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Physical Symptoms and the Interplay of Work and Family Roles

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The paradigm underlying research on the relationship between work and physical-health symptoms in men has focused on workplace stressors and has ignored men's family roles. Research on women, work, and health suggests several necessary additions to this paradigm, including (a) a focus on job rewards and job concerns and (b) attention to the impact of family roles on the relationship between job rewards and concerns and physical health. We included these variables in a study of a disproportionate random sample of 403 employed 25- to 55-year-old women. Major findings are that (a) work rewards (e.g., helping others at work) are related to reports of low levels of physical symptoms; (b) work concerns (e.g., overload) are associated with reports of high levels of physical symptoms; (c) particular work rewards, which may be different for women than for men, mitigate the negative health effects of work concerns; (d) among employed mothers, satisfaction with salary is negatively related to physical-health symptoms; and (e) women in positive marriages or partnerships were more likely to reap physical-health benefits from the rewards of helping others at work and from supervisor support.

Key words: work, gender roles, family, symptoms

Mainstream research in behavioral medicine has focused on relationships between workplace stressors and physical health in male populations. The thrust of this research has been to identify job conditions that are consistently associated with increased reports of physical symptoms (Karasek, Schwartz, & Theorell, 1982; Karasek & Theorell, 1990). Recent studies on women and workplace stress, however, have raised several important considerations which need to be incorporated into this stream of research. These include (a) attention to gender differences in those aspects of the workplace that are associated with physical-health outcomes and (b) consideration of the impact of family roles on the relationship between workplace rewards and concerns and physical-health symptoms. In this article, we address these considerations using data from a stratified random sample of 403 employed 25- to 55-year-old women.

Much current research on workplace stress builds on a model, developed by Karasek et al. (1982), that integrates two traditions. The first, the "life stress" tradition, focuses on mental and physical illness induced by "stressors" on the job; these job demands include work load, deadlines, or conflicts (Caplan, Cobb, French, Van Harrison, & Pinneau, 1975; Quinn et al., 1971; Theorell, 1976). The second tradition, including studies of job satisfaction, focuses on job decision latitude (Hackman & Lawler, 1971; Turner & Lawrence, 1965; Walker & Guest, 1952). Joining these two traditions into a single model, Karasek et al. (1982) postulated that psychological and physical strain result from jobs with a combination of high psychological demands and low decision latitude.

Much of the existing research associated with this model has focused on men (Karasek & Theorell, 1990). However, there is evidence that the job experiences of men and women differ in important ways. Indeed, Karasek and Theorell (1990) reported that the average level of decision latitude among employed women is markedly lower than it is among employed men. Further, they stated that there is a major difference in the relationship between decision latitude and demand for men and for women. Among women, the correlation is moderate and negative ($r = -.24$), indicating that women's high-demand jobs tend to have low decision latitude. Among men, it is small and positive ($r = .06$), suggesting that men's high-demand jobs are often somewhat higher in decision latitude (pp. 45-46). These observations raise the possibility that decision latitude may be a more available, and therefore more important, job reward and job-stress mitigator for men than for women and that other job rewards may moderate the stress-illness relationship for women. Indeed, when interactions between job demands and job control have been estimated in female samples, the findings have been inconclusive. LaCroix and Haynes (1987) reported a significant interaction for female but not male employees in the Framingham Heart Study data. In contrast, Landsbergis (1988) failed to find interaction effects of decision latitude and demands in a study of female nurses.

To date, the search for work-stress moderators has been limited largely to decision latitude and social support at work. These limitations appear to derive as much from the constraints imposed by the availability of data (especially the Quality of Employment Survey data, as reported in Quinn & Staines, 1979, on which many analyses are based) as from any theoretical necessity. Moreover, these limitations may restrict our understanding of women's work experiences more strongly than those of men, because the original samples for the Quality of Employment surveys were predominantly male. In this study, we examined new job condition factors that may affect the physical health of employed women.

Another consideration in the relationship between workplace stress and physical symptoms is the part played by women's (and men's) family roles. Previous research on work, family, and health has focused on women. The basic finding is that family-role status has an impact on the physical-health reports of employed women. To illustrate, married employed women reported better physical health than did single em-

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ployed women (Verbrugge & Madans, 1985). There is some disagreement about the health consequences of parenthood among employed married women. Some researchers have reported that the physical-health benefit enjoyed by married employed women is not affected by their parental status (e.g., Verbrugge & Madans, 1985), but others have reported that a child in the home is associated with lowered risk (e.g., Kotler & Wingard, 1989). In spite of this discrepancy, there is agreement that the differential effect of parental status on physical health is low compared to that of employment and partnership status.

However, most existing research has not asked whether the impact of occupational stress on a woman's physical health is moderated by the family roles she does or does not occupy—that is, whether the impact is different for women in different family roles. The only study to examine the moderating effects of marital and parental status on the relationship of work conditions to physical health found that risk of heart disease among employed clerical workers was substantially increased if they were married and had three or more children (Haynes & Feinleib, 1982; Haynes, Levine, Scotch, Feinleib, & Kannel, 1978). The sample of our study was stratified on partnership and parental status, enabling us to estimate separately the effects of partner-role and parent-role occupancy on the relationship between workplace stressors and stress mitigators and physical-health symptoms.

Finally, almost no attention has been paid either to the direct effects of the *quality* of experience in family roles on the physical health of employed women or to the moderating effects of family-role quality on the relationship between workplace stressors and stress mitigators and physical health.[1] Yet it seems reasonable to expect that women who report positive experiences in their family roles will experience fewer physical symptoms than women with troubled relationships. Further, it is important to ask whether the quality of experience in a family role can affect the relationship between physical health and the quality of experience in the job role. It is widely assumed that work is stressful for women and exacerbates the distress they experience in their family roles. Yet empirical data relating to these relationships are unavailable. In this article, we address such questions as "Do negative experiences on the job exacerbate the effects of negative family roles? Conversely, can negative experiences on the job mitigate the salutary effects on health of a positive family role? And, can positive experiences at work protect women from the physical-health effects of negative experiences in their family roles?"

METHOD

Sample

The data for these analyses came from the first year of a 3-year longitudinal study of a stratified, random sample of 403 women employed in one of two health-care professions: licensed practical nursing and social work. These two professions were selected on the basis of three criteria: (a) They are predominantly female professions, (b) they are high-strain professions, and (c) they have public licensure records from which we could draw a random sample.

The sample consisted of 248 social workers and 155 licensed practical nurses. The mean age of the respondents was 39.5 years (SD = 7.4 years). On average, they had been working in their respective fields for 11 years (range = 2 to 35 years) and at their current jobs for 6 years. They worked 38 hr per week on average, and 80% worked the same schedule on a regular basis. The mean individual income in 1985 was $24,000 ($SD$ = $2,700).

Within the two occupations, the sample was stratified on race, parental status, and partnership status (women who were either married or living with a partner were defined as "partnered"). Sixty-one women (15.3%) were Black, and 342 (84.7%) were White. Approximately half were partnered (n = 198, 49.1%), and roughly half had children (n = 229, 56.8%). About half the women with children were also partnered (n = 123, 53.7% of all mothers); the other 106 women were single mothers. Most of the mothers were not caring for preschoolers; only 13.9% had a child under age 6. In contrast, most of the mothers had school-age children—that is, 6- to 18-year-olds. Only 14% of the mothers did not have a child under the age of 19.[2]

All respondents lived within a 25-mile radius of Boston. Respondents were interviewed in their homes or offices by a trained interviewer. Each interview lasted about 2 hr and covered positive and negative aspects of a woman's major social roles (i.e., employee, mother, partner) as well as measures of psychological distress, well-being, and physical health. Only 4% of eligible subjects refused to participate, and 92% of those who began the study were interviewed in all 3 years.

Measures

Role-quality. The quality of the roles of worker, partner, and mother was assessed by rewards and concerns scales constructed originally from data gathered during in-depth interviews with 72 women, ages 35 to 55 (see Baruch & Barnett, 1986, for a full discussion).

For each role, subjects were instructed to think about their situation as it was right then and to indicate on a 4-point scale ranging from *not at all* (1) to *extremely* (4) to what extent, if at all, each of the items was rewarding (or of concern). The number of items varied for each role: For the role of worker, there were 25 reward and 25 concern items; for the role of parent, there were 18 reward and 20 concern items; for the role of partner, there were 18 reward and 15 concern items. To illustrate, for the role of paid worker, each woman was asked how rewarding she found "the job security" and to what extent "the job's not using your skills" was a concern. For the role of mother, each woman with children was asked how rewarding she found "the love they show" and how much of a concern

[1] Verbrugge (1987) demonstrated that subjective experience of life roles (particularly the employee or homemaker role) had greater predictive value for physical health than did more objective aspects of roles.

[2] The respondents' children ranged in age from less than 1 year to over 30 years old, and the average family size was 2.5 children.

was "how they spend their free time." For the role of partner, each parterned woman was asked how rewarding she found "good communication" and how much of a concern was "arguing or fighting." Each subject received two scores for each social role: a reward score and a concern score. *Role quality* was operationalized as the difference between the reward and the concern scores (Baruch & Barnett, 1986).

Test-retest reliability coefficients, calculated on a 10% random subsample within 1 to 3 months of the Wave 1 interview, were .88 for both work rewards and work concerns, .82 for parent rewards and .70 for parent concerns, and .87 for partner rewards and .78 for partner concerns. Cronbach's alpha was .88 for work rewards, .89 for work concerns, .83 for parent rewards, .89 for parent concerns, .93 for partner rewards, and .88 for partner concerns.

Job-reward and job-concern factors. The job-reward and job-concern scales reflect various aspects of the job role. It is likely that specific job rewards and job concerns vary in their relation to physical health. To identify specific role stressors and role rewards that had health consequences, we factor-analyzed the job-reward and job-concern scales. We identified and confirmed the factor structure of the scales using a two-stage analysis.[3] First, the sample was divided into random halves, a "development" sample and a "confirmatory" sample.[4] Based on previous research and principal-components analyses, we specified factor structures for each of the scales in the development half. These models were tested using LISREL and were modified to improve goodness-of-fit. After satisfying ourselves that further modifications would not significantly improve the models, we assessed their fit using the other half of the sample.

From this analysis, we identified six work-reward factors (Helping Others at Work, Decision Authority,[5] Challenge, Supervisor Support Recognition, Satisfaction With Salary) and five work-concern factors (Overload, Dead-End Job, Hazard Exposure, Poor Supervision, Discrimination). (The items comprising the job-reward and job-concern factors are reproduced in the Appendix.)

[3]We also used the same two-stage procedure to factor-analyze the reward and concern scales for the roles of partner and parent. We found four parent-reward factors (Parent's Attachment to the Child, Child's Development, Family Involvement, Companionship), three parent-concern factors (Overload, Child's Health and Safety, Disaffection), three partner-reward factors (Compatibility, Good Provider, Sex), and three partner-concern factors (Disaffection, Partner's Job, Lack of Sharing).

[4]The classic method for confirmatory factor analysis is to develop a model of one sample and then confirm that model on a second, independent sample. To approximate this technique with one sample, we divided the sample into two random halves and designated one half the "development" sample and the other half the "confirmatory" sample.

[5]The term *decision authority* is used because the items comprising this factor correspond closely to those identified by Karasek et al. (1982), who also used this term. For four items comprising their decision authority scale were "freedom as to how I work," "allows a lot of decisions," "assist in one's own decision," and "have say over what happens."

Physical symptoms. Our measure of physical symptoms was the Medical Symptom Checklist, a 29-item measure of general physical symptoms (Leserman, 1989). Respondents were asked to indicate, on a scale ranging from *never or almost never* (1) to *daily* (7), how frequently in the past year they had each of these symptoms; they also rated the degree of discomfort each caused, from *no discomfort* (1) to *extreme discomfort* (4). By multiplying the frequency of occurrence by the degree of discomfort for each symptom and then dividing the product by 29 and multiplying by 10, we derived a total score for physical symptoms that reflects the average frequency and discomfort per symptom.

RESULTS

Preliminary analyses comparing the two occupational groups (social workers and licensed practical nurses), indicated no significant differences on any of the reward or concern scales. Using a dummy variable for occupation, a series of regression models was estimated to test for main and interactive effects of occupation on physical symptoms. The main effect of occupation and the interactions between occupation and socioeconomic status (SES), race, age, and per capita income were nonsignificant. Thus, the two occupational groups were combined for the analyses reported in this article.

Physical Health

Theoretically, scores on the physical-symptom scale could range from 10 to 280. The actual range was from 10 to 84, with a mean of 26.3 (SD = 12.67). Of the 29 physical symptoms on the symptom checklist, fatigue/exhaustion was the most commonly reported. It was considered a problem by 86% of the women interviewed, although only 14% reported considerable or extreme discomfort from it. Table 1 presents these findings. Other frequently noted symptoms were headaches (79%), trouble sleeping (64%), stomach discomfort (62%), and back pain (61%).

Relationship Between Work Rewards and Concerns and Physical Health Reports

To identify those work reward and concern factors that have physical-health consequences, we estimated an ordinary-

TABLE 1
Most Commonly Reported Physical Symptoms

Symptom	*Percentage of Women Reporting Symptoms*	*Percentage With Extreme Discomfort (of Those Reporting Symptoms)*
Fatigue/exhaustion	86	14
Headaches	79	22
Trouble sleeping	64	13
Stomach discomfort	62	15
Back pain	61	14

Note. N = 403.

least-squares regression model with the physical-health measure as the outcome and the six reward factors entered simultaneously as predictors. We then estimated a regression model with the five work-concern factors entered simultaneously as predictors. To control for the relationship between background characteristics and the physical-health measure, all models included the following control variables: SES,[6] age, race, and per capita income.[7]

Of the six work-reward factors, only Helping Others and Satisfaction With Salary were significantly associated with physical symptoms when all six were entered into the same regression equation. When we entered all five work-concern factors into one regression equation, only two factors, Hazard Exposure and Overload, were significant. The items comprising these four factors are presented in Table 2. Clearly, after controlling for other factors, some work rewards and concerns contribute to women's overall job quality but have no physical-health consequences.

These four factors also remained significant ($R^2 = .17, p < .001$) when they were all entered into one regression model, as shown in Table 3. Thus, employed female health-care providers who enjoy high rewards from helping others at work and satisfaction with salary report low levels of physical symptoms; those who are concerned about overload and hazard exposure, report high levels. In other words, physical-symptom scores are responsive to the presence or absence of *both* work rewards and work concerns.

Having identified the work factors that have main effects, we addressed the question of moderating effects. (For this article, we focus on moderators of overload; future work will address moderators of hazard exposure.) Does the presence of particular work rewards mitigate the negative effect of particular work stressors? We examined the potential buffering effects of each of the six work-reward factors on overload in separate regression models.

Helping Others at Work was the most consistent work-reward factor that buffered the effects of overload. The Helping Others at Work × Overload interaction was significant ($b = -3.465, p < .01$)[8] and is presented graphically in Figure 1. Under conditions of high rewards from helping others,[9] employed women with high concerns about overload at work report no more physical-health symptoms than employed women with low overload. Conversely, under conditions of both low rewards from helping others and high overload, reports of symptoms are especially high. Finally, under conditions of low concern about overload at work, rewards from helping others are unrelated to physical-symptom reports.

Thus, work overload, hazard exposure, satisfaction with salary, and helping others are strong predictors of physical-health symptoms. Only rewards from helping others, however, moderate the effects of overload at work.

TABLE 2
Items Comprising Significant Job-Reward and Job-Concern Factors

Factor	*Items*
Job Rewards	
Helping Others at Work	Helping others.
	Being needed by others.
	Having an impact on other people's lives.
Satisfaction With Salary	The income.
	Make good money compared to other people in your field.
Job Concerns	
Overload	Having too much to do.
	The job's taking too much out of you.
	Having to deal with emotionally difficult situations.
Hazard Exposure	Being exposed to illness or injury.
	The physical conditions of your job (noise, crowding, temperature, etc.).
	The job being physically strenuous.

TABLE 3
Job-Reward Factors, Job-Concern Factors, and Physical Health

Job Factor	b[a]	SE[b]
Helping Others at Work	−3.24**	1.12
Satisfaction With Salary	−2.17**	0.80
Overload	1.75*	0.91
Hazard Exposure	4.28***	1.03

$R^2 = .17$

Notes. All analyses controlled for age, race, SES, and per capita income; $N = 371$.

[a]Unstandardized regression coefficient. [b]Standard error.

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

Does Women's Family-Role Occupancy Affect These Relationships?

Partner-role occupancy. As can be seen in Table 4, after controlling for age, race, SES, and per capita income, the main effect of partnership status is not significant. Thus, employed single women are at no higher risk of physical symptoms than are employed partnered women. Additional analyses, not shown in Table 4, estimating the interactive effects of partnership status and each of the work-reward and work-concern factors, yielded nonsignificant findings. In other words, the relationships between physical symptoms and the work-reward and work-concern factors were not moderated by the women's partnership status.

[6]SES was determined by adding scores for occupation (2 = social worker, 1 = licensed practical nurse) and years of education. This model was based on results from a principal-components analysis indicating that these two variables contributed equally to the first component.

[7]Because roughly 30 women did not provide per capita income data, the number of subjects in the following regressions is less than 403.

[8]The addition of the interaction term to the regression model resulted in an increase in R^2 that was significant at $p < .001$.

[9]High and low are defined as ±1 *SD*.

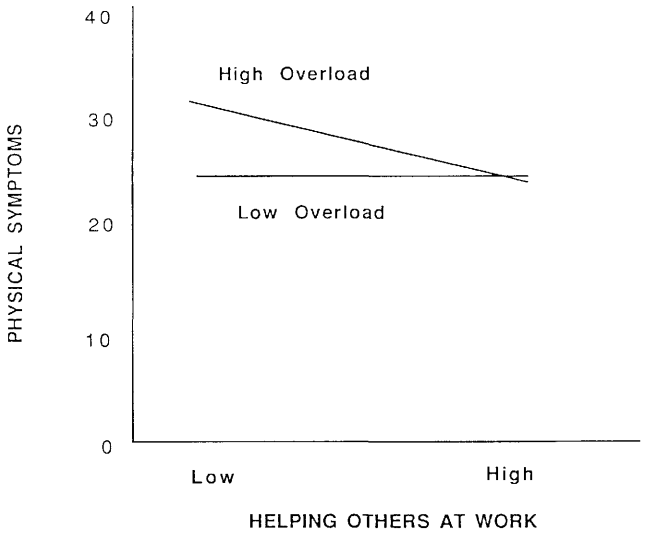

FIGURE 1 Interaction of Helping Others at Work and Overload on Physical Symptoms.

TABLE 4
Job-Reward Factors, Job-Concern Factors, Partner-Role Occupancy, and Physical Health

Variable	b^a	SE^b
Helping Others at Work	−3.20**	1.11
Satisfaction With Salary	−1.95*	0.80
Overload	1.62	0.90
Hazard Exposure	4.27***	1.02
Overload × Helping Others at Work	−3.07*	1.34
Partner-role occupancy	−0.78	1.22
R^2 = .18		

Notes. All analyses controlled for age, race, SES, and per capita income; N = 371.
[a]Unstandardized regression coefficient. [b]Standard error.
*p < .05. **p < .01. ***p < .001.

Parent-role occupancy. In contrast, parental status was a significant buffer of the relationship between physical symptoms and Satisfaction With Salary, as is shown in Table 5. This interaction is depicted graphically in Figure 2. As can be seen from this figure, the physical health of employed mothers was inversely related to satisfaction with salary. In contrast, physical-health reports were unrelated to satisfaction with salary among employed women without children. Moreover, the interaction between satisfaction with salary and parental status occurred for both single and partnered women. It appears that the impact of stress associated with low levels of rewards from satisfaction with salary is felt more strongly among women who have the financial strain of rearing children, whether they have a partner or not.

How Does the Quality of Women's Family Roles Affect These Relationships?

To examine the effects of family-role quality, we estimated one model for the subsample of women who were partnered

TABLE 5
Job-Reward Factors, Job-Concern Factors, Partner-Role Occupancy, and Physical Health

Variable	b^a	SE^b
Helping Others at Work	−3.04**	1.11
Satisfaction With Salary	−1.87*	0.79
Overload	1.69	0.90
Hazard Exposure	4.41***	1.01
Overload × Helping Others at Work	−3.45*	1.32
Parent-role occupancy	−0.40	1.64
Parent-Role Occupancy × Satisfaction With Salary	−4.72**	1.59
R^2 = .20		

Notes. All analyses controlled for age, race, SES, and per capita income; N = 371.
[a]Unstandardized regression coefficient. [b]Standard error.
*p < .05. **p < .01. ***p < .001.

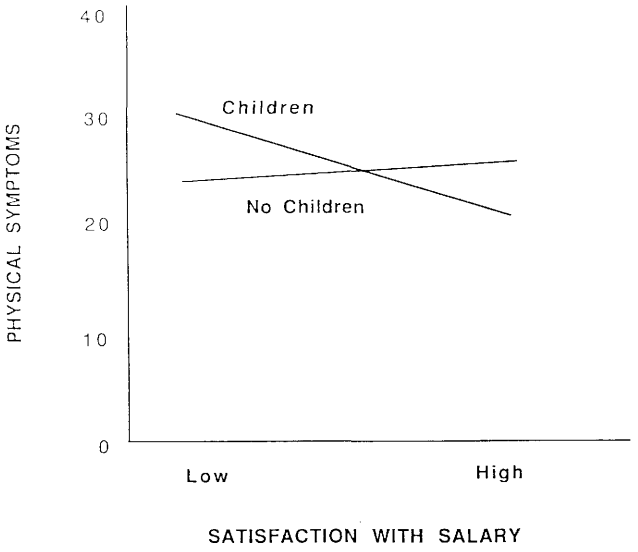

FIGURE 2 Interaction of Satisfaction With Salary and Parental Status on Physical Symptoms.

and another for the subsample of women who were mothers. Thus, the samples for the separate regression models differed; the one estimating the effect of partner-role quality was calculated for the partnered women (n = 188); the model estimating the effect of parent-role quality was computed on the subsample of mothers (n = 211). The data are presented in Table 6. As expected, even after taking into account work rewards and work concerns, women who report rewarding relationships with partners or children also report low levels of physical symptoms.

We then examined the relationship between physical health and the interaction of work- and family-role quality by adding interaction terms to the already obtained equations for each combination of family-role quality and a work reward or concern (e.g., Parent-Role Quality × Overload, Partner-Role Quality × Helping Others at Work). Contrary to widely held assumptions, we found no evidence that overload at work

TABLE 6
Job-Reward Factors, Job-Concern Factors, Family-Role Quality, and Physical Health

	Partnered Women Only[a]		*Parents Only*[b]	
Variable	b[c]	*SE*[d]	b[c]	*SE*[d]
Helping Others at Work	−1.26	1.50	−2.43	1.67
Satisfaction With Salary	−2.31*	1.07	−3.70***	1.06
Overload	2.50*	1.18	1.93	1.32
Hazard Exposure	3.34*	1.40	3.87**	1.44
Partner-role quality	−2.18*	−2.46		
Parent-role quality			−2.30**	1.01
R^2	.22		.23	

Note. All analyses controlled for age, race, SES, and per capita income.

[a]n = 188. [b]n = 211. [c]Unstandardized regression coefficient. [d]Standard error.

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

exacerbated the relationship between problems at home and physical health. Also, negative experiences as a parent or as a partner did not exacerbate the relationship between overload at work and physical health.

When we examined positive experiences in the work role, we found that for women with children the relationship between the quality of their experiences as parents and their physical health was independent of their experiences at work. However, for partnered women, we found that women in better marriages or relationships were more likely to reap physical-health benefits from the rewards of helping others at work ($b = -4.71$, $p < .001$) and from supervisor support ($b = -2.49$, $p < .05$).

DISCUSSION AND CONCLUSIONS

The major findings of this study are:

1. Work rewards as well as work concerns need to be assessed in any attempt to understand the relationship between work conditions and physical health.
2. There may be gender differences in the aspects of work that are experienced as rewarding or that moderate the negative effects of work overload.
3. Family roles (quality and occupancy) must be assessed for their main effects and for their interactive effects on these relationships.

A focus on work concerns (i.e., stressors) is inadequate for understanding the workplace stress-illness relationship, because physical-health reports are as much affected by the absence of work rewards as by the presence of work concerns. In this sample, high rewards from helping others at work and from satisfaction with salary were associated with low levels of physical symptoms. In addition, among employed women, the presence of high rewards from helping others buffered the negative effects of high concerns about overload on symptom reports for all employed women, whereas high rewards from satisfaction with salary mitigated the negative health effects of high overload among employed mothers. In previous analyses of this sample, helping others at work emerged as the most consistent predictor of psychological health and as the job-reward factor that most consistently moderated the negative effects of job overload (Barnett & Marshall, in press).

These findings offer only modest support for Karasek et al.'s (1982) Job Demand × Job Control interaction model. Whereas overload (i.e., demand) emerges as one of the job stressors most consistently related to physical symptoms, decision latitude, which is measured by our work-reward factors of challenge and decision authority, had neither main nor interactive effects on physical health. This important difference may be due to the inclusion of the Helping Others factor, which has not been part of other studies of work rewards or job-stress mitigators.

Other studies that have failed to confirm the Karasek et al. model have included male samples not employed in "the conventional high-strain occupations in manufacturing" (see Reed, LaCroix, Karasek, Miller, & McLean, 1989, p. 497). The job rewards and job concerns that predict high strain in unconventional occupations may differ from those proposed by Karasek and his colleagues. In particular, many occupations in the service industries, including social work and licensed practical nursing, are characterized by a focus on the social relationships between the client and the server, as opposed to the physical component of production, which is paramount in conventional manufacturing occupations. The Helping Others at Work job-reward factor seems to reflect "emotionally interdependent relationships among individuals" (Karasek & Theorell, 1990, p. 97), and, among service workers, this may be a more salient job reward than is decision latitude. We are not yet able to say whether helping others at work is a reward specific to employed women, to people (men and women) in service occupations, or to both. Given that women are likely to be concentrated in these jobs, helping others may also be an important reward for employed women. Work currently in progress, with a sample of women and men in a variety of occupations, will help to answer this question.

The significant interactions between women's family roles and particular work factors underscore the need to incorporate into our research paradigm the non-workplace lives of female as well as male employees. To illustrate, the reactivity of employed women with children to the presence or absence of rewards from satisfaction with salary probably reflects the great financial burden of having dependent children. It is, of course, likely that employed men with children also feel this burden. However, no research that we are aware of has examined the effects of either partnership or parental status on the relationship between workplace factors and physical-health problems among men. Indeed, most mainstream research on men and work does not even report family-role status, and, when it does, it uses the data only as a control.

Further, women whose marriages or partnerships were rewarding experienced physical-health benefits from helping others at work and from supervisor support. However, we found no evidence that overload at work exacerbated the

relationship between problems at home and physical health. This finding suggests that employment does not have the negative effects on the health of women with families that is commonly assumed.

It is important to recognize that men and women have both work and family responsibilities. Future research on men and stress needs to place men in the context of their family roles and to examine the interplay between these two worlds.

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APPENDIX

Scale Items Comprising the Job-Reward and Job-Concern Factors

	Job-Reward Items
Helping Others at Work	1. Helping others.
	2. Being needed by others.
	3. Having an impact on other people's lives.
Decision Authority	1. Being able to make decisions on your own.
	2. Being able to work on your own.
	3. Having the authority you need to get your job done without having to go to someone else for permission.
	4. The freedom to decide how you do your work.
Challenge	1. Challenging or stimulating work.
	2. Having a variety of tasks.
	3. The sense of accomplishment and competence you get from doing your job.
	4. The job's fitting your interests and skills.
	5. The opportunity for learning new things.
Supervisor Support	1. Your immediate supervisor's respect for your abilities.
	2. Your supervisor's concern about the welfare of those under him/her.
	3. Your supervisor's encouragement of your professional development.
	4. Liking your immediate supervisor.
Recognition	1. The recognition you get.
	2. The appreciation you get.
Satisfaction With Salary	1. The income.
	2. Making good money compared to other people in your field.
	Job-Concern Items
Overload	1. Having too much to do.
	2. The job's taking too much out of you.
	3. Having to deal with emotionally difficult situations.
Dead-End Job	1. Having little chance for advancement.
	2. The job's not using your skills.
	3. The job's monotony, lack of variety.
	4. Limited opportunity for professional or career development.
Hazard Exposure	1. Being exposed to illness or injury.
	2. The physical conditions on your job (noise, crowding, temperature, etc.).
	3. The job's being physically strenuous.
Poor Supervision	1. Lack of support from your supervisor for what you need to do your job.
	2. Your supervisor's lack of competence.
	3. Your supervisor's lack of appreciation for your work.
	4. Your supervisor's having unrealistic expectations for your work.
Discrimination	1. Facing discrimination or harassment because you're a woman.
	2. Facing discrimination or harassment because of your race of ethnic background.