

Psychosocial Predictors of Health, Job Satisfaction and Absenteeism:
Results of Two Prospective Studies

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Abstract

Examined, in prospective designs, the relationship between psychosocial factors, job satisfaction, absenteeism, and illness. In study 1, measures of stress, lifestyle habits, support, hardiness, and coping style were collected for 203 employees. Self-reported illness, absenteeism and job satisfaction were collected. After adjustments for age, sex, education, initial illness and psychological well-being, exercise and an avoidant coping style (threat minimization) significantly contributed to predictions of illness over a 2 ½ year period. Hardiness and lifestyle habits significantly contributed to predictions of job satisfaction and absenteeism, respectively. In study 2, 109 male supervisors completed a health risk appraisal. Negative threat minimization significantly contributed to predictions of absenteeism measured one year later.

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In recent years, a great deal of research has investigated the role of individual factors in the stress-illness relationship. Social support, lifestyle, adverse life events, personality, positive and negative affectivity, cognitions, coping style, and job strain have all been consistently associated with increased risk of disease in a wide variety of cross-sectional and epidemiologic studies (e.g., Folkman, Lazarus, Dunkel-Schetter, DeLongis, & Gruen, 1986; Kobasa, 1979; Cobb 1976; Antonovosky, 1979; Taylor, 1990). To date, the majority of studies investigating the relationship between psychosocial factors and health status have tended to use cross-sectional designs involving measurement of a limited number of individual variables. Prospective designs that include two or more psychosocial variables provide for greater clarity about the relative contributions of psychosocial risk factors to organizational factors and health status. These two prospective studies explore the relationship between psychosocial factors, self-reported physical illness, job satisfaction, and absenteeism in two diverse sets of professional employees.

Study 1

METHOD

Participants and Procedures

Participants included 203 professional employees of a large aerospace firm located in Los Angeles. During 1987-1988, employees attending management training workshops were asked to complete a comprehensive health risk appraisal (Nowack, 1990) and were provided a confidential computerized feedback report for their cooperation. Employees were informed in a cover letter that their participation was voluntary and all information would be strictly confidential and used only for research purposes. In September 1989 and 1990, follow-up questionnaires assessing physical illness, psychological health, and job satisfaction were sent to all 203 employees who had previously completed the health risk appraisal resulting in a final sample of 71.

The mean age of the sample was 38.2 (S.D.=7.35) with ages ranging from 24 to 57 years. The sample consisted of 54.8% males and 44.2% females, was well educated (75.3% reported to have at least a two-year college degree), and was racially diverse (68.5% White, 8.7% Asian, 10.9% Black, 8.7% Hispanic, and 3.4% other). The employees were working primarily in management, supervisory, technical, and administrative positions.

Measures

Independent Measures. Measures of stress, lifestyle habits (exercise, eating/nutrition, rest/sleep, preventive hygiene), social support, Type A behavior, cognitive hardiness, coping style (positive appraisal, negative appraisal, avoidance, problem-focused coping), and psychological well-being were collected using the StressScan/Stress Assessment Inventory (Nowack, 1990). The development and psychometric properties of this stress and health risk appraisal instrument have been described elsewhere (Nowack, 1989; Nowack, 1990).

Dependent Measures. In this study, physical and psychological health status was measured subjectively. Several longitudinal studies have demonstrated that self-report measures of general health are related to all-cause mortality, even when statistical adjustments have been made for the standard risk factors (e.g., Kaplan & Camacho, 1983; Waldron, Herold, & Dunn, 1982). Physical illness was measured by the 94-item Seriousness of Illness scale (Wyler, Masuda, & Holmes, 1968; 1970). The Job Descriptive Index (JDI; Smith, Kendall, & Hulin, 1969) is a widely used measure of job satisfaction designed to measure five orthogonal dimensions of job satisfaction. For this study, the 18-item Satisfaction with Job In General subscale was used as a dependent variable. Absenteeism was measured as total days missed from worked and was verified from personnel records collected during the study period.

RESULTS

A series of stepwise multiple regression analyses were used to explore the predictors of physical illness and job satisfaction at the end of the 2 ½ year period. After controlling for relevant demographic variables (sex, age, race, education) and initial levels of physical illness and psychological well-being to minimize the possible confounds of negative affectivity, exercise ($R_{sqCh}=.086$, $F=4.94$, $p < .05$) and avoidance ($R_{sqCh}=.077$, $F=4.82$, $p < .05$) significantly contributed to predictions of physical illness accounting for .52 of the variance.

After controlling for relevant demographic variables, only cognitive hardiness significantly contributed to predictions of job satisfaction at the end of the 2½ year period ($R_{sqCh}=.265$, $F=16.98$, $p < .01$) accounting for .51 of the variance. Although entered first, no relevant demographic variables contributed to predictions of satisfaction.

Study 2

Participants and Procedures

During 1988, 109 male supervisors from a major utility company who attended a management training workshop were asked to complete a comprehensive health risk appraisal (Nowack, 1990) and were provided a confidential computerized feedback report for their cooperation. One year later, absenteeism from work (total days absent) derived from personnel records were collected.

Measures

Independent Measures. Measures of stress, lifestyle habits (exercise, eating/nutrition, rest/sleep, preventive hygiene), social support, Type A behavior, cognitive hardiness, coping style (positive appraisal, negative appraisal, threat minimization, problem-focused coping), and psychological well-being were collected using the Stress Assessment Inventory (Nowack, 1990). The development and psychometric properties of this stress and health risk appraisal instrument have been described elsewhere (Nowack, 1989; Nowack, 1990).

Dependent Measures. Absenteeism due to physical illness was measured by cumulative sick time verified from medical personnel records for each of the 109 employees over the one year study period. Medical personnel records were obtained for each participant and analyzed for actual illness, or illness complaints, over the course of the study.

RESULTS

Stepwise multiple regression was used to explore the predictors of absenteeism at the end of the one year period. After controlling for relevant demographic variables (sex, age, education) an avoidant coping style ($R^2 = .056$, $F = 6.05$, $p < .05$) significantly contributed to predictions of absenteeism verified from personnel records accounting for .24 of the variance.

DISCUSSION

These prospective studies examined the contribution of specific psychosocial factors to predictions of physical illness, job satisfaction, and absenteeism verified from personnel records in professional working adults. The data tend to support a positive association between lifestyle habits and an avoidant coping style with self-reported physical illness and absenteeism. These results were obtained after statistical adjustments for relevant demographic variables (age, sex, education, and ethnicity) and initial levels of physical illness and psychological well-being.

The results of this study must be interpreted cautiously due to the reliance on self-report measures and the highly educated and relatively small sample size. Future research is needed using more objective indices of physical health status (e.g., absenteeism, medical records) and multiple assessments of the various psychosocial factors assessed in this study.

The contribution of an threat minimization coping style to the prediction of self-reported physical illness is consistent with an earlier finding with a concurrent study of professional working adults using a different self-report measure of health status (Nowack, 1989). In the present study, individuals who minimized the significance of work and life stress reported significantly less physical illness and absenteeism in these two prospective designs. Clearly, additional research is required to elucidate the potential benefits and liabilities of this particular approach to coping.

Physical activity level also significantly contributed to predictions of physical health in this study. This finding is particularly noteworthy in light of recent prospective findings suggesting that exercise is significantly related to all-cause mortality, including cancer, and that the risk of developing CHD in a sedentary population is approximately 1.9 times as great as in an active population (cf., Blair et al., 1989; Powell, Thompson, Caspersen, & Kendrick, 1987).

In Study 1, a significant association was found between hardiness and job satisfaction. The data support the view that a sense of commitment, control, and challenge underlying the cognitive hardiness measure are important affect and cognitions that contribute to predictions of satisfaction at work. Additional research is clearly needed to determine the potential confound of this measure with negative affectivity and its association with diverse health and organizational outcomes.

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