.003)	(0.004)	(0.003)	(0.004)
Childcare hours/week	0.005***	0.0005	− 0.005***	− 0.0006
	(0.001)	(0.002)	(0.001)	(0.002)
Eldercare hours/week	0.022***	0.003	− 0.003	− 0.0003
	(0.007)	(0.005)	(0.006)	(0.006)
Volunteer hours/month	0.005	0.008***	0.003	− 0.007**
	(0.003)	(0.003)	(0.003)	(0.003)
Dummy = 1 if low income	0.195	0.234*	− 0.142	− 0.294**
	(0.129)	(0.124)	(0.138)	(0.134)
Dummy = 1 if single	0.002	− 0.097	− 0.046	0.009
	(0.082)	(0.073)	(0.087)	(0.079)
Dummy = 1 if self-employed	− 0.095	− 0.094	0.356***	− 0.009
	(0.112)	(0.081)	(0.128)	(0.086)
Dummy = 1 if regular evening shift	− 0.192	0.027	− 0.146	− 0.106
	(0.158)	(0.132)	(0.170)	(0.143)
Dummy = 1 if irregular shift	− 0.108	0.028	− 0.144	− 0.235***
	(0.086)	(0.067)	(0.093)	(0.071)
Dummy = 1 if flexible schedule	− 0.085	− 0.0007	0.129	0.073
	(0.075)	(0.064)	(0.081)	(0.068)
Dummy = 1 if multiple jobs	− 0.451***	− 0.084	0.376***	− 0.054
	(0.123)	(0.121)	(0.136)	(0.124)
Observations	1699	1950	1684	1930
Pseudo R^2	0.095	0.068	0.112	0.144

Notes: *** statistically significant at 99%; ** statistically significant at 95%; * statistically significant at 90%. [a]The question asked is: "Do you feel you're constantly under stress trying to accomplish more than you can handle?" [b]The question asked is: "Are you satisfied or dissatisfied with the balance between your job and home life?"

stress is 9.2 percentage points higher for women with a 5- to 12-year-old; while rare, having an elder present in the home is associated with an increase of 27 percentage points in the probability of constant stress, everything else equal (see Table 3). For men, having children ages 0–4 present in the household is associated with a higher probability of stress (6.3 percentage points).

Specification 1 also includes a dummy variable indicating that the respondent reported positive hours of *both* eldercare and childcare (the "sandwich" dummy). The hypothesis considered here is that juggling both responsibilities at the same time may be more stressful than is indicated by a simple count of the hours involved. For women, results are consistent with

Table 5 Probability of stress and satisfaction with work-life balance change in point estimates

	Probability of stress		*Probability of being satisfied with home-work balance*	
	Females	*Males*	*Females*	*Males*
Baseline[a] probability of stress	49.5	39.9	74.6	84.1
Increase of paid work by 10 hours per week (from base)	7.4	5.8	− 8.8	− 7.5
Increase of housework hours by 10	4.1	ns	ns	− 1.7
Increase of childcare hours by 10	1.9	ns	− 1.8	ns
Increase eldercare hours by 10	8.5	ns	ns	ns
Individual is self-employed	ns	ns	10.0	ns
Household is poor	ns	9.2	ns	− 8.1
Individual works multiple jobs	− 17.3	ns	10.4	ns
Individual has an irregular shift	ns	ns	ns	− 6.4

Notes: [a]The base case scenario is constructed from averages for all women. Thus, the base is a 38-year-old single individual with no children. He/she has 33.2 hours of paid work, 15.7 hours of housework, 25.2 hours of childcare, and 1.77 hours of eldercare per week, volunteers 4.5 hours per month, and has 1.94 hours of school time per month. The individual lives in Ontario, is not poor, rents, is not limited in activity, and was born in Canada. His/her job is not self-employment, is a regular daytime shift, and is not flexible hours, and he/she does not work multiple jobs. ns = variable is not statistically significant

this hypothesis – the sandwich dummy is positive and statistically significant, controlling for hours of work. Sandwich responsibilities are associated with a 6.5 percentage point higher probability of time stress, other things equal. The sandwich dummy is not statistically significant for men.

For both men and women, poverty is associated with a higher probability of reporting time stress, though the magnitude of the association is larger for men (this finding remains true across all specifications we will report in this research). This finding could be connected to the fact that men have traditionally been regarded as the primary breadwinners for the family. For women, other things equal, poverty is associated with an 8.3 percentage point higher probability of time stress; for men, poverty is associated with a 12.7 percentage point higher probability of time stress.[10]

The second specification considered in Table 2 disaggregates unpaid work to consider the associations that exist between stress and specific types of unpaid work (housework, childcare, and eldercare), while still also controlling for total paid work hours. However, as noted earlier, dummy variables indicating the presence of children or elders are removed. Notice first that the estimated relationship between paid work hours and stress is robust to disaggregating unpaid hours. For men, additional hours of housework are associated with a small increase in the probability of stress (an additional 10 hours of housework per week is associated with a 2 percentage point higher probability of time stress, other things equal); other forms of unpaid work do not have a significant relationship with time

stress. For women, additional hours of any form of unpaid work are associated with a higher probability of stress, but the form of work with the largest association (aside from paid work hours) is eldercare (10 additional hours of eldercare are associated with a 7.2 percentage point higher probability of time stress). Housework ranks second (10 extra hours are associated with a 3.3 percentage point higher probability of constant stress). Additional hours of childcare increase the probability of stress but by the smallest amount per hour (10 extra hours are associated with only a 1.5 percentage point higher probability of time stress).

To save space, we do not report estimated coefficients for all control variables, though these are available upon request from the authors. To summarize, the education and regional dummy variables are not particularly important. Home ownership is never statistically significant. Men born outside of Canada tend to be more likely to report stress, but the immigrant variable is not statistically significant for women. Both men and women who are limited in activity report higher time stress levels.

For better or worse? Spouses and time stress

In the second stage of our multivariate analysis, we focus upon a sub-sample of currently partnered or "married" respondents (about 75 percent).[11] "Married" includes both legal and common-law heterosexual relationships. Individuals currently living with a partner may share unpaid work responsibilities, though in some cases negotiating how the sharing will be done may be an added source of strain. On the other hand, a spouse who is either unable or unwilling to help share the burden of unpaid work responsibilities may increase, rather than alleviate, the amount of work that must be done. Differences in traditional gender roles within marriage make it very likely that the presence of a partner will affect time stress quite differently for men relative to women.

In the "married couple" specification (also reported in Table 2), we add five new variables intended to investigate the role played by spouses: (1) spouse's usual weekly hours of paid work; spouse's weekly hours of (2) childcare, (3) housework, and (4) other housework ("to improve or maintain your house, yard, or automobile"),[12] and (5) a dummy variable indicating that the spouse's main activity in the last week was "long-term illness" (2.1 percent of married women and 2.3 percent of married men report a spouse with long-term illness).[13]

Married women report an average of 39.5 hours of paid work weekly for their husbands versus the 43.7 hours reported by married men themselves. Married men report an average of 22.9 hours for their wives versus 25.5 hours reported by married women themselves.[14] Married women report that their husbands do 18.6 hours of unpaid work each week versus 25.5 hours reported by married men themselves. Married men report that

their wives do 46.7 hours of unpaid work each week versus 54.1 hours reported by married women themselves. Thus, qualitatively the same picture is apparent regardless of whether it is the men or the women responding, although, perhaps not surprisingly, each sex seems to slightly under-report the spouse's work contributions (or perhaps exaggerate their own).

Turning to regression results (see the final specification in Tables 2 and 3), notice first that estimated coefficients for the association between the respondent's own hours of paid and unpaid work and his/her reported stress are robust to the inclusion of work hours done by the partner, and this is true for both men and women. However, additional hours of unpaid work by the partner are not associated with lower stress. In fact, counterintuitively, where significant, the probability of stress is higher when the partner's hours increase. Specifically, for married women, 10 additional hours of housework by the husband are associated with a 4.3 percentage point higher probability of stress. Two interpretations of this surprising finding come to mind: (1) negotiations involved in getting a spouse to do more housework may be extremely stressful; and (2) spouses may be more inclined to pitch in when their wives are completely overwhelmed (so that this association may result from, rather than cause, women's higher stress). This possibility of a crossover effect, where spouses (mainly women) increase their unpaid work (and stress) in response to increased work stress experienced by their partners has been noted by others (Bolger *et al.* 1989; Pittman, Solheim, and Blanchard 1996).

Very likely because household poverty status and a husband's hours of paid work are highly correlated, the low-income dummy variable is no longer statistically significant for married women; however, it remains significant for married men. Having a spouse who is disabled is not statistically significant for married women, once we have controlled for total unpaid work hours.[15] However, for married men, having a disabled wife is associated with a much higher probability of reporting stress (25.2 percentage points).[16]

Can the characteristics of paid employment alleviate/exacerbate stress?

The final section of our multivariate analysis focuses on a sub-sample of prime-age men and women who had at least some paid work in the past year (regardless of marital status). The idea that we wish to examine here is that some kinds of paid work may be more family-friendly than others and hence may help to alleviate the stresses otherwise associated with a double workday. Since we continue to control for total hours of both paid and unpaid work done, we are asking now about factors that go beyond just the total sum of time spent working.

For example, having a job with flexibility about start and finish times to work around child drop-off/pick-up from daycare or school, could lead to

much less experienced time stress (e.g., if it doesn't matter that you are running a few minutes late because the baby needed a sudden complete change just as you were about to go out the door, or Johnny remembered halfway to school that he had left his backpack with lunch and project at home). In our sample, 30.7 percent of women who work full-time/full-year have jobs with flexibility about starting and stopping times compared to 23.6 percent of women who work part-time or part-year. Men are more likely than women to report that they have "a flexible schedule that allows you to choose the time you begin and end your work day" (40.3 percent of those who work full-time/full-year and 28.7 percent of those who work part-time or part-year). Notice also that for both men and women, it is the full-time/full-year workers who are most likely to have flexible jobs, perhaps because they are more likely to have control and authority.

Depending upon circumstances, paid work that involves irregular shifts could be a way of planning family life around a spouse's work schedule or children's care needs, or it could be a nightmare because standard daycare arrangements are unavailable. The 1998 GSS asks respondents with paid work in the past week about how they would describe their work schedules. Options included: (1) regular daytime; (2) regular evening or night shift; (3) rotating, split shifts, on call/casual, or irregular.[17] In our sample, 77.7 percent of women with full-time/full-year jobs report regular daytime hours versus only 46.7 percent of women with part-time or part-year employment. Men are somewhat less likely to have regular daytime shifts, with 69.9 percent of full-time workers and 40.8 percent of part-time workers reporting such shifts. Regular evening shifts are relatively uncommon for either men or women, both at about 5 percent. Irregular schedules are reported by 17.7 percent of full-time female workers (19.5 percent of part-time or part-year female workers) and by 25.0 percent of male full-time workers (24.2 percent of male part-time or part-year workers).

The same total hours of paid work could be the result of one job or many. Coping with two different paid jobs could lead to much greater time stress (e.g., if conflicts arise or because two different "taskmasters" must be pleased), or it could be a way of supporting a more flexible lifestyle (e.g., artists who also work as waitresses) or of holding two less demanding jobs rather than one job with a lot of responsibility. In our sample, 7.4 percent of women with full-time employment are multiple jobholders (as are 6.0 percent of men). It is also possible with many of these variables that individuals with different sorts of paid work arrangements differ from one another in unobservable ways that may be important for how much stress they feel. For example, "free spirit" personalities may both prefer more casual employment arrangements and be less inclined to report or feel stress.

Finally, self-employment may be used as a way of gaining control and accommodating family responsibilities (e.g., running an in-home daycare

business) or it could be a source of considerable extra strain because it is not possible to leave responsibilities behind at the end of the day (e.g., operating a corner store). Self-employment is more common for men (18.3 percent of our full-time/full-year male sample) than for women (9.9 percent of our full-time/full-year women).

The probit models of the probability of feeling "constantly under stress" reported in Table 4 add these employment characteristics to the models estimated previously; as noted above, our sample now includes respondents who are married or single, but all must have had at least some paid work in the past year. To economize on space, we report only the models in which all of the "job characteristic" variables are included. However, since jobs come with packages of characteristics, there are some correlations across these characteristics leading to multicollinearity and hence large standard errors in the full model (for example, for self-employment and multiple jobs in the "stress" model in Table 4). Hence, we have also estimated our models including just one job characteristic at a time and we report upon these results where appropriate.

Notice first in Table 4 that the pattern of association between stress and work hours is again much the same as reported in Table 2. For women, both paid and unpaid work hours are associated with a higher probability of experiencing time stress (with eldercare and housework hours being more stressful than childcare hours). For men, paid hours are positively associated with stress and in much the same magnitude as is true for women; unpaid work, however, is not associated with increased stress.

We turn now to the job characteristics variables. For women in the full model, feeling "constantly under stress" is significantly *reduced* by multiple-job holding, controlling for total work hours (suggesting that the flexibility argument may be more appropriate than the two taskmasters argument). Women with multiple jobs are 17.3 percentage points *less* likely to report being "constantly stressed" than women with just one paid job (see Table 5 for marginal effects). Other variables are not statistically significant in this specification. However, when we examine these variables one at a time, we find that women with irregular shifts are less likely to be time stressed than others, given the same total hours of work. Surprisingly, neither self-employment nor flexible starting times are associated with reported time stress.

For men, none of the job characteristic variables are associated with reported stress in either the full model or when entered one at a time. Note that usual hours of work for women and men vary significantly across jobs with the characteristics modeled here, so with increased flexibility may come increased hours.[18] The effect of varying these hours on stress is controlled for in our model, although the possibility of multicollinearity's increasing standard errors remains. Beyond this, it would seem that these characteristics do not play a very important role.

And what about work-life balance?

Since we are now focusing only upon paid workers, we can also examine the extent to which individuals are satisfied with the balance between paid work and home life. Recall, as noted earlier, that the GSS asks: "Are you satisfied or dissatisfied with the balance between your job and home life?" In our sample, 65.9 percent of women who work full-time/full-year are satisfied with work-life balance; 81.1 percent of those who work part-time or part-year are satisfied. For men, satisfaction with the balance between paid work and home life, as with feeling time stressed, is approximately the same regardless of employment status – about 72 percent of men report that they are satisfied. Thus, men who work full-time/full-year are more satisfied with work-life balance than their female counterparts; men who work part-time or part-year are less satisfied. Again, these results may reflect traditional gender divisions of labor. Women may find part-time work a way of accommodating family responsibilities; men may find that less than full-time/full-year employment does not fulfill their breadwinner expectations.

For our multivariate analyses, we employ the same specification used for time stress. Since respondents simply answer "yes" or "no" about their satisfaction, we can again use probit techniques to analyze the correlates of satisfaction with "work-life balance." Regression results are presented in Table 4 and marginal effects in Table 5.

For women, total paid hours significantly reduce satisfaction with work-life balance (10 hours of paid work more than in our base scenario is associated with an 8.8 percentage point lower satisfaction with work-life balance). However, unpaid hours of either housework or eldercare do *not* reduce satisfaction with work-life balance. Additional hours of childcare have a small negative association (10 extra hours associated with a 1.8 percentage point lower satisfaction with work-life balance).

Women who are self-employed are more satisfied with work-life balance with an increase of nearly 10 percentage points. This is consistent with women's using a strategy of self-employment to have more control over work and better integrate work and family demands. As noted above, however, their time stress is not reduced. Interestingly, holding multiple jobs also improves work-life balance by 10.4 percentage points, controlling for hours of paid work. Perhaps these jobs are scheduled to accommodate family needs or they may be less demanding. However, this balance may be gained at a cost in terms of lack of access to benefits or promotions in non-standard jobs.

Neither irregular shifts nor flexibility in the time one starts and ends the workday are statistically significant in this specification. This may be because the characteristics of jobs are not continuous and independent – hours and other job characteristics are packaged in particular ways. Many people who have flexibility in hours, for example, have responsibilities that involve long

hours or that do not end when they leave the office, as with academics, for example, or managers. In some specifications of the model, flexibility is significant for women, but not for men, depending on which job-related characteristics we include (for example, when occupation was included, or total paid hours omitted). (The reported runs do not include occupation to avoid multicollinearity with the other job characteristics.) For men, as for women, there is a negative association between work-life balance and hours spent on paid work: 10 additional hours of paid work per week are associated with a 1.7 percentage point lower probability of being satisfied with work-life balance. For men, unlike women, hours of housework are negatively related with work-life balance, with 10 more hours per week associated with an 8.1 percentage point lower satisfaction with work-life balance. Hours spent on childcare or eldercare are not statistically significant. The different impact of childcare time on work-life balance for men and women may reflect women's greater sense of responsibility for childcare and the different kinds of childcare tasks done by each.

In terms of job characteristics, men with irregular shifts are less satisfied with work-life balance (6.4 percentage points); otherwise, these variables are statistically insignificant. We would like to further explore the economic importance of all of these job-related variables (for both men and women) with better data.

CONCLUSIONS

This paper uses microdata from the 1998 Statistics Canada General Social Survey to explore the implications of both paid and unpaid work responsibilities for feelings of time stress and (for those with paid work) for satisfaction with work-life balance. Gender differences in the quantity and type of work done, and in the impact of that work on health and well-being, are central to the analysis. The first section of the multivariate analysis evaluates whether all kinds of work are equally stress inducing and concludes that for both men and women, additional hours of paid work increase the probability of time stress. For women, all kinds of unpaid work also increase time stress, but eldercare and housework hours are more likely to increase time stress than childcare hours, showing that not all work is the same. Childcare is presumably less stressful than housework because it can be both a delight (reading stories or going to the park) and a chore (changing diapers). Results also emphasize that it is not just total hours of work which matter, but particular combinations can be stress inducing: women with both childcare and eldercare responsibilities (i.e., those in the sandwich generation) are especially likely to feel time stress, given the same total hours.

For men, unpaid work rarely has any association with time stress. This is an important gender difference, which may reflect gendered spheres of

responsibility. In some specifications, additional housework is associated with higher stress; hours of eldercare and hours of childcare are never important, perhaps because men are more likely to perform the more pleasant aspects of such caregiving (e.g., playing or going for a drive).

For married couples, we investigate the role played by spouses both as potential sources of support and as additional responsibilities. We find that the impact of a respondent's own work hours is robust to the inclusion of spouse's hours. In general, the spouse doing more unpaid hours does not alleviate time stress; when the hours are for housework, it is in fact aggravated, especially for women. It may be that spouses do more unpaid hours when their partners are particularly under pressure. For married women, the strongest marginal effects on stress are from eldercare hours, while men are particularly stressed by caring for a disabled spouse.

Finally, we ask whether certain characteristics of paid work can help women juggle responsibilities and so help to alleviate time stress and/or improve satisfaction with the balance between work and home life (e.g., having a job with flexible starting and/or stopping time or being self-employed). Somewhat to our surprise, we find few associations between time stress or work-life balance and job characteristics once we have controlled for total work hours. However, since work hours and job characteristics come bundled together in packages, it may be more that we are unable to distinguish these associations than that they do not matter. More research is needed on this issue, especially given the importance attached to these alternative work arrangements in the work-life balance literature.

While this study affirms the burden of unpaid work, it also highlights that not all aspects of unpaid work are the same, nor is the burden of unpaid work experienced in the same way by men and women. These findings on stress and work-life balance suggest that research is needed on other health risks associated with caregiving and other unpaid work. The findings also challenge the simple work-leisure dichotomy underlying neoclassical labor market analysis.

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NOTES

[1] Thus, of course, individuals without telephones are excluded, though sampling weights based on the census take this into account.

[2] We also carried out all of the analyses discussed here using a question that asks: "How often do you feel rushed? Would you say that it is: (1) Every day? (2) A few times a week? (3) About once a week? (4) About once a month? (5) Less than once a month? (6) Never." The major qualitative lessons learned were essentially the same. However, there are interesting subtleties of difference, which we plan to examine further in future versions of this paper.

[3] "Full-time/full-year" means that the respondent reported 30 or more "usual weekly hours" of paid work for at least 50 weeks in the previous year. "Not in the labor force" means that the respondent reported no weeks of paid work. "Part-time or part-year" includes individuals usually working less than 30 hours per week or fewer than 50 weeks in the survey year.

[4] We focus upon usual weekly hours, since previous work (e.g., Marshall 1993; Shelley Phipps, Peter Burton, and Lars Osberg 2001) has suggested that weekly hours of work rather than annual hours are most important for measuring time stress. This relates to the fact that most caregiving cannot be postponed until paid work responsibilities are less onerous. Moreover, this is particularly true for traditionally "female" tasks (preparing meals for the children) as compared with traditionally "male" tasks (mowing the lawn).

[5] The public-use version of the GSS provides income information in twelve intervals. Each household is assigned the income level from the midpoint of the appropriate interval, with the exception of households in the highest income category (over 100,000 1998 Canadian dollars). These households are assigned the median income of all households in the Survey of Consumer Finance with incomes over 100,000 dollars ($138,675). Poverty status is then calculated according to the Statistics Canada Low-Income Cut-Offs for residents in urban areas with populations between 100,000 and 500,000. We have experimented with other ways of controlling for household income (e.g., including income as a continuous variable in linear form and in quadratic form). None of our substantive results appears to be affected by these modeling choices. Hence, for simplicity, we report only specifications with the dichotomous poverty status variable.

[6] Specifically, respondents were asked, "Are you limited in the amount or kind of activity you can do at home, at work, or at school because of a long-term physical or mental condition or health problem?"

[7] We also know region of birth for both the respondent and the respondent's parents. We experimented with both variables with little success given extremely small cell counts.

[8] The base case uses mean hours for all women. Dummy variables are all set equal to zero. We also conducted all the simulations reported here from a base that uses mean hours for all men. Estimated marginal effects were essentially no different, and so in the interests of space we do not report them here.

[9] The co-author of this paper with three children in the 5 to 12 category finds this result extremely reasonable!

[10] We also experimented with poverty-work hours interaction variables, but these were not particularly important, especially for women.

[11] We also attempted to conduct separate analyses for single respondents, since we have a particular interest in the stresses associated with paid and unpaid work for lone mothers. Unfortunately, sample sizes were too small to provide reasonable estimates.

[12] Unfortunately, the unpaid work questions that the respondent answered about his/her spouse are not identical to those answered by the respondent about him/herself.

[13] Respondents were asked about the "main activity" of their spouse in the last seven days. Answers included: working at a paid job or business; looking for paid work; going to school; household work/caring for child; retired; and "other" (including maternity/paternity leave and long-term illness). To avoid classifying spouses on maternity leave together with those experiencing long-term illness, we have grouped those answering "other" but with a child aged less than 1 year together with those who are *not* in a "long-term illness."

[14] Of course, the two figures are not directly comparable as they reflect *different* samples of married men/women (i.e., the ones who are themselves survey respondents versus the ones whose wives/husbands are survey respondents). However, they do *represent* the same individuals in the population. One explanation for the higher hours reported by respondents themselves is that they include overtime while spouses answer in terms of a standard workweek.

[15] Husbands with a long-term illness are reported to do more weekly hours of in-home housework (6.3 hours) than husbands on average (4.7 hours). However, hours spent on "other" housework, which includes yard work, working on the car, etc., are less for husbands with a long-term illness. Women with ill or disabled husbands are also less likely to have children at home.

[16] Women with disabilities in our Equity Reference Groups found these findings plausible, arguing that taking on the care of a disabled partner requires men to step far outside their traditional responsibilities and hence such caregiving is particularly stressful for men.

[17] We have grouped these options into the three categories as described above as a result of sample size considerations.

[18] For example, women who work irregular shifts report, on average, 24.3 hours per week compared to 37.8 hours per week for those who work regular workdays. Men who are self-employed work 54.7 hours per week on average, compared to 42.5 hours per week for the non-self-employed. Men with multiple paid jobs report 58.9 hours per week, compared to 43.9 for those with just one paid job.

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