



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.

Do workplace wellness programs help in improving employee health and well-being: Evidence from a workplace wellness training for small rural businesses in Indiana

Laxmi Adhikari, Bhagyashree Katare, Maria I. Marshall

Department of Agricultural Economics, Purdue University

***Selected Paper prepared for presentation at the 2024 Agricultural & Applied Economics Association
Annual Meeting, New Orleans, LA; July 28-30, 2024***

Copyright 2024 by [authors]. All rights reserved. Readers may make verbatim copies of this document for non-commercial purposes by any means, provided that this copyright notice appears on all such copies.

Do workplace wellness programs help in improving employee health and well-being: Evidence from a workplace wellness training for small rural businesses in Indiana

Introduction

Mental health problems, such as stress and depression, are growing issues in the US. The World Health Organization (WHO) reported that approximately 12.6% of the world's population was affected by mental health problems, mainly anxiety and depressive disorders in 2019 (WHO 2022). Mental health problems are deeply recognized among working-age adults. Work-related conflict and mental stress arise from various sources, including but not limited to communication issues among employees and problems with emotions. Previous literature suggests that conflict in the workplace causes financial and interpersonal burdens for both businesses and employees. Workplace conflict and lack of employee well-being affect worker productivity and worker retention (Overton and Lowry 2013). Lost productivity costs are notably high for businesses, which are 2.3 times higher than medical and pharmacy costs (Berry, Mirabito and Baun 2010). Reducing work-related stress and improving the psychological quality of work through mental well-being can prevent a substantial proportion of common mental health problems among employees.

Our study focuses on the impact of a workplace wellness program on the health and well-being of rural small business employees. We are particularly interested in rural small businesses because almost 15.4% of the population in rural US is below the poverty (ERS 2021), preventing them from getting health insurance. This directly leads to approximately 12.3% population in rural counties being without health insurance (U.S. Census Bureau 2022). In general, many employers support health insurance for their employees, but small businesses in rural areas cannot afford insurance for their employees. In addition, these businesses cannot provide workplace wellness training to their employees due to limited resources. To the best of our knowledge, there is no study on the impact of wellness training on the mental well-being of rural small businesses. To fill this gap, we design workplace wellness training to improve workplace communication, conflict resolution, and emotional well-being. Our goal is to study the impact of a workplace wellness program on the mental well-being of rural small business employees in Indiana.

Objectives

The objectives of our study are to 1) study the impact of a workplace wellness program on the mental well-being of rural small business employees and 2) perform the economic evaluation of the workplace wellness program.

Sampling and Data

Our workplace wellness program consists of three modules: workplace communication, conflict resolution, and emotional well-being. The workplace communication module covers essential communication skills at work, including open-ended and closed-ended communication techniques, as well as active listening skills at work. The conflict resolution module explores the nature of workplace conflict and effective strategies to deal with and resolve conflict. The employee well-being module includes strategies to improve well-being and the creation of a safe culture. We expect that participation in the workplace wellness program is related to increasing productivity, reducing absenteeism, and improving well-being among employees. For this study, we obtained a list of small businesses in Indiana and randomly selected 200 small businesses to receive the workplace wellness program and the employees of these businesses form the treatment group. Two hundred were randomly selected to be a control group and did not receive the program. We offered training to the treatment group which is 60 to 90 minutes in duration. Trained extension educators and researchers delivered training. This training can be conducted virtually or in person. We collected participant surveys at three distinct time points: pre-intervention, after-intervention, and post-intervention. Participants complete the pre-intervention survey before the training, provide feedback survey immediately after the training, and then complete the post-intervention survey three weeks after the training.

Econometric Model

Our analytical approach involves a simple difference-in-difference model. We compare the mental well-being of employees, measured by the Kessler (K6) score and the Patient Health Questionnaire (PHQ2), in the treatment group and in the control group to assess the impact of wellness training. The K6 was developed by Kessler et al. (2003) and measures psychological distress during the past 30 days. It has six items with five options from ‘none of the time’ to ‘all the time’. None of

the time is assigned to zero and all the time is assigned to 4. The total K6 score ranges from 0 to 24 and a K6 score ≥ 13 represents poor mental well-being. Additionally, the PHQ2 has 2 items and the total score ranges from 0 to 6. A score of 3 is the optimal cutoff point, and a score higher than 3 is considered a major depressive disorder. We also directly evaluate the cost-effectiveness of the intervention for rural small businesses using absenteeism and presentism which is also used by previous literature (Martin et al. 2009).

Expected Results

Our expected result is that small business employees who participate in wellness training will have better mental well-being compared to those who do not participate in wellness training. More specifically, we expect that, after the wellness training, employees have lower scores on K6 and PHQ2 than their counterparts. As the training focuses on emotional well-being, it provides tools to manage mental stress. We also expect that wellness training will reduce absenteeism due to mental health-related illness, thus improving the productivity of employees. These results would be important for at least three reasons. First, given the limited mental health care professionals in rural areas and the lack of health insurance for rural employees, it can be a convenient service and cost-effective approach for the promotion of mental well-being. Second, even if health care is provided, small business employees may not have the time or resources to visit hospitals or therapy settings to get individual counseling with healthcare professionals. Offering wellness training services at their workplace can yield meaningful results. Lastly, the cost-effectiveness measure of wellness training can be a useful guide for business owners and policymakers in planning and implementing the wellness training service.

Conclusion

Work-related mental health stress is a growing concern as it incurs financial burdens. This study provides empirical evidence on the impact of workplace wellness training on the mental well-being and productivity of small business employees. Applying a simple difference-in-difference model, we expect that our results will show a positive and significant effect on the improvement of the mental well-being of small business employees. The findings of this study will be useful to policymakers and mental health advocates to upscale wellness training services to many business communities in rural areas in the US.

References

- Berry, L.L., A.M. Mirabito, and W.B. Baun. 2010. "What's the Hard Return on Employee Wellness Programs?" *Harvard Business Review*. Available at: <https://hbr.org/2010/12/whats-the-hard-return-on-employee-wellness-programs> [Accessed December 20, 2023].
- Martin, A., K. Sanderson, J. Scott, and P. Brough. 2009. "Promoting mental health in small-medium enterprises: An evaluation of the 'Business in Mind' program." *BMC Public Health* 9(1):239.
- Overton, A.R., and A.C. Lowry. 2013. "Conflict Management: Difficult Conversations with Difficult People." *Clinics in Colon and Rectal Surgery* 26(4):259–264.
- U.S. Census Bureau. "Rates of Uninsured Fall in Rural Counties, Remain Higher Than Urban Counties." *Census.gov*. Available at: <https://www.census.gov/library/stories/2019/04/health-insurance-rural-america.html> [Accessed January 8, 2024].