

Vacations Improve Mental Health Among Rural Women: The Wisconsin Rural Women's Health Study

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ABSTRACT

Objective: To compare psychological stress, quality of marital life, and disruptive homelife due to work among rural women of central Wisconsin who take vacations frequently and those who do not.

Methods: Women were recruited from 1996 to 2001 for a prospective cohort study from the Marshfield Epidemiologic Study area, a geographic area in central Wisconsin. Stratified sampling was used to select a random sample of 1500 farm and non-farm resident women.

Results: The odds of depression and tension were higher among women who took vacations only once in 2 years (Depression: OR=1.92, 95% CI=1.2, 3.0; Tension: OR=1.7, 95% CI=1.2, 2.3) or once in 6 years (Depression: OR=1.97, 95% CI=1.2, 3.2; Tension: OR=1.9, 95% CI=1.3, 2.8) compared to women who took vacations twice or more per year. The odds of marital satisfaction decreased as the frequency of vacations decreased.

Conclusion: Women who take vacations frequently are less likely to become tense, depressed, or tired, and are more satisfied with their marriage. These personal psychological benefits that lead to increased quality of life may also lead to improved work performance.

INTRODUCTION

“Getting away helps to distance yourself from the stressful parts of your life. It can help restore your perspective, give you new viewpoints, and allow you to develop new strategies to cope.”¹

—Dr Mel Borins

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The majority of Americans receive only 2 weeks of paid vacation per year, compared with more than a month of paid vacation in many other countries.² Additionally, 1 in 6 US employees is so overworked that he/she is unable to use this vacation time.^{3,4} According to a national survey of 632 men and women, workers who do not take vacation are more likely to stay up nights worrying about work, eat and work at the same time, and fail to maintain a healthy diet at work compared to those who do take vacation.

Vacation provides a break from everyday stressors at work, provides an opportunity to engage in health promoting behaviors, and allows time for tension release, personal involvement, and time to catch upon sleep and rest; these in turn have carryover effects into the job settings in terms of job satisfaction and job performance.^{2,5,6} Klausner surveyed 361 steel workers and found that 25% of the respondents felt after vacations that their work efficiency had increased, their jobs were more interesting, and they had more interactions and shared activities with their spouse and children.⁷ Research has also found that employees prefer more paid vacation days compared to a 10% pay raise or any other benefits.^{8,9}

The aim of this study is to compare psychological stress, quality of marital life, and disruptive home-life due to work among rural women of central Wisconsin who take vacations frequently and those who do not.

METHODS

The Marshfield Epidemiological Research Center of the Marshfield Clinic established a resource for population-based health research in the form of the Marshfield Epidemiological Study Area (MESA).¹⁰ The MESA is a geographic area in central Wisconsin comprised of 14 ZIP codes with 50,000 residents. MESA was developed in order to conduct longitudinal follow-up studies of individuals living in a defined

geographic region. The farm and non-farm residency cohort was designed in 1991-1992 by further delineation of all residents of the MESA area using source lists involving agriculture and farming. The Rural Women's Health Study (RWHS) was established to address the deficits in information regarding the health and behaviors of farm and non-farm women living in a rural environment. The RWHS used the MESA area as a sampling frame. The RWHS was designed to be a prospective cohort study with allowance for 2% attrition per year. A total of 1500 rural women aged 25 to 75 were recruited from 1996 to 2001.

Self-administered questionnaires were mailed to participants. Questionnaires included items about personal health history, symptoms of tension and depression, quality of marital life, social support, job control, and socioeconomic status. The research coordinator verified the self-reported health events through electronic medical records available at the Marshfield Clinic. The Institutional Review Board of the Marshfield Clinic approved the project, and all women gave written informed consent prior to their participation in the study.

Psychological Stress

Framingham's tension scale was used to measure the frequency of occurrence of nervous symptoms and is comprised of 7 items.¹¹ Framingham's marital dissatisfaction scale was used to measure self and spouse marital satisfaction. This scale indicates whether the marriage has been happy and satisfactory for the respondent. To carry out logistic regression analysis, tension and marital-satisfaction variables were divided into 2 categories, low and high.

The Center for Epidemiological Studies Depression Scale was used to assess the presence and severity of depressive symptoms occurring over the past week.¹² The scale is comprised of 20 items and respondents rated each item on a 4-point scale. After 4 positively worded items were reverse scored, responses were summed to obtain total scores ranging from 0 to 60. A binary variable was created with scores >16 categorized as "depression" and scores <16 categorized as "no depression."

A few other questions were asked to measure psychological stress: (1) Do you often feel tired or exhausted? (yes, no); (2) What are your usual hours of sleep? (<8, ≥8); (3) How disruptive is working to your home life? (less disruptive, highly disruptive); and (4) To what extent does your business/work impact your ability to: (a) spend time with your children; (b) spend time with spouse; and (c) socialize with friends/family (negative impact, no impact). Frequency of vacationing was assessed: "On average, how often have you had a vaca-

tion—twice or more per year, once a year, once every 2-5 years, and once every 6 years or less."

Other factors included as potential confounding variables in analyses were age, education, income, and farm/non-farm residents. Education (less than high school/high school, and college degree) was divided into 2 categories, while income level was divided into 4 categories (<\$20,000; ≥\$20,000 and <\$49,999; ≥\$49,999 and <\$79,999; and >\$79,999). Statistical analysis was performed utilizing SPSS® (Version 10.0).

RESULTS

The sample is composed of 1500 women between the ages of 25 and 75 who are residents of the MESA area. Of the cohort, 99% were Non-Hispanic Caucasian (1438/1500) and 89% were married. The majority (48.0%) reported having family income as ≥\$20,000 and <\$49,999; 15.5% reported family income as <\$20,000; 22.3% reported family income as ≥\$49,999 and <\$79,999; and 14.2% reported having family income ≥\$79,999. The majority of the cohort took vacation once a year (34.0%), followed by twice a year (23.4%), once every 2-5 years (23.2%), and once every 6 years or less (19.4%).

Table 1 shows the psychological stress among rural women who take vacations frequently and those who do not. The odds of tension increased among women who took vacations once a year (OR = 1.4) or once in 2-5 years (OR = 1.7) or once in every 6 years (OR = 1.9) compared to women who took vacations twice or more per year. Similar results were found for depression. The odds of being depressed increased as the frequency of vacation decreased. Women who took vacations only once in 6 years thought their home life was more disruptive due to work, felt more tired and exhausted, and had less than 8 hours of sleep.

Table 2 describes marital and family satisfaction among rural women who take vacations frequently and those who do not. Women who took vacations more frequently were found to be more satisfied with their marriage, and their work had no impact on socializing with family and friends. Although not significant, decreasing frequency of vacations even had negative impact on spending time with either children or spouse.

DISCUSSION

These results suggest that vacation has an impact on psychological health and overall quality of family life of employees. The results confirmed the hypothesis that women who take vacations frequently are less likely to become tense, depressed, or tired, and are more satisfied

Table 1. Psychological Stress Among Rural Women Who Take Vacations Frequently and Those Who Do Not*

Frequency of Vacation	Tension (High) [†]	Depression [†]	Disruptive Home-Life Due to Work [†]	Taking ≥8 Hours of Sleep [†]	Feeling Tired/Exhausted [†]
Twice or more per year	1.00 (N/A)	1.00 (N/A)	1.00 (N/A)	1.00 (N/A)	1.00 (N/A)
Once a year	1.4 (1.09, 2.03)	1.1 (0.7, 1.7)	1.4 (0.9, 2.2)	0.7 (0.5, 1.03)	1.44 (1.01, 2.1)
Once every 2-5 years	1.7 (1.2, 2.3)	1.92 (1.1, 3.0)	1.3 (0.8, 2.1)	0.6 (0.4, 0.9)	1.48 (0.9, 2.2)
Once every 6 years or less	1.9 (1.3, 2.8)	1.97 (1.2, 3.2)	1.6 (1.01, 2.6)	0.5 (0.3, 0.8)	1.67 (1.05, 2.6)

Significant results are presented in bold.

* Adjusted for age, income, education, and farm/non-farm residents.

† Logistic regression analysis (OR, 95% CI)

Table 2. Marital and Family Satisfaction Among Rural Women Who Take Vacations Frequently and Those Who Do Not*

Frequency of Vacation	Self-Marital Satisfaction [†]	Spouse Marital Satisfaction [†]	Spending Time with Children [†]	Spending Time with Spouse [†]	Socializing with Family and Friends [†]
Twice or more per year	1.00 (N/A)	1.00 (N/A)	1.00 (N/A)	1.00 (N/A)	1.00 (N/A)
Once a year	0.8 (0.4, 1.5)	1.04 (0.7, 1.5)	0.8 (0.5, 1.1)	0.8 (0.6, 1.2)	0.9 (0.6, 1.2)
Once every 2-5 years	0.48 (0.2, 0.9)	0.8 (0.5, 1.2)	0.7 (0.5, 1.1)	0.6 (0.5, 1.1)	0.7 (0.5, 1.07)
Once every 6 years or less	0.45 (0.2, 0.8)	0.7 (0.4, 1.08)	0.7 (0.4, 1.08)	0.5 (0.5, 1.1)	0.6 (0.4, 0.9)

Significant results are presented in bold.

* Adjusted for age, income, education, and farm/non-farm residents.

† Logistic regression analysis (OR, 95% CI)

with their marriage compared to those who do not take vacations regularly.

Several limitations of this study are worth noting. First, our results were based on a single evaluation of psychosocial factors. Because symptoms of tension and depression are not necessarily static in individuals, it would be potentially fruitful to carry out a longitudinal study to evaluate patterns of psychological factors over time based on repeated symptom assessment. Second, no questions were asked about the length of each vacation and the type of these vacations. Such information might enable a description of the type and pattern of vacationing that have health-enhancing effects. Third, we cannot determine cause and effect because we have information at only 1 time point. It is possible that people may be too tense or depressed to take a vacation or to recognize the need for one. Also, some people may feel they obtain equal psychological benefit by taking “weekend vacations” as opposed to longer vacations, which we were not able to measure in this study.

According to *Healthy People 2010*,¹³ depression is the most common disorder in the United States, affecting 19 millions adults. The total estimated direct and indirect cost of mental illness in the United States in 1996 was \$150 billion. A growing body of research suggests that vacation reduces stress by removing ongoing stressors and providing a unique opportunity for behaviors that have restorative effects on anabolic physiological processes, such as social contact with family and friends,^{14,15}

and physical activity¹⁶ in the context of reduction of stress-initiated catabolic effects. Vacation offers the opportunity for freedom, intrinsic motivation, creativity, and self-determining behavior, which ultimately results in psychological benefits.^{17,18} These psychological benefits not only increase the quality of life but also help people return to their jobs refreshed and more relaxed, leading to better job performance.² For the most part, employers benefit from a happier and more relaxed work force. People need to pursue leisure and learn to relax; employers should support vacations as a cost-effective measure to increase productivity.

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