

Outcomes of Educational Interventions for Employee Stress: A Longitudinal Controlled Study

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Abstract

This two-group three-wave longitudinal study assessed the impact of health promotion interventions on stress and work performance of employees. Survey data were collected during a one year period from staff at public high schools in Minnesota (total N = 208). One school was the treatment site, which received monthly psychosocial educational interventions, and two other schools were control sites. Statistical tests demonstrated that the delivery of multiple, brief, educational interventions appeared to have a small but positive impact on reducing overall stress level, increasing utilization of employee assistance program counseling services, and improving job performance and absenteeism.

Introduction

- Teachers work in a high stress occupation
- There are many adverse effects of stress
- Employee assistance programs offer on-site educational interventions for health promotion
- Multiple kinds of interventions are better than single interventions
- There are few controlled studies testing the impact of interventions for reducing teacher stress

Research Questions

- RQ1: What is the level of stress and general physical and mental health among teachers and school staff?
 RQ2: What factors are associated with high stress? Demographic, health, perceived control, and personal coping resources were all assessed as possible factors related to stress.
 RQ3: Are educational health promotion interventions delivered to individual employees effective in reducing stress?
 RQ4: Are educational health promotion interventions delivered to individual employees effective in helping to improve workplace performance and to reduce employee absenteeism?

Methods

DATA & PROCEDURE

This was a longitudinal study of three inner city public high schools located in Minnesota. One school was the treatment site and the other two were control sites. The staff at the treatment school received interventions almost monthly over the entire school year. Self-report surveys were completed at three points (sample sizes in table).

	Treatment	Control
Fall	105	103
Winter	60	56
Spring	40	42

SAMPLE CHARACTERISTICS

Mean Age = 43 -- Female 63%; Male 37%
 Job Tenure: Mean = 13 years of working in schools
 Job Type: Teacher 68%, Staff 21%, Other 11%

INTERVENTIONS

- 08-97 Training: Healthy lifestyles
 08-97 Resource: Stress squeeze toy
 09-97 Resource: Self-care book
 09-97 Resource: Health bulletin board
 10-97 **Survey 1**
 10-97 Training: Stress management Part 1
 10-97 Resource: Exercise facility
 11-97 Workshop: Breathing exercises
 12-97 Training: Stress management Part 2
 01-98 Workshop: Humor and stress
 01-98 **Survey 2**
 02-98 Training: Depression in the workplace
 03-98 Resource: Stress dots
 04-98 Workshop: Back and neck exercises
 05-98 Workshop: Relaxation/pressure points
 05-98 **Survey 3**

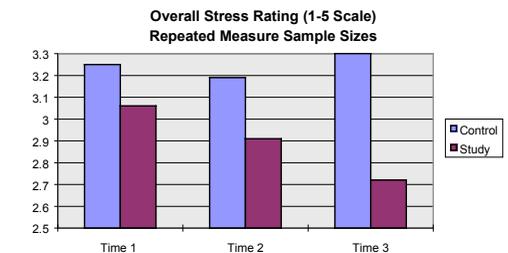
Results

STRESS LEVEL AND HEALTH STATUS

Due to no differences at baseline, the control and treatment sites were combined for descriptive analyses. Comparison of the Health Status Questionnaire (HSQ-12) with U.S. norms revealed that teachers had a health profile that was normal in physical areas but lower than normal in the areas of mental health/depression and energy level. **Almost 4 out of every 5 teachers reported moderate or high stress:** *very high* = 7%; *high* = 27%; *moderate* = 45%; *low* = 17%; and *very low* = 4%. Factors that correlated significantly with higher stress included lower health status (mental and social), lack of social support, low control over work factors of administration issues, work time, paperwork, and sex (females were more stressed than males).

CHANGE IN OVERALL STRESS LEVEL

By the end of the year, 34% of employees in the study group reported lower stress compared to 6% in the control group. Statistical repeated measures tests indicated a significant decline over time in mean stress ratings for only the group with the interventions (see figure).



Other tests found an increased use of employee assistance counseling among study staff but not control staff. Also, most staff rated the interventions as helping to improve work performance (73%) and to reduce time off work (52%; means = 4 and 3, respectively, on a 1-10 scale).

Conclusions

- In general, teachers had high stress, fatigue and depressive symptoms yet had normal physical health status. Thus, interventions were needed.
- Educational type interventions were helpful in reducing stress and improving workplace outcomes.
- Intervention effects were significant but small.
- Personal coping efforts are limited and system level interventions are needed to change many factors that cause employee stress (ex. time schedules, workload, violence prevention, and control issues).

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