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More Than a Job:
Women and Stress in Caregiving Occupations

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16. Abstract (Limit: 200 words) Women employed in caregiving occupations were examined to determine the effect of such employment on their psychological and physical health. The data collected were from a study of occupational stress and health among 403 women, aged 25 to 55 years, who were currently employed at least half of the time as social workers or licensed practical nurses and were living within a 25 mile radius of Boston. The sample was composed 15 percent of black women and 85 percent of white women. By limiting the sample to those who were registered, the cohort overrepresented social workers with bachelors and masters level training in social work. The respondents averaged 11 years in this type of occupation. The data collected indicates that caregiving occupations carry heavy workloads and emotional demands as the workers respond to the crises and assist individuals and families in facing emotionally difficult times. Concern about job characteristics contributes to greater psychological distress, poorer physical health and reduced well being. Of importance to those doing this type of work was their feeling that their work was important, and they derived pleasure from helping the other person involved. It appeared in some instances that the heavy demands of caregiving were tolerable so long as the worker found the demands of the job challenging and had the decision authority she needed to do the best she could, content that her supervisor was doing all she could to make the job a better one.			13. Type of Report & Period Covered	
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More Than a Job: Women and Stress in Caregiving Occupations

While women made up only 44% of the labor force in 1985, fully 61% of the employees in the services industries were women.¹ In 1985, 43% of employed women were employed in the services industries, the majority as nurses, teachers, social workers, housekeepers, and in other caregiving occupations.² Caregiving occupations are generally recognized as highly stressful (Karasek, Triantis and Chaudry, 1982; Cherniss, 1980; Jayaratne and Chess, 1984; Jayaratne, Chess and Kunkel, 1986). This chapter focuses on women who are employed in caregiving occupations, and on the impact of their working conditions on their psychological and physical health.

We take as background for this work research indicating that employment per se does not negatively affect the health of women (LaCroix and Haynes, 1987). However, for both women and men, particular characteristics of jobs may be stressful and may lead to psychological distress, reduced well-being and poorer physical health.

Job stress research is part of a larger stream of research on life stress which posits that "stressors" give rise to feelings of "stress" which, in turn, contribute to psychological strain or distress and physical illness. Prior research on job stress has taken many forms and has measured different aspects of the workplace. One major line of research attempts to identify those job conditions that are associated with stress-related health problems. Some researchers within this tradition have examined the relationship between illness and job conditions, such as heavy workloads, time pressure or tensions at work (Theorell, 1976; Caplan, Cobb, French, Van Harrison and Pinneau, 1975). Others have focused on the relationship of job satisfaction to

autonomy, control and decision latitude (Turner and Lawrence, 1965; Walker and Guest, 1952; Hackman and Lawler, 1971).

Over time, our understanding of job conditions and job stress has become more complex. Karasek and colleagues (1981) proposed that "job strain" results when individuals are in jobs with heavy demands and little opportunity to moderate the resultant stress. Their work originally examined the combined effects of job demands and decision latitude (defined as control over time allocation, control over organizational decisions, and control over the use of skills or the extent to which work is repetitious or monotonous). This Job Strain model has been expanded to include job insecurity, exposure to physical hazards, physical exertion, and social support at work (Landsbergis, 1986).

Several studies lend support to the relevance of the Job Strain model for caregiving occupations. Cherniss (1980) found that one of the major strains faced by nurses, social workers, teachers, and poverty lawyers in their first jobs after training was the burden of being responsible for others, and of feeling inadequate to the task because of inadequate or irrelevant training, and lack of resources with which to address the problem. Bates and Moore (1975) report that heavy workloads, inadequate staffing, and feeling unable to influence administrative decisions are sources of stress for nurses.

In this chapter we explore and refine the Job Strain model for women in caregiving occupations. We argue that the model must be expanded to include the importance of the rewards from helping others to women in caregiving occupations. This chapter is divided into three sections. In the first section, we describe those job conditions most characteristic of social workers and LPNs. In the second section, we focus specifically on the impact of concerns about those job conditions on the emotional and physical health of

social workers and LPNs who are involved in direct care for patients and clients. Women not in direct care positions were excluded from this section because their jobs are different from the jobs of other social workers and LPNs with respect to caregiving responsibilities. In the third section, we discuss the implications of our findings.

METHODS

The data to be presented in this chapter come from a study of occupational stress and health among 403 women, ages 25 to 55, who were currently employed at least half time as social workers or licensed practical nurses (LPNs) and were living within a 25-mile radius of Boston. The sample was randomly drawn from the registries of those two occupations and was stratified within occupation by race, by whether or not the respondent had children and by whether the respondent was single or partnered (married or living with a partner). Fifteen percent of the sample were black, 85% were white. Approximately half had children and half did not, half were partnered and half were single. The mean age of the respondents was 39.5 years. It is important to note that, in Massachusetts, individuals with the job title of social worker are not required to be registered. By limiting our sample to registered social workers, our sample overrepresents social workers with bachelor's and master's level training in social work. In addition, social workers and LPNs who worked nights (starting after 8 pm) or rotating shifts, who were self-employed, or who had been at their current job for less than 3 months or in the field for less than a year, were excluded from the sample. On average, the respondents had been working in their respective fields for 11 years (ranging from two to 35 years) and at their current jobs for six years. The

respondents were interviewed face-to-face for about two hours, about various aspects of their work and family lives. (For a full description of the sample, see Barnett, 1988).

CHARACTERISTICS OF CAREGIVING OCCUPATIONS

Social workers and LPNs describe their jobs as often offering limited opportunities for advancement, and involving heavy workloads and overtime hours. They also describe their jobs as sometimes providing limited resources, restricted decision authority, unsupportive supervisors, and involving discrimination, and exposure to illness or injury. Most of this section is based on the social workers' and LPNs' responses to a checklist of 30 job conditions. They were asked to indicate, on a four-point scale from 1=Almost Never/Never to 4=Almost Always/Always, how frequently each item was true for their job. The items were written to encourage reports of objective job conditions, rather than the respondent's subjective feelings about job conditions. However, these are self-reports of job conditions, not objective measures. The following section describes the frequency of these job characteristics among social workers and LPNs.³ Most LPNs worked in hospitals or nursing homes. Social workers were employed in various subareas of social work practice, including child protective services, psychiatric social work, medical social work, and work in the schools, community mental health centers, the courts or with the elderly. Job conditions vary from workplace to workplace and, when relevant, these differences are specified.

Salaries and Benefits

The LPNs in our sample who are employed at least 30 hours a week were paid an average of \$1455 per month, or \$17,460 a year in 1985; the social workers

who are employed 30 hours a week or more were paid an average of \$25,068 a year in 1985. Certain fringe benefits appear to be standard for full-time employees; most of the respondents working 30 hours or more a week report that they receive paid sick leave, paid vacation and paid or partially paid health insurance. However, only 75% of LPNs employed by nursing homes receive health insurance benefits. In addition, over one third of part-time workers in both occupations do not receive health insurance benefits; 30% do not have paid sick leave and 18% do not have paid vacation.⁴

Advancement Opportunity

As a group, these caregiving jobs are characterized by little advancement opportunity -- 89% of social workers and LPNs report that only occasionally, if at all, are people with similar jobs at their place of employment able to advance. Lack of advancement opportunity is more often reported by social workers employed in the schools, the courts or in work with the elderly, and by LPNs employed in hospitals. Over one-quarter of psychiatric social workers and social workers working with the elderly report that people in their field often have periods of unemployment.

Workload

The jobs of social workers and LPNs are characterized by heavy workloads -- 87% of the women report that often, or almost always, their jobs require working very hard; 76% report that their jobs often make heavy emotional demands on them. Many social workers have to deal on a regular basis with families in crisis, incidents of child abuse, individuals with severe emotional problems, suicidal clients, or families responding to the illnesses or deaths of loved ones. Licensed practical nurses are involved in physical caretaking of individuals in hospitals and nursing homes. They often have to

deal with issues of death and dying, and with the emotional needs of their patients and of their families. For almost a third of the respondents, their jobs require working outside the usual work day, or working more than 40 hours a week.

Many of the respondents have to work under time pressure. Over two-thirds of protective social workers (responsible for child abuse and neglect cases) report that the amount of work they must do often or always interferes with the quality of their performance and that they rarely, if ever, have enough time to finish their work. Almost half of social workers working in the schools or with psychiatric patients, as well as LPNs employed in hospitals, also report that they work under time pressure.

Decision Authority

LPNs and social workers working with the elderly or in protective services report limited decision authority -- one third to over half report that they often have to do what other people tell them to do.

Limited Resources

A third of the respondents often must meet the demands of their jobs with inadequate resources -- especially protective social workers, social workers working in the courts or with psychiatric patients, and LPNs employed in nursing homes.

Supervision

Almost half (45%) of the women in both occupations have supervisors whom they consider to be poorly qualified as managers and 29% have supervisors whom they feel are not qualified for their own jobs. Almost two thirds of the respondents feel that their supervisor is only occasionally, if at all, helpful to them in getting their jobs done. A similar proportion reported that their supervisors only occasionally, if ever, praise them when they have done a good job. Supervisors are most likely to receive poor ratings among protective social workers, social workers working in the courts or with psychiatric patients, and social workers who are teaching at the college level.

Hazard Exposure

Over three quarters of LPNs working in hospitals, and about half of LPNs working in nursing homes and social workers employed in hospitals, report that their jobs expose them to illness or injury. Over three quarters of LPNs working in hospitals, and about half of LPNs employed in nursing homes report that their jobs are often physically strenuous.

Monotony

The jobs of almost all LPNs and of about half of the protective social workers, adoption workers, and social workers working with the elderly are often monotonous, requiring them to do the same tasks over and over.

Discrimination

About one in five social workers and LPNs report that people doing their kind of job are only occasionally, if ever, treated with respect by other professionals at their workplace -- this is especially true for protective workers and social workers working with the elderly. Eight percent of the

respondents report that they often or almost always experience sex discrimination or sexual harassment on the job; another 18% report that they occasionally do. Twelve percent of Black respondents report that they often or almost always experience race discrimination on the job; another 44% report that they sometimes do.

THE IMPACT OF JOB CONDITIONS

We turn now to an examination of the impact of concerns about these job conditions, as well as the rewards of these jobs, on psychological and physical health.⁵ In this section, we focus on the 326 social workers and LPNs in direct care.⁶ We begin by describing the measures we used, and the types of concerns and rewards caregivers experience on the job. We then look at the relationship between these concerns and rewards and the respondents' health.

Measuring the Concerns and Rewards of Caregiving

To assess the concerns and rewards in caregiving occupations, we asked respondents to complete a scale that asked how much concern or reward they experienced from a series of job conditions. This measure paralleled the job conditions checklist described above, but differed in wording and response options since it was designed to elicit the respondent's subjective sense of concern or reward related to job conditions.

The Concerns of Caregiving. To assess the concerns of caregiving occupations, we asked each respondent how concerned she was, on a 4 point scale from not at all to extremely concerned, about a series of job conditions. The five factors that comprise this scale, their composite items,

the mean score for each factor, and the Cronbach alphas, are shown in Table 1. The five factors are: Overload; Dead-End Job; Hazard Exposure; Poor Supervision; and Discrimination. (The factor structure of this and the following scale was confirmed using LISREL for confirmatory factor analysis. For details, see Barnett and Marshall, 1989).

-- Table 1 About Here --

On average, the respondents were most concerned about the sense of overload on their jobs -- "having too much to do, the job's taking too much out of you, and having to deal with emotionally difficult situations".

The Rewards of Caregiving. To assess the benefits of caregiving occupations, we asked each respondent how rewarding a part of her job she found each of a series of job conditions. The six factors that comprise this scale, their composite items, the mean score for each factor, and the Cronbach alphas, are shown in Table 2. The six factors are: Helping Others, Decision Authority,⁷ Challenge, Supervisor Support, Recognition and Satisfaction with Salary.

--- Table 2 About Here --

Relationship of Job Concerns and Job Rewards to Health

The concerns and rewards that women experience in caregiving occupations are directly related to their mental and physical health. We assessed two aspects of mental health -- psychological distress and psychological well-being -- and used one measure of physical health.

Psychological Distress. Psychological distress was assessed by the depression and anxiety subscales of the SCL-90-R (Derogatis, 1975). We combined the depression and anxiety subscales because they were correlated .80

with each other, and showed similar patterns of relationship to other variables of interest. The SCL-90-R has high levels of both internal consistency and test-retest reliability. In this sample, Cronbach's alpha was .88 for depression and .89 for anxiety.

Psychological Well-being. Psychological well-being was assessed using a modified version of a 14-item scale developed by the Rand Corporation (Davies, Sherbourne, Peterson and Ware, 1985). This scale measures positive affect. Subjects are asked to respond on a six-point scale (0 = not at all to 6 = extremely) to such items as, "How often in the past month did you feel relaxed and free of tension?", "How often in the past month did you expect in the morning to have an interesting day?" This scale has high internal consistency and test-retest reliability. In this sample, Cronbach alpha was .94, which is essentially identical with the .96 figure given by Veit and Ware (1983), who also report a one-year test-retest correlation of $r = .64$.

Physical Symptoms. We measured physical health using a 29-item symptom checklist derived from measures developed by the Mind-Body Program at the Beth Israel Hospital. This scale assessed the frequency and associated discomfort of each of 29 symptoms (e.g., dizziness or feeling faint, chest pain, and respiratory congestion).

The Costs of Caregiving. To assess the relationship of the five concern factors listed in Table 1 to these three health measures, we estimated a series of regression models. Each model controlled for age, race, per capita household income, and SES⁸, since these variables have each been related to health measures. The R²s and unstandardized regression coefficients for separate regressions of each of the factors listed in Table 1 are shown in Table 3.

-- Table 3 About Here --

Almost all job-concern factors are significantly related to psychological distress and to well-being, after controlling for age, race, income and SES. Overload makes the greatest contribution to the R^2 for psychological distress and well-being -- an increase of 19% and 9% respectively, over the contribution of the control variables alone.⁹ Overload and Hazard Exposure are both significantly related to physical health. Interestingly, concern about discrimination was not significantly related to any of the health measures. We examined whether discrimination might be related to health only for Black women by including the interaction term: race x discrimination. There was no significant relationship between this term and the health measures, indicating that, even when considering the possibility of race differences, our measure of concern about discrimination was not related to the health measures.

When we included all five job-concern factors in a single regression, on each of the health measures, we found the same pattern of results as when we examined the factors separately. As Table 4 shows, Overload and Hazard Exposure are both important predictors of psychological distress and physical health, even after controlling for the impact of the other job concern factors. Overload is the only job concern factor, after controlling for the other factors, that significantly predicts well-being.

-- Table 4 About Here --

In sum, while four of the five job-concern factors are each related to the health measures, when we estimate a model with all of the job concern factors, only Overload and Hazard Exposure have a direct effect on psychological distress and physical health, and only Overload has a direct effect on well-

being. While the other factors -- Dead-end Job, Poor Supervision and Discrimination -- may be related to the overall quality of the job and to job satisfaction, they are not related to psychological distress, well-being or physical health, after considering the impact of Overload and Hazard Exposure.

The Benefits of Caregiving. The rewards women experience in caregiving occupations are also directly related to their mental and physical health. To assess the relationship of the five reward factors listed in Table 2 to the three health measures, we estimated a series of regressions. The R^2 and unstandardized regression coefficients for separate regressions of each of the reward factors are shown in Table 5. Each regression controlled for age, race, per capita household income, and SES.

-- Table 5 About Here --

Almost all the job-reward factors are significantly related to psychological distress and well-being. Unlike job concerns, no one factor stands out as the most important predictor. Only Helping Others, Supervisor Support and Satisfaction with Salary are significantly related to physical health.

When we include all six job-reward factors in a single regression, we find three different patterns for the three different health measures. As Table 6 shows, Decision Authority and Helping Others are both important predictors of psychological distress, even after controlling for the impact of the other job reward factors. Helping Others and Recognition are important predictors of well-being, after controlling for the other factors. Helping Others, Satisfaction with Salary, and Supervisor Support are all significant predictors of physical health. The other job-reward factors are not

significantly related to health after considering the importance of the factors noted above.

-- Table 6 About Here --

Additive Effects of Job Concerns and Job Rewards

Table 7 provides a summary of the significant main effects that we have found so far. We have demonstrated strong direct effects of Overload, Hazard Exposure, Helping Others, and Decision Authority on psychological distress. Similarly we have found strong effects of Overload, Helping Others, and Recognition from Others on well-being. For physical health, significant direct effects are found for Overload, Hazard Exposure, Helping Others, Satisfaction with Salary, and Supervisor Support.

-- Table 7 About Here --

The next step in our analyses is to simultaneously include job-concern factors and job-reward factors in our models. As noted earlier, the Job Strain model posits that jobs with high demands and low decision latitude have negative effects on health. Two of our job-reward factors -- Challenge and Decision Authority -- are two components of what Karasek and colleagues call decision latitude in the Job Strain model (1981). Based on the Job Strain model we would expect, therefore, that respondents in our sample whose jobs are high on Overload (our measure of demand), and low on Challenge and Decision Authority would have the poorest health.

Table 8 contains the results of regressions of the control variables, Overload, Decision Authority and Challenge on each of the health measures. The applicability of Karasek's Job Strain model varies with the health measure being considered for women in caregiving occupations. Overload and Decision

Authority have an additive impact on psychological distress, but not on well-being or physical health. Overload and Challenge have an additive impact on well-being, but not on psychological distress or physical health.

-- Table 8 About Here --

Alternative Models. In fact, when we estimate regression equations with the significant factors from Table 8, plus the other significant factors from Table 7, we find that psychological distress is related to Overload, Hazard Exposure, Decision Authority and Helping Others (see Table 9). That is, Overload, Hazard Exposure, Helping Others and Decision Authority have an additive effect on psychological distress.

The model is different for well-being -- Overload, Helping Others and Recognition have an additive effect on well-being. As Table 9 shows, Overload and Helping Others are significantly related to well-being. Challenge is not significantly related to well-being once we consider the rewards of Helping Others. Recognition approaches significance ($p < 0.10$). If we remove the non-significant Challenge from the equation, Recognition reaches significance at $p < 0.05$ (not shown).

A third model predicts physical health -- Overload, Helping Others, and Satisfaction with Salary have an additive effect on physical health. As Table 9 shows, Overload and Helping Others are significantly related to physical health. Hazard Exposure and Satisfaction with Salary approach significance at $p < 0.10$. Supervisor Support is not related to physical health. If we remove Supervisor Support from the equation, Satisfaction with Salary reaches significance at $p < 0.05$; Hazard Exposure remains marginally significant at $p < 0.10$ (not shown).

It is important to note that Helping Others is significantly related to each of the health measures. We will return to this in the next section.

-- Table 9 About Here --

Interactions Between Job Concerns and Job Rewards

While some of the prior work on the Job Strain model has considered only the additive effects of demand and decision latitude, if we include interaction terms in our models we can test whether individuals whose jobs are characterized both by high demand and low decision latitude are worse off than those whose jobs are characterized by high demand but not by low decision latitude. Put another way, we can test whether the rewarding aspects of jobs, such as decision latitude, can protect individuals from the negative effects of high demand.

Based on the Job Strain model we would expect that respondents in our sample whose jobs are high on Overload, and low on Challenge and Decision Authority would have the poorest health. In other words, the interactions between Overload and Challenge, and Overload and Decision Authority should be significantly related to the health measures. To test this, we estimated a series of regression models on the three health measures. Each model contained the control variables, the significant main effects for that health variable and one interaction term of the form: Overload x reward factor. Again, as Table 10 indicates, for women in caregiving occupations, Karasek's Job Strain model is only applicable to psychological distress. As Table 10 shows, the interaction between Overload and Decision Authority, and the interaction between Overload and Challenge, are significant predictors of psychological distress, as would be expected from Karasek's Job Strain model.

That is, women in caregiving occupations whose jobs are characterized by high Overload and low Challenge or low Decision Authority experience greater psychological distress than women with high Overload and high Challenge or high Decision Authority or women with low Overload. However, the interactions of Decision Authority and Challenge with Overload are not significant predictors of psychological well-being or physical health. While Overload has a direct effect on well-being and physical health, decision latitude has no additive effect and no interactive effect on either health measure.

-- Table 10 About Here --

Other Factors. As with the additive model, other factors must be considered. The results shown in Table 10 indicate that we need to add two new variables to our model of job strain for caregivers -- Helping Others and Supervisor Support. Respondents with high Overload and low rewards from Helping Others are more likely to experience psychological distress or poor health than are other respondents with high Overload and high rewards from Helping Others or with low Overload. Put another way, the rewards of Helping Others buffer the negative impact of Overload on psychological distress or physical health. That is, women with high Overload who experience greater rewards from Helping Others are better off than women with high Overload and low rewards from Helping Others. Similarly, Supervisor Support can buffer the impact of Overload on psychological distress and physical health.

Summary

When we put together all of the results reported in this chapter (see Table 11), we find that our model of the relationship between job rewards and concerns and psychological and physical health varies depending on the

particular health measure. For psychological distress, the rewards of Decision Authority have a significant direct effect, and individuals with high Overload and low Decision Authority or low Challenge are in poorer health than other women, thus confirming Karasek's Job Strain Model. However, we also found that Helping Others has an important direct effect on psychological distress and that women with low rewards from Helping Others and high Overload suffer greater psychological distress. Women in caregiving occupations are at least partially motivated to enter those occupations because of their desire to help others. It appears that, when their jobs are structured in such a way that they are actually able to be effective helpers, this directly reduces psychological distress and helps to reduce the consequences of heavy workloads and emotional demands. When their jobs are demanding and they experience little reward from helping others, they experience greater distress. A supportive supervisor is also an important buffer of the impact of heavy workloads and emotional demands on psychological distress among women in caregiving occupations.

-- Table 11 About Here --

When we consider the results concerning well-being, we get a somewhat different picture. The rewards of Decision Authority and Challenge are not at all important to psychological well-being, once we consider the importance of the rewards of Helping Others. Psychological well-being is associated with greater rewards of Helping Others and greater Recognition and appreciation from others. Well-being seems to be more strongly tied to the rewards found in relationships with patients, clients and colleagues than to decision latitude. In addition, job rewards do not moderate or buffer the negative impact of Overload on well-being.

Finally, Supervisor Support and Helping Others play an important role in predicting physical health. Helping Others has a significant direct effect on physical health. In addition, women with high Overload and low Supervisor Support or low rewards from Helping Others report poorer physical health than do women with high Overload and high Supervisor Support or high rewards from Helping Others.

IMPLICATIONS

The results of this research have implications for both theory and practice. Our theory must be expanded to incorporate the importance of helping others as a moderator of job demands. Additional research is needed to clarify whether this model applies only to caregiving occupations or only to women, or whether it is applicable to all workers.

Our practice can also be informed by this study. Caregiving occupations bring with them heavy workloads and emotional demands as caregivers respond to crises and assist individuals and families facing emotionally difficult times. Caregiving can also be physically strenuous and involve exposure to illness or injury, particularly when caring for the sick. Concern about these job characteristics contributes to greater psychological distress, poorer physical health and reduced well-being. To the extent that workloads and exposure to hazards can be reduced and caregivers can receive assistance in managing emotional demands, the negative impact of these job conditions can be reduced for women in caregiving occupations.

However, caregiving, by its nature, requires responding to individuals in crisis or in poor health. A certain level of demand is built into the work. It therefore becomes particularly important to note under what conditions such

job characteristics become destructive, and to identify other aspects of the job that can be strengthened to improve caregivers' health. Consistent with Karasek's research, opportunities for workers to make decisions about their work and to be engaged in work that is stimulating and permits them to use their skills can reduce psychological distress. This study has also shown that, for women employed as caregivers, the opportunity to help others and the availability of a supportive supervisor is equally important, if not more so. It is as if the heavy demands of caregiving occupations are tolerable as long as the worker finds the demands of the job challenging, has the decision authority she needs to do the best she can, feels that her supervisor is doing all that can be done to make the job a better job, and finds reward in helping others.

Table 1: Job Concern Factors

Factor	Cronbach's Alpha	Average Score ^a
<u>Overload</u>	.72	2.3
1. Having too much to do		
2. The job's taking too much out of you		
3. Having to deal with emotionally difficult situations		
<u>Dead-End Job</u>	.82	2.0
1. Having little chance for the advancement you want or deserve		
2. The job's not using your skills		
3. The job's dullness, monotony, lack of variety		
4. Limited opportunity for professional or career development		
<u>Hazard Exposure</u>	.66	1.8
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		
<u>Poor Supervision</u>	.85	1.6
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		
<u>Discrimination</u>	.48	1.2
1. Facing discrimination or harassment because of your race/ethnic background		
2. Facing discrimination or harassment because you're a woman		

^a Scores ranged from 1-not at all concerned to 4-extremely concerned.

Table 2: Job Reward Factors

Factor	Cronbach's Alpha	Average Score ^a
<u>Helping Others</u>	.69	3.2
1. Helping others		
2. Being needed by others		
3. Having an impact on other people's lives		
<u>Decision Authority</u>	.82	3.1
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		
<u>Challenge</u>	.78	3.1
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		
<u>Supervisor Support</u>	.87	2.8
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		
<u>Recognition</u>	.68	2.6
1. The recognition you get		
2. The appreciation you get		
<u>Satisfaction with Salary</u>	.72	2.4
1. The income		
2. Making good money compared to other people in your field		

^a Scores ranged from 1-not at all rewarding to 4-extremely rewarding.

Table 3: Direct Costs of Caregiving

R² and Unstandardized Regression Coefficients of Job Concern Factors
Controlling for SES, Per Capita Household Income, Race and Age

<u>Factor</u>	<u>Psychological Distress</u>	<u>Well-being</u>	<u>Physical Health</u>
Controls Only: R ²	0.04 *	0.03	0.02
Overload: R ²	0.23 ***	0.12 ***	0.06 **
B	7.20 ***	-4.85 ***	4.72 ***
Dead-End Job: R ²	0.07 **	0.06 **	0.02
B	2.89 **	-3.05 **	0.82
Hazard Exposure: R ²	0.15 ***	0.06 **	0.06 **
B	6.29 ***	-3.27 **	5.13 ***
Poor Supervision: R ²	0.09 ***	0.07 ***	0.02
B	4.38 ***	-3.75 ***	1.77
Discrimination: R ²	0.04 *	0.04 *	0.02
B	0.74	-3.06	1.44

* p < 0.05; ** p < 0.01; *** p < 0.001

Table 4: Comparing the Costs of Caregiving

R² and Unstandardized Regression Coefficients of Job Concern Factors,
Controlling for SES, Per Capita Household Income, Race and Age

<u>Factors</u>	<u>Psychological Distress</u>	<u>Well-being</u>	<u>Physical Health</u>
Overload	5.70 ***	-3.89 ***	3.74 **
Dead-End Job	-0.10	-1.53	-1.36
Hazard Exposure	3.61 **	-0.44	4.38 **
Poor Supervision	1.95	-1.72	0.42
Discrimination	-1.97	-1.09	-2.93
R ²	0.26 ***	0.14 ***	0.09 **

* p < 0.05; ** p < 0.01; *** p < 0.001

Table 5: Direct Benefits of Caregiving
 R^2 and Unstandardized Regression Coefficients of Rewards,
 Controlling for SES, Per Capita Household Income, Race and Age

<u>Rewards</u>	<u>Psychological Distress</u>	<u>Well-being</u>	<u>Physical Health</u>
Helping Others: R^2	0.11 ***	0.11 ***	0.05 **
B	-6.53 ***	6.50 ***	-5.96 **
Decision Authority: R^2	0.15 ***	0.07 ***	0.02
B	-7.15 ***	4.23 ***	-1.53
Challenge: R^2	0.10 ***	0.09 ***	0.02
B	-5.51 ***	5.53 ***	-2.00
Supervisor Support: R^2	0.06 *	0.06 *	0.04 *
B	-2.31 *	2.52 **	-3.18 **
Recognition: R^2	0.09 ***	0.10 ***	0.02
B	-4.01 ***	4.58 ***	-0.37
Satisfaction with Salary: R^2	0.05 *	0.03	0.04
B	-1.45	0.75	-2.97 *

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Table 6: Comparing the Rewards of Caregiving

R^2 and Unstandardized Regression Coefficients of Job Reward Factors,
 Controlling for SES, Per Capita Household Income, Race and Age

<u>Factors</u>	<u>Psychological Distress</u>	<u>Well-being</u>	<u>Physical Health</u>
Helping Others	-4.50 ***	4.41 **	-6.97 ***
Decision Authority	-5.71 ***	1.30	0.31
Challenge	-0.12	0.91	1.71
Supervisor Support	0.14	0.52	-3.17 *
Recognition	-0.68	2.43 *	2.79
Satisfaction with Salary	-0.38	-0.20	-3.27 **
R^2	0.19 ***	0.14 ***	0.10 ***

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Table 7: Summary of Main Effects

	<u>Psychological Distress</u>	<u>Well-being</u>	<u>Physical Health</u>
Concerns:	Overload Hazard Exposure	Overload	Overload Hazard Exposure
Rewards:	Helping Others Decision Authority	Helping Others Recognition	Helping Others Supervisor Support Satisfaction with Salary

Table 8: Overload and Decision Latitude

	<u>Psychological Distress</u>	<u>Well-being</u>	<u>Physical Health</u>
Overload	6.03 ***	-3.92 ***	4.69 ***
Decision Authority	-4.68 ***	1.44	0.28
Challenge	-0.98	3.40 *	-0.48
Each regression equation controlled for SES, per capita household income, race and age.			
R ²	0.28 ***	0.15 ***	0.06 ***

* p < 0.05; ** p < 0.01; *** p < 0.001

Table 9: Overload and Job Reward Factors

	<u>Psychological Distress</u>	<u>Well-being</u>	<u>Physical Health</u>
Overload	5.05 ***	-3.63 ***	2.87 **
Hazard Exposure	2.52 *	-	2.58 +
Decision Authority	-3.88 ***	-	-
Challenge	-	0.85	-
Helping Others	-3.59 **	4.35 **	-4.14 *
Recognition	-	1.92 +	-
Satisfaction with Salary	-	-	-2.26 +
Supervisor Support	-	-	-1.46
R ²	0.32 ***	0.18 ***	0.12 ***

* p < 0.05; ** p < 0.01; *** p < 0.001; + p < 0.10

Each regression equation controlled for SES, per capita household income, race and age. A minus sign [-] indicates that the factor was not included in the equation because it was not significant at an earlier stage of analysis.

Table 10: Interactions Between Job Rewards and Overload

R² and Unstandardized Regression Coefficients
of the Interactions between Rewards and Overload

<u>Interaction of Overload and:</u>	<u>Psychological Distress</u>	<u>Well-being</u>	<u>Physical Health</u>
Decision Authority: R ²	0.33 ***	0.19 ***	0.08 ***
B	-3.53 **	1.10	0.36
Challenge: R ²	0.33 ***	0.19 ***	0.09 ***
B	-3.39 *	1.25	-3.23
Helping Others: R ²	0.33 ***	0.19 ***	0.11 ***
B	-3.62 **	1.86	-6.09 **
Supervisor Support: R ²	0.33 ***	0.19 ***	0.11 ***
B	-2.11 *	0.03	-4.06 **
Recognition: R ²	0.33 ***	0.18 ***	0.09 ***
B	-1.33	0.33	-2.24
Satisfaction with Salary: R ²	0.32 ***	0.19 ***	0.09 ***
B	0.10	1.82	-1.13

* p < 0.05; ** p < 0.01; *** p < 0.001

Each regression equation controlled for SES, per capita household income, race and age, and included all significant main effects for that health measure, the interaction term of the form: Overload x reward factor, and the direct effect of Overload and of the relevant reward term.

Table 11: Summary

	<u>Psychological Distress</u>	<u>Well-being</u>	<u>Physical Health</u>
<u>Main Effects</u>			
Concerns:	Overload Hazard Exposure	Overload	Overload Hazard Exposure
Rewards:	Helping Others Decision Authority	Helping Others Recognition	Helping Others Satisfaction with Salary
<u>Buffers of Overload</u>	Helping Others Supervisor Support Decision Authority Challenge		Helping Others Supervisor Support

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NOTES

1. The services industries include professional and related services, personal services, business and repair services, and entertainment and recreation services.
2. Based on information provided by the Bureau of Labor Statistics. All figures are for 1985.
3. The frequencies of job characteristics, and mean salaries, reported in this section are based on weighted data. The sample was stratified by race, parental status and partnership status. Because these factors are related to the types of jobs respondents held, this stratification could alter the relative incidence of various job characteristics. Therefore, information gathered during screening calls to a full random sample of the two occupations was used to weight this sample back to represent the population of social workers and LPNs who were employed 20 hours or more at the time of the screening call, were not self-employed, and had been employed at least one year at the time of the call.
4. Twenty-five percent of LPNs and 15% of social workers are employed part-time, that is, between 20 and 30 hours each week (weighted data).
5. Because there is no consensus on the operationalization of the terms "stressors" and "stress" (Barnett, Biener and Baruch, 1987), we will avoid the use of these terms in the discussion of the results of our research.
6. "Direct care" jobs are defined as jobs that the respondents characterize as often or always involving responsibility for the physical or emotional wellbeing of others. We did not initially limit our sample to social workers and LPNs in direct caregiving positions. We defined social workers as anyone registered in their field and working in social work or a related field. Similarly, LPNs were defined as registered LPNs working in their field, who had not earned an RN as well. As a result, our sample included 63 social workers who report that their jobs only occasionally, if ever, require them to be responsible for others' wellbeing -- many of them are administrators or planners in government or social service agencies. Similarly 14 LPNs report that their jobs rarely require them to be responsible for others' wellbeing -- many of them are working in doctors' offices or in student health.
7. We purposely chose to use the label "decision authority" for this scale because its component items are similar to those in the scale that Karasek calls Decision Authority (1982).
8. Our SES measure is the sum of occupation (1-LPN, 2-social worker) and number of years of education, based on a principle components analysis that indicated that they contributed equally to the first component.
9. Because the job concern factors are all scored so that each represents the average per item score for that factor, the unstandardized regression coefficients can be compared to each other across the regressions, within each

outcome measure. Because the outcome measures use different metrics, the unstandardized regression coefficients cannot be compared across outcome measures.

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