



The Psychosocial Stress of Managing Work and Care Roles: Gender Differences Among IT Professionals

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ABSTRACT

Background: An increasing number of adults are simultaneously managing work and family caregiving roles. Yet, little is known about the psychosocial implications of balancing work and different caregiving roles, particularly among men and women employed in demanding white-collar industries. Additionally, although gender differences in *family caregivers'* health, stress, and resources have been well-established, few studies have documented gender differences in *working caregivers'* psychosocial stress by examining diverse caregiving role occupancy and holding work context constant.

Objective: Applying Pearlin's stress process model of family caregiving, we examined whether employees occupying diverse caregiving roles (child, elder, and "sandwiched" caregiving) and their noncaregiving counterparts in the information technology (IT) division of a white-collar organization differed on several psychosocial stress indicators. We also investigated the degree to which gender moderates associations between caregiving role occupancy and psychosocial stress.

Methods: Drawing on a sample of 823 adults from the Work, Family and Health Study (WFHS) employed in the IT division of a Fortune 500 company, we conducted multiple linear regression models to assess the extent to which caregiving role occupancy predicted psychosocial stress. We used general linear modeling with planned contrasts when significant interactions emerged in regression models.

Results: Child caregivers reported more perceived stress and partner strain whereas elder caregivers reported greater subjective primary stress than noncaregivers. With the exception of work-to-family conflict, sandwiched caregivers reported poorer psychosocial functioning. As for gender differences, sandwiched men reported less family-to-work conflict and more partner support compared to sandwiched women.

Conclusion: Our results suggest that IT professionals occupying caregiving roles experience the work-family interface differently than their noncaregiving counterparts, and that gender differences are evident in sandwiched caregivers' exposure to secondary role strains.

INTRODUCTION

The information technology (IT) industry represents one of the fastest-growing sectors of the US economy and increasingly consists of both men and women. Employment in the industry is often intensive and requires ongoing or intermittent engagement beyond the traditional workplace and the conventional workday or week. Therefore, such jobs may be particularly stressful when simultaneously balanced with caregiving role occupancy. Consequently, the present study applies the stress process model of family caregiving (Pearlin et al., 1990) to examine appraisals of subjective primary stress and secondary role strain among IT professionals occupying caregiving roles relative to noncaregiving counterparts as well as investigate gender differences in stress exposure. Given the paucity of evidence on the stress experienced by IT professionals occupying a range of caregiving roles, we do not formulate hypotheses. Rather, we pose the following research questions:

- 1) How do IT professionals occupying diverse family caregiving roles differ from their noncaregiving counterparts on indicators of psychosocial stress?
- 2) Are there gender differences as well? In other words, does gender moderate the effects of caregiving role occupancy on psychosocial stress outcomes among this (growing) segment of the workforce?

PARTICIPANTS

Participants were 823 IT employees drawn from the Work, Family and Health Study (WFHS), a multidisciplinary research initiative by the Work, Family and Health Network (WFHN) to enhance understanding of the ways in which workplace practices and policies affect work, family, and health outcomes among employees working in different industries. Employees were recruited from 56 study groups identified for participation in the WFHS; study groups refer to large teams of workers reporting to the same senior management team, roughly analogous to a department, who work closely together and generally perform similar work. Employees were eligible for study participation if they worked in the two cities in which data collection occurred and were not contractors.



MEASURES

Family Caregiving Role Occupancy

Child caregivers lived with dependent children 18 years of age and younger in the same household for 4 or more days per week.

Elder caregivers provided care (i.e., informal help with shopping, medical care, or financial planning) for at least 3 hours per week in the past 6 months to an adult relative, regardless of residential proximity.

Sandwiched caregivers satisfied the criteria for both child and elder care.

Noncaregivers did not satisfy any of the above family caregiving criteria.

Subjective Primary Stress

Perceived stress (Cohen, Kamarck, & Mermelstein, 1983) comprised four items pertaining to the last 30 days. Total values ranged from 4 to 20, with higher mean values reflecting more stress ($\alpha = .76$).

Six items examined *psychological distress* (Kessler et al., 2003) during the past 30 days. We computed a composite distress total ranging from 6 to 30, with higher values denoting greater distress ($\alpha = .77$).

Secondary Stress (Role Strains)

The *work-to-family conflict* (WFC) and *family-to-work conflict* (FWC) scales from Netemeyer, Boles, and McMurrin (1996) assessed secondary role strains in the work and family domains. Five items pertained to WFC and five items assessed FWC in the past 6 months. Higher values reflect more WFC ($\alpha = .91$) and FWC ($\alpha = .83$).

A modified measure of *partners' emotional support and strain* from Schuster, Kessler, and Aseltine (1990) examined partner relationship quality. Five items evaluated *partner support* and five items assessed *partner strain* within the past month. Total values ranged from 5 to 20, with higher values indicating greater partner support ($\alpha = .88$) and partner strain ($\alpha = .83$).

DATA ANALYSIS

Given that IT professionals were nested within work groups, an *intraclass correlation* (ICC) was calculated for each outcome to determine whether multivariate models should account for shared variance. Only WFC had a substantial ICC (15%), with the remaining ICCs at 3.6% or below. Therefore, we performed *separate multiple linear regressions* for each outcome and clustered standard errors by work group for the WFC model. We then interacted each caregiving role with gender to test whether gender moderates associations between different caregiving roles and psychosocial stress. If significant interactions emerged, we performed planned contrasts using *general linear modeling* to compare average psychosocial stress outcomes for both men and women separately.

RESULTS

Table 1. IT Professionals' Characteristics by Caregiving Role Occupancy

Characteristics, n(%)	None n = 315 (39%)	Child n = 304 (38%)	Elder n = 108 (13%)	Sandwiched n = 83 (10%)
Sociodemographics				
Age	48 (.10)	43 (.7)	50 (.8)	43 (.7)
Male	.62	.64	.45	.60
White	.80	.66	.80	.48
College degree	.74	.83	.68	.83
\$100,000 or more per year	.64	.71	.60	.82
Family characteristics				
Child disability	---	.09	---	.10
Non-residential children	.48	.19	.50	.23
Cohabiting or married	.68	.91	.66	.93
Dual-earner couple	.53	.69	.47	.70
Hours partner works	41 (12)	40 (15)	42 (16)	42 (12)
Work characteristics				
Company tenure	15 (11)	11 (6)	18 (11)	11 (7)
Hours worked	45 (5)	45 (6)	46 (7)	45 (6)
Hours working from home	12 (12)	11 (10)	11 (10)	9 (7)
Weekend days or shifts	1 (2)	1 (2)	1 (2)	1 (1)
Hours commuting	6 (4)	6 (4)	6 (4)	7 (4)
Psychological job demands	4 (1)	4 (1)	4 (1)	4 (1)

Significant findings appear in bold, orange font. Means (and standard deviations) or proportions are shown. Analysis of variance with Tukey post-hoc tests were conducted with noncaregivers as the reference group. Eighty-one employees did not provide information regarding income. Hours represents an average number per week; weekend days or shifts reflect each month.

Table 2. Multiple Linear Regression Analysis: Caregiving Role Occupancy in Relation to Psychosocial Stress Indicators

	Primary Stress		Secondary Stress (Role Strains)			
	Perceived Stress n = 785	Psych. Distress n = 785	WFC n = 761	FWC n = 785	Partner Support n = 620	Partner Strain n = 620
Predictors	B (SE)	B (SE)	B (SE)	B (SE)	B (SE)	B (SE)
Age	-.02 (.01)	-.04 (.02)	.002 (.005)	-.01 (.003)	-.01 (.01)	.01 (.02)
White	.29 (.23)	-.12 (.27)	.20 (.09)	-.12 (.05)	-.57 (.21)	-.91 (.29)
Male	-.50 (.20)	-.88 (.24)	-.22 (.08)	.02 (.05)	-.57 (.19)	.05 (.26)
College Degree	.07 (.24)	-.01 (.29)	.30 (.09)	.08 (.06)	.02 (.23)	.23 (.31)
Child Disability	.84 (.48)	.78 (.57)	-.19 (.16)	.42 (.11)	-.50 (.41)	1.72 (.56)
Dual-Earner Couple	-.47 (.20)	-.66 (.24)	-.001 (.08)	-.03 (.05)	-.16 (.21)	-.40 (.29)
Non-residential Children	-.09 (.24)	.01 (.29)	-.10 (.10)	-.01 (.06)	-.09 (.23)	.25 (.32)
Child Care	.50 (.24)	.01 (.28)	.10 (.09)	.09 (.06)	-.33 (.23)	.74 (.31)
Elder Care	.61 (.31)	.89 (.36)	.16 (.11)	.12 (.07)	-.08 (.31)	.57 (.42)
Sandwiched Care	.95 (.35)	.92 (.42)	.12 (.12)	.23 (.08)	-.94 (.31)	1.18 (.43)
R ²	.04	.06	.05	.06	.05	.06

Significant findings appear in bold, orange font. Marginally significant findings appear in bold font. Unstandardized coefficients are shown. Single employees are excluded from partner relationship quality analyses.

All three types of caregiving role occupancy were associated with more perceived stress relative to noncaregiving IT professionals. Additionally, elder and sandwiched caregiving role occupancy predicted greater psychological distress. None of the caregiving roles were linked to WFC. However, sandwiched caregiving role occupancy was associated with more FWC. Sandwiched caregivers also reported less partner support, and both child and sandwiched caregivers indicated more partner strain.

RESULTS

In our main effects analysis, men indicated less subjective primary stress and WFC as well as more partner support than women. Our study pointed to two gender differences in the caregiving-stress relationship in moderation analysis, both of which involved sandwiched caregivers and secondary role strains. First, sandwiched men reported less FWC than their female counterparts ($B = -.35$, $SE = .16$, $p < .05$).

Table 3. Gender Differences in Sandwiched Caregivers' Perceived Family-to-Work Conflict

Men	M (SE)	Women	M (SE)
Sandwiched	2.41 (.13)	Sandwiched	2.74 (.15)
Noncaregiving	2.39 (.08)	Noncaregiving	2.27 (.08)

Second, a significant interaction emerged between gender and sandwiched caregiving when predicting partner support ($B = 1.40$, $SE = .61$, $p < .05$). Specifically, sandwiched men reported more partner support, thereby suggesting that sandwiched women lacked this resource in the family domain.

Table 4. Gender Differences in Sandwiched Caregivers' Perceived Partner Support

Men	M (SE)	Women	M (SE)
Sandwiched	17.72 (.46)	Sandwiched	15.91 (.57)
Noncaregiving	18.14 (.29)	Noncaregiving	17.73 (.30)

IMPLICATIONS

Our findings suggest that IT professionals occupying caregiving roles generally experience more psychosocial stress than their noncaregiving counterparts. Given the growing number of working caregivers, the psychosocial implications of managing work with different caregiving roles will likely become a greater concern for the IT industry as it seeks to retain or hire new employees, especially women, with an increased likelihood of caregiving role occupancy. Our results also highlight the need for more recognition by employers, particularly front-line managers, of the stress experienced by working professionals involved in a range of caregiving situations. Because work-family conflict can have detrimental consequences for employees and employers, organizations should make a greater effort to prioritize work-life balance by offering flexible work scheduling, promoting family-friendly policies, developing innovative health and well-being initiatives, communicating employee benefits effectively, and providing strong mentorship. Our findings also underscore the need for white-collar organizations to combat ideal worker norms that reinforce gender inequity. Thus, further research on the implications of combining a white-collar employment role with different caregiving roles is warranted.

CITATION

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