Employment and Women's Health

Effects of Paid Employment on Women's Mental and Physical Health

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ABSTRACT: This article reviews empirical evidence concerning the effects of paid employment on women's mental and physical health, with special attention to variations in the effects of employment depending on the characteristics of women and their jobs. We highlight methodological issues and focus primarily on studies with longitudinal data for representative samples of women. We conclude that women's employment does not have a negative effect on their health, on the average. Indeed, employment appears to improve the health of unmarried women and married women who have positive attitudes toward employment. Possible mediators linking employment to health outcomes are discussed. Current evidence suggests that increased social support from co-workers and supervisors may be one important mediator of the beneficial health effects of employment. Given the paucity of available longitudinal studies, we encourage additional prospective research examining the mental and physical health consequences of employment according to job characteristics, personal characteristics, and disease outcome. We also recommend research on several promising mediators of employment–health relationships.

Does paid employment increase a woman's risk for physical and mental health problems, or does paid employment improve a woman's health? On the one hand, some women are exposed to physical, chemical, and biological hazards on the job. Employed women may also suffer strain and exhaustion due to job stress and overload. On the other hand, employment generally results in increased income and better access to health care, which should benefit women's health. Being an employee and co-worker may also increase a woman's contact with people who can provide social support, as well as opportunities for enhancing self-esteem and a sense of control. Because the relative importance of each of these effects varies, depending on the characteristics of a woman and her job, we would expect the net effect of employment on women's health to vary for different women.

In this article, we review empirical findings on the net effect of employment on women's mental and physical health. We examine the health consequences of employment according to individual characteristics of women, their jobs, and their home lives. These may be considered moderators that shape the effect that employment has on health. Due to space limitations, we were forced to be extremely selective in our review. Accordingly, we have relied heavily on studies of longitudinal data for representative samples with appropriate methods of analysis (as discussed later).

We also discuss underlying mechanisms or mediators that might account for the health effects of employment. We use the term *mediator* to refer to intervening variables through which employment influences health. *Social support* may be one important mediator, connecting paid employment to improved health for some women. Employment offers women an opportunity to increase the size of their social networks, which may, in turn, result in better health. Longitudinal studies have shown that social isolation and a lack of support predict early mortality (Berkman, 1984), depression (Aneshensel, 1985; Kaplan, Roberts, Camacho, & Coyne, 1987), and other indexes of physical and psychological dysfunction. (See Cohen & Wills, 1985, for a review.) Two groups that should benefit most from the protection offered by job-related social support are women under stress and those with limited sources of social support outside of work, such as unmarried women.

Another mediator, which has been postulated to be an important link between employment and negative health consequences, is *overload* (Verbrugge, 1986). *Multiple role strain* is one type of overload. It includes role overload, which arises when women have too much to do as a result of their multiple roles, and role conflict, which arises when fulfillment of the demands of one role (e.g., employee) interferes with the fulfillment of the demands of another role (e.g., mother). Multiple role strain should be greatest for mothers of young children, full-time workers, and married women whose husbands contribute relatively little to household labor and childcare.

Heavy job demands constitute another type of overload that may have harmful effects on health. The consequences of overload may include fatigue, increased risk for coronary heart disease (Jenkins, 1982), and possibly a greater vulnerability to other physical and mental health risks associated with employment.

Methodological Issues

Most studies concerning employment and women's health are based on cross-sectional data. Unfortunately, in most cases, cross-sectional data do not provide meaningful ev-

 0003-066X/89/$00.75
Vol. 44, No. 11, 1394-1401

idence concerning the effects of employment on women's health. For example, the finding that employed women are healthier than homemakers does not necessarily imply that employment has beneficial effects on women's health (Waldron, 1980). An alternative interpretation is that healthier women are more likely to become employed and to stay employed, and that is why employed women are healthier. This latter effect is called the *healthy worker effect.*

Current research findings indicate that a woman's physical health influences whether she is employed, thus providing evidence for the healthy worker effect. Women who are not employed frequently report poor health as their reason for not having a job, and available evidence generally supports the validity of these self-reports (Kessler & McRae, 1982; Waldron, 1980; Waldron, Herold, & Dunn, 1982). In addition, analyses of longitudinal data have shown that women who were in better health initially were more likely to enter the labor force and less likely to leave the labor force during a subsequent follow-up interval (Waldron, Herold, Dunn, & Staum, 1982; Waldron & Jacobs, 1989a). Thus, good health increases the likelihood that a woman will be employed.

One study (Jennings, Mazaik, & McKinlay, 1984) has addressed the question: To what extent is the relationship between employment status and health observed in cross-sectional data influenced by the effects of health on employment status? Jennings et al. first showed that in their sample, as in other samples, employed women were healthier than homemakers. Specifically, employed women were less likely to report that their health was worse than the health of other women their age, and this was true even in analyses that controlled for number of chronic conditions and restricted activity days. The relationship between health and employment status was then tested again, this time excluding women who reported that their health influenced their employment status. Specifically, the second analysis excluded those homemakers who reported that poor health was a highly or moderately important reason for not being employed. In this analysis, the relationship between employment status and health was reversed, with homemakers reporting better health than employed women. These findings suggest that the healthy worker effect has a major influence on relationships observed in cross-sectional data, and thus cross-sectional data generally do not provide an adequate basis for assessing the effects of employment on women's physical health.

Research concerning mental health and the healthy worker effect has evaluated the extent to which mental health influences women's employment status. This research evidence is more limited and appears inconsistent (Kessler & McRae, 1982). One analysis has found that women who reported "nervousness, tension, anxiety or depression" were less likely to join the labor force and more likely to leave the labor force, but in another analysis the balance between negative and positive affect did not predict whether a woman would leave employment (unpublished results from Waldron, Herold, Dunn, & Staum, 1982; Waldron & Jacobs, 1989a).

This evidence indicates that it is important to use longitudinal data in order to distinguish between the effects of health on employment and the effects of employment on health. In analyzing longitudinal data, it is important to use appropriate methods of analysis in order to assess the effects of employment on health. For example, it is not possible to distinguish between effects of employment on health and effects of health on employment on the basis of an analysis that assesses the relationship between employment status and health at the time of follow-up, with controls for initial employment status and health. In our summary of research findings, we refer to this type of analysis as concurrent.

Unless otherwise described, all findings cited in our review of empirical evidence are based on appropriately analyzed longitudinal data *for women,* with controls for initial health status either in the analysis or through other means (e.g., elimination of individuals who had the disease under investigation at the beginning of the follow-up period) (Waldron & Jacobs, 1989b). Because there is strong evidence for a healthy worker effect with regard to physical health, the employment and physical health findings we cite are almost exclusively from longitudinal studies. We focus on studies that have representative samples, containing substantial numbers of women. In addition, age, education, race, and marital status can influence both employment status and health, confounding the obtained relationships. Almost all findings cited here were derived from analyses that controlled for age and education or were based on a sample with a restricted range of age and education. In addition, we discuss findings regarding the health effects of employment within different race and marital status subgroups.

Physical and mental health have been measured in diverse ways in the studies we review. Indexes of physical health have ranged from mortality verified by death certificates to physician-diagnosed chronic health conditions to self-reported general health or physical symptoms. Several longitudinal studies have demonstrated that self-report measures of general health are related to all-cause mortality, even when statistical adjustments have been introduced for the standard risk factors for survival (Kaplan & Camacho, 1983; Waldron, Herold, & Dunn, 1982). So we have considered self-report measures of health as valid, if imprecise, measures of health status. We also report results for several biological variables that result in increased risk of coronary heart disease. These include elevated blood pressures, elevated levels of serum cholesterol or low density lipoprotein (LDL) cholesterol, and low levels of high density lipoprotein (HDL) choles-

This research was supported by funds from the John D. and Catherine T. MacArthur Network on the Determinants and Consequences of Health-Promoting and Health-Damaging Behavior. We are grateful to Michael Frese, Kathleen McCartney, and Deborah Phillips for their comments on an earlier draft of this article.

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terol. Indexes of mental health included in the studies reviewed here are self-report scales of anxiety and depression and general scales of psychological symptoms. Almost all of the studies used validated measures of mental health or scales derived from these validated measures.

Different definitions of employment status have been used in the literature. We use the term *employed women* to refer to women currently employed in either part-time or full-time jobs. The one exception to this rule is the Framingham Heart Study data, in which any woman who was employed outside the home for over half of her adult years is included in the employed group. *Labor force participants* are those women who are currently employed or are not employed, but are looking for a job, that is, *unemployed. Nonemployed* women are women who are not in the labor force. Although this group has been defined in different ways in the research literature, it usually includes homemakers, students, and disabled and retired women.

Empirical Evidence Concerning Effects of Employment on Women's Health

Overall Effect of Employment

Baruch, Biener, and Barnett (1987) have observed that the workplace has been implicitly and explicitly assumed to be a primary stressor for men, and in consequence, many have expected that, as women entered the work force, they would also suffer negative effects of employment on their health. However, the available evidence does not support this conclusion. Waldron and Jacobs (1989a) used longitudinal data from a national sample of middle-aged women to analyze the relationship between labor force participation and change in a self-report measure of general health (including physical limitations, such as difficulty walking and lifting, and psychosomatic symptoms, such as weakness and anxiety). The hypothesis that, on the average, labor force participation has detrimental effects on women's health was contradicted by their finding that labor force participation had beneficial effects on health for unmarried women and for Black married women, and no significant effect on health for White married women. The Tecumseh Community Health Study reported no 10-year mortality differences between employed and nonemployed women in analyses that controlled for the presence of chronic disease and health behaviors at the time of the initial interview (House, Strecher, Metzner, & Robbins, 1986; J. S. House, personal communication, June 1988).

Longitudinal data from the Framingham Heart Study indicate that among middle-aged and older women, there was no significant difference between the employed and nonemployed women in incidence rates of coronary heart disease (Haynes, Eaker, & Feinleib, 1984; Haynes & Feinleib, 1980). The Framingham Offspring Study similarly showed no differences between employed and nonemployed young adult women in changes in blood pressure or total, LDL, or HDL serum cholesterol levels over eight years (Hubert, Eaker, Garrison, & Castelli, 1987). In contrast, cross-sectional data for Mexican American and non-Hispanic White women indicated that employed women had a more favorable lipid and lipoprotein cholesterol profile than did nonemployed women, even when statistical adjustments were introduced for obesity, exercise, cigarette smoking, alcohol consumption, and the presence of chronic illness (Hazuda et al., 1986).

Evidence concerning the effects of employment on mental health is inconsistent and limited to concurrent and cross-sectional studies. Several studies suggest that employed women are less depressed than nonemployed women (Aneshensel, 1986; Gore & Mangione, 1983; Kandel, Davies, & Raveis, 1985), but this difference has not been found in other studies (Aneshensel, Frerichs, & Clark, 1981; Baruch & Barnett, 1986; Cleary & Mechanic, 1983; Parry, 1986; Radloff, 1975; Repetti & Crosby, 1984; Ross, Mirowsky, & Huber, 1983). None of these studies have found employed women to be more depressed than nonemployed women.

In sum, the limited available evidence provides no support for overall negative effects of employment on women's health, with a few results indicating beneficial effects. As was suggested earlier, however, this general conclusion may not apply to all subgroups of women. Employment may have beneficial or harmful effects on a woman's physical and mental health depending on her marital status, her husband's contribution to home labor, her parental status, her attitude toward employment, and characteristics of her job.

Effects of Employment According to Women's Characteristics

Marital status. If the health benefits of employment are due in part to increased income and social support, then one might hypothesize that employment would have a more beneficial effect on health for unmarried women, who do not have a husband as an alternative source of income or social support. One analysis of longitudinal data has shown more beneficial effects of labor force participation on self-reported general health for unmarried women than for married women, particularly among White women (Waldron & Jacobs, 1989a). Using a retrospective design, Brown and Harris (1978) reported that employment outside the home reduced the risk of depression only for women who did not have an intimate tie to a husband or boyfriend. A review of cross-sectional studies also suggests that employment is more closely linked to mental health for unmarried women than for married women (Warr & Parry, 1982). Thus, the available evidence is consistent with the hypothesis that employment has more beneficial effects on health for women with fewer alternative sources of the income, social support, and self-esteem that employment may provide. It should be noted that labor force participation has been found to have a more beneficial effect on health for unmarried women, even when income was controlled (Waldron & Jacobs, 1989a).

The division of labor within a marriage might be an

important moderator of the relationship between employment and health among married women. Cross-sectional data suggest that employed women are less anxious and depressed than nonemployed women only if their husbands contribute significantly to childcare or housework (Kessler & McRae, 1982; Krause & Markides, 1985). Also, one study found a cross-sectional association between poor social relations at work and depression, and this association was stronger among women who perceived greater inequity in the division of home labor, compared with women who perceived a more equitable distribution (Repetti, 1988).

In sum, longitudinal and cross-sectional data suggest that the health benefits of employment are greater for unmarried women than for married women. For married women, employment may have more beneficial health effects if their husbands contribute more to household labor.

Maternal status. If one disadvantage of employment is multiple role strain, then one might expect employment to have a more negative effect on health for mothers than for nonmothers. Current evidence provides very little support for this hypothesis. Waldron and Jacobs (1989b) found that for White middle-aged women, the effects of labor force participation on self-reported general health did not differ for those who had children at home and those who did not. For Black women, labor force participation appeared to provide an *advantage* for those who had children living at home, but not for those without children at home. Data from the Framingham Heart Study are ambiguous because they suggest that employed women with three or more children had a higher risk of coronary heart disease than employed women with no children or nonemployed women with three or more children, but this effect was only marginally significant at the 8-year follow-up and nonsignificant at the 10-year follow-up (Haynes et al., 1984; Haynes & Feinleib, 1980). Additional data suggest that clerical and sales workers with children may have an especially high risk of coronary heart disease. Mixed results have been obtained in several studies that used concurrent analyses or cross-sectional data to test for interactions between employment status and maternal status in relation to depression (Aneshensel, 1986; Kandel et al., 1985; Kessler & McRae, 1982; Krause & Markides, 1985).

In conclusion, prospective longitudinal investigations and some concurrent and cross-sectional analyses suggest that for most, but not all, women the physical and mental health effects of employment do not vary according to parental status. Possible exceptions include Black women, unmarried women, and clerical workers (Haynes & Feinleib, 1980; Krause & Markides, 1985; Waldron & Jacobs, 1989b).

Women's attitudes toward employment. A woman's attitude toward her employment situation may also influence the effect that a job has on her well-being. One analysis of national longitudinal data suggests that, for married women, labor force participation has a beneficial influence on self-reported general health only among those with favorable attitudes toward employment (Waldron & Herold, 1986). Several cross-sectional studies have also found that the association between employment and good health is stronger for women who have favorable attitudes toward employment or women who prefer employment to being a homemaker (Parry, 1987; Ross et al., 1983; see Waldron & Herold, 1986, for a summary of additional cross-sectional studies). In the Framingham Offspring Study, Type A behavior was positively related to change in the total/HDL cholesterol ratio among nonemployed women, but not among employed women (Hubert et al., 1987); this unfavorable trend for Type A nonemployed women may reflect their dissatisfaction with being homemakers (see Lawler, Rixse, & Allen, 1983). Taken together, these findings suggest that employment has beneficial health effects when there is congruity between women's attitudes toward or desire for employment and their actual role status.

Effects of Employment According to Job Characteristics

Occupational category. A number of studies have examined the differential effects that various types of jobs have on the health of employed women. It is important to note that health differences related to occupational categories may reflect the effects of differences in job characteristics or the effects of differences in the personal characteristics and home situations of women who work in different occupations. For example, studies have found lower mortality for physicians and for high-level managers and professionals in the federal work force, relative to the general population (Detre, Feinleib, Matthews, & Kerr, 1987; Goodman, 1975), and this could be attributed to beneficial effects of very high status occupations. However, neither of these studies controlled for education or other indexes of socioeconomic status, so the observed mortality advantage for these women might be due to the general beneficial effects of high socioeconomic status. Another study controlled for education and found no differences in mortality among women in three categories of employment: professional and managerial, clerical and sales, and blue collar (House et al., 1986).

Other studies of occupational differences in women's health have obtained varying results, which are difficult to compare because different studies have categorized occupations in different ways and have measured different health outcomes. One study analyzed longitudinal data concerning self-reported general health for married women, with controls for education (Waldron & Jacobs, 1989a). This study found that labor force participation had beneficial effects or no net effect on health for blue-collar women and harmful effects for white-collar women, including women in professional, managerial, clerical, and sales occupations. Data from the Framingham Heart Study suggest that female clerical and sales workers have a higher risk of developing coronary heart disease than do women in other occupations (Haynes et al., 1984), but cross-sectional studies of coronary heart disease morbidity and mortality have not shown this differential

(House et al., 1986; "Women, Work," 1980). Current evidence also suggests that workers in different occupational categories may have generally similar blood pressure and serum cholesterol levels, but that professional and managerial workers may have particularly favorable HDL cholesterol levels (Haynes & Feinleib, 1980; Hazuda et al., 1986; Hubert et al., 1987).

Thus, studies comparing women in different occupational groupings have yielded inconsistent findings. As discussed in the next section, efforts to assess the effects of specific job characteristics have been more informative.

Specific job characteristics. Research on physical, chemical, and biological *occupational hazards* has demonstrated specific harmful effects on health for women employed in certain occupations such as cotton mill worker or health care worker (Waldron, 1980). In addition, heavy physical work and exposure to hazardous chemicals can increase the risk of spontaneous abortions, stillbirths, and birth defects (Chesney & Hill, 1988; McDonald, 1988; McDonald et al., 1988).

A number of studies have found that *occupational stressors* such as heavy job demands and lack of control are associated with various health problems for women. Longitudinal data from the Framingham Heart Study indicate that high job demands in combination with lack of clarity of expectations and feedback from supervisors led to an increased risk of coronary heart disease (LaCroix & Haynes, 1987). For a large sample of employed Swedish women, hectic monotonous work was associated with increased hospitalization rates for myocardial infarction, gastrointestinal illness, and alcohol-related illness (Alfredsson, Spetz, & Theorell, 1985); the analyses, however, did not control for initial health status. Two cross-sectional studies found that perceived general job stress or job stress due to working overtime was associated with high blood pressure (House et al., 1986; James, Cates, Pickering, & Laragh, 1989), although another cross-sectional study found that neither work hours nor deadlines on the job were related to blood pressure or serum cholesterol levels (Sorensen et al., 1985). In an analysis of cross-sectional self-report data for employed Swedish women, high workload and low job control (e.g., little decision-making authority) were each associated with depressed mood and with reports of physical symptoms, such as dizziness, headaches, and stomach problems (Karasek, Gardell, & Lindell, 1987). Generally similar results have been obtained for a sample of communication workers and a sample of health care workers, 96% of whom were women (Haynes, LaCroix, & Lippin, 1987; Landsbergis, 1988). A concurrent analysis has shown that work-related strain due to overload, depersonalization, and inadequacy of rewards was associated with increased depression (Aneshensel, 1986).

If *part-time employment* leads to less multiple role strain than full-time employment, then it might be hypothesized that part-time employment would have more beneficial effects on health than full-time employment. However, this hypothesis is not supported by two analyses of longitudinal data concerning the effects of employment on general health (Herold & Waldron, 1985; Waldron & Jacobs, 1989a, 1989b). Part-time employment did not have more beneficial health effects than full-time employment, even among mothers, a group who should be the most vulnerable to multiple role strain. One reason why part-time employment does not have the hypothesized beneficial effects may be that women who are employed part-time do not receive the same benefits of employment as full-time workers, due to lower rates of pay, fewer fringe benefits, and less opportunity for advancement (Foster, Siegel, & Jacobs, 1988; Herold & Waldron, 1985).

Social support at work may also play an important role in women's physical and psychological well-being. A lack of support at work has been associated with depression in concurrent analyses (Holahan & Moos, 1981) and with more hospitalization days and physical complaints in cross-sectional analyses (Hibbard & Pope, 1985; Karasek et al., 1987). Clerical workers in the Framingham Heart Study were at an increased risk of developing coronary heart disease if they had a nonsupportive supervisor (Haynes et al., 1984). In concert with these findings, Repetti (1987) found that the quality of the group social climate at work, rated by co-workers, was related to individual depression scores obtained a few weeks later. Self-reported depression levels were higher among female tellers in bank branches that were rated as nonsupportive by their peers.

In summary, occupational hazards and job stressors such as heavy demands and low control appear to increase health risks, whereas job-related social support appears to improve health.

Mechanisms Underlying the Effects of Employment on Health

This brief review of the research literature indicates that employment does not affect all women in the same way. On the one hand, there is evidence that employment benefits the health of many women, for example, unmarried women and married women with favorable attitudes toward employment. On the other hand, employment can have harmful effects on mental or physical health, particularly when it is associated with occupational hazards, heavy job demands, or poor social relations at work.

A broad range of evidence suggests that the beneficial health effects of employment are, at least in part, due to increased *social support* associated with employment. The evidence is of four varieties. First, employed women report co-workers to be one important source of social support (Fischer & Oliker, 1983; McFarlane, Neale, Norman, Roy, & Streiner, 1981). Second, as discussed above, supportive social relations at work are associated with better physical and mental health among employed women. Third, a group of women whose health appears to profit most from participation in the labor force are those who may be in the greatest need of social support: women without spouses or partners. The fourth line of evidence is based on the observation that the availability of social networks at work may help to buffer the impact of stress

in employed women's lives, an advantage not shared by nonemployed women. Specifically, several cross-sectional studies indicate that, among married women and mothers, stress is more strongly linked to psychological symptoms, particularly depression, for women who are not employed (Cleary & Mechanic, 1983; Kandel et al., 1985; Parry, 1986; Stewart & Salt, 1981). Overall, these findings suggest that employment increases social support, which has beneficial effects on women's health. It should be noted that employment appears to have other beneficial effects, in addition to social support, at least with respect to depression (Aneshensel, 1986).

There is mixed evidence regarding the possible harmful effects of employment due to two types of overload, *heavy job demands* and *multiple role strain.* Job demands, such as overtime, may be associated with increased risks for physical and mental health problems among women. With respect to multiple role strain, results from several cross-sectional studies reviewed here provide limited evidence that the mental health benefits of employment do not accrue as much to women whose husbands do not share the burden of household labor. Compared to other employed women, employed mothers report experiencing significantly more role overload and role conflict (Barnett & Baruch, 1985). However, as discussed earlier, most longitudinal studies do not find that employment has less beneficial effects for mothers or full-time workers, as would be expected if multiple role strain were important to health. One study even suggests that employment may offer a greater health *advantage* to Black mothers than to Black women without children at home. It should be noted that neither the health effects of employment of mothers nor the health effects of full-time versus part-time employment have been assessed in a longitudinal study of young women with preschool age children, for whom multiple role strain may be greatest. It is possible that detrimental effects due to multiple role strain would be observed for these women.

In addition to the mediating variables discussed thus far, several other links between employment and health may prove important. For example, increased *income* may account for some of the health benefits of employment. Not only does income provide the essentials of life for some women, it also can lessen the impact of potential liabilities of employment. For example, mothers who enjoy a good income may buy the services of housekeepers and high-quality childcare that can protect them from excessive workload and worry. Surprisingly, one analysis of longitudinal data has not found income to be an important mediator of the health benefits of employment (Waldron & Jacobs, 1989a). Nevertheless, this question should be investigated in other studies.

Employment could also lead to *changes in behaviors* that influence health. Several studies suggest that among young women, those who are employed are more likely to be problem drinkers or heavy drinkers (Hazuda et al., 1986; studies reviewed in Waldron, 1988). Comparisons of employed and nonemployed women have not found a consistent difference in the women's propensity to visit a physician when ill (Waldron, 1988). Recent data also indicate no difference in the prevalence of cigarette smoking between employed and nonemployed women (Haynes & Feinleib, 1980; Hazuda et al., 1986; Waldron, 1988). It is possible that historical trends in women's employment may have had an indirect effect on women's health-related behavior. For example, higher rates of employment among women appear to have contributed to the liberalization of norms concerning women's behavior. This liberalization of norms has included increasing social acceptance of women's smoking, and this has been one important reason for increased smoking among women (Waldron, 1988).

Another mechanism linking employment and physical health may be *acute psychophysiological responses* to events at work and at home. Exaggerated cardiovascular and neuroendocrine responses to stress, when they occur repeatedly in the same individual, are thought to be linked to elevated risk for hypertension and coronary heart disease (Krantz & Manuck, 1984; Matthews et al., 1986). There appear to be very few studies that compare the acute psychophysiological responses of employed and nonemployed women with events on the job and at home or assess the relationships between acute psychophysiological responses and job characteristics for employed women. One study has found that employed women have higher blood pressures and urinary epinephrine on days at work compared with days at home (Frankenhaeuser et al., in press). Another study has reported that excessive overtime leads to increased excretion of urinary epinephrine, both during the work day and after work in the evenings (cited by Frankenhaeuser, 1981). Ultimately, any relationships between employment and physical health must have a biological basis, so studies on possible biological mediators, including acute psychophysiological responses, are important to pursue.

Directions for Future Research

It has frequently been assumed that the workplace is stressful and that, as women enter the work force and move into demanding positions, their risk of disease and mortality rates will come to resemble men's risk (Baruch et al., 1987). The evidence reviewed in this article indicates that the net effect of employment on women's health is *not* negative, on the average. Indeed, employment appears to have beneficial effects on health for some subgroups of women, such as unmarried women or married women with favorable attitudes toward employment. However, these conclusions are based on only a handful of longitudinal studies of women's physical health and a variety of retrospective, concurrent, and cross-sectional studies of mental health.

Additional well-designed longitudinal studies are needed on the effects of employment on women's mental and physical health. These studies should assess the effects of different types of jobs for different health outcomes among women of varying life circumstances and demands. This approach makes sense to us because employment does not have a single effect on women, but

multiple effects; because the benefits and liabilities of employment appear to vary according to the characteristics of the woman and the job; and because psychological and social factors have different effects on different health outcomes.

In the future, it will also be important to pursue research concerning possible mediators of the effects of employment on health. The identification of specific mediators can lead to the development of sophisticated conceptual models of the effects of employment on health and vice versa. In addition, legislation and public policy initiatives can be based on programs designed to promote the health-enhancing aspects of employment and to alter the health-damaging aspects. In past research, the impact of mediators has often been inferred from health differences among women in different occupational and role categories. For example, full-time employment was thought to lead to greater multiple role strain than part-time employment, and full-time employment has been considered a proxy for multiple role strain. However, full-time employment can also be a proxy for other factors, such as women's personal characteristics, for example, career commitment. We recommend moving beyond the use of occupational and role categories as proxies for mediating variables and directly measuring the proposed mediators of employment–health relationships.

At present, the empirical evidence suggests that a gain in social support at work is an important mediator of the beneficial effects of employment on health. We encourage continued research to test this hypothesis and to identify the types of social support received, the characteristics of jobs that facilitate social support, the types of women for whom support at work is especially useful, and the mental and physical health outcomes influenced by supportive relationships at work. We also encourage research on other possible mediators of the beneficial health effects of employment, including employed women's increased income and higher self-esteem (Baruch & Barnett, 1986; Kessler & McRae, 1982; Parry, 1986).

Further research is also needed to identify the sources of negative health outcomes for employed women. We did not find evidence for the proposed negative effects of multiple role strain on women's health. However, another form of overload, heavy job demands in combination with little control at work, might have negative health consequences. This hypothesis should be further tested. As discussed earlier, we also encourage the study of acute psychophysiological responses to events throughout the day among employed women and nonemployed women, and particularly among employed women in occupational categories that are linked to poor health.

The employment rate among women is still on the upswing, particularly among married women with young children (Matthews & Rodin, this issue, pp. 1389–1393). It is estimated that this trend will continue into the 21st century. A consequence of women's increasing labor force participation is that more women will be unemployed, especially given their relatively low seniority. Recent studies suggest that unemployment may have serious emotional and physical consequences for women and that women's work in the home is not a substitute for work outside the home for women who desire employment (Jennings et al., 1984; Radloff, 1975; Schwefel, 1986; Shamir, 1985). Thus, the benefits and liabilities of women's employment and unemployment are pressing public health issues now and for the foreseeable future.

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