Stress Management Strategies for the Workplace: A Case Study in Evaluating Employers using the Centers for Disease Control Health Scorecard

Andrew L. McCart[1], PhD, FACHE

Abstract:

Workplace stress is a topic garnering increasing attention in recent years. This article conveys the findings of a study into the stress management practices of organizations in the midwestern and southern United States. The study uses the Centers for Disease Control's (CDC) Health Scorecard toevaluate organizational policies and practices related to stress management. Study participants were asked 125 questions worth 265 points according to the CDC Health Scorecard. The scorecard was followed with a series of open-ended qualitative questions. The study found that organizations and leaders who took an active role in reducing the stress of their employers scored higher on the CDC Health scorecard. Further, employers were more successful in reducing stress when they provided a flexible work environment, allowed employees to provide input on the environment, and communicated regularly with employees about stressful issues.

Keywords: stress management, workplace wellness, management, leadership

1. Introduction

Stress in the workplace has received increased attention as a driver of employee health and workplace productivity. When speaking of employee health, stress-related psychological disorders have well-documented negative links to various cardiovascular outcomes [4]. Other analysis has suggested that, although the impact would be less than addressing other outstanding risk factors such as smoking or obesity, the lessening of workplace stress could decrease incidence of coronary heart disease [8].

When speaking of workplace productivity, literature heavily supports the presence of a financial burden placed upon an employer by workplace stress, even if the exact burden may be difficult to quantify. A 2007 study involving Europe's largest employer, the National Health Service, found that 30% of employee sickness-related absences during the study were attributable to stress [3]. An infographic assembled by Eastern Kentucky University estimates one million workdays lost to stress-related issues in the U.S., with financial losses of $602 per employee per year for each of those missed days [11]. This information makes the expense of paying for an unhealthy workforce important and leads to efforts to limit those expenses. This is particularly relevant for this study's geographical area: Indiana ranks 41st in overall health status in the United States, and Kentucky 43rd [1]. The Centers of Disease Control has also devoted a section of its Health Scorecard (CDC HSC) to measuring a workplace's efforts at managing stress, allowing respondents to earn points for their workplace by documenting their employers' methods to manage and reduce stress[5].

Organizational efforts to manage and reduce workplace stress can take many forms. Stress management programs can be presented to employeesin online, on-site, or off-site variants. These programs may focus on work-life balance skill development, stress reduction practices, and stress identification skills. Literature suggests enhanced benefits for employees that take part in these programs with coworkers, as the social aspect bolsters participation.For example, one study found that "the percentage of participants who reported practicing meditation at least once per week was greater among those with group support than without group support: 94% versus 54%" [2].

[1] Assistant Professor, Associate Director, Health Management Programs, Department of Health Management and Systems Sciences, UNIVERSITY OF LOUISVILLE, School of Public Health and Information Sciences, 485 East Gray Street, #129 Louisville, KY 40202, (812) 345-2856 andrew.mccart@louisville.edu
https://www.linkedin.com/in/andrew-mccart

A similar sense of involvement may be the source of improved stress management when including employees in the decision-making process for issues that impact job stress, such as changes in work schedule, time management demands, specific work practices, and work processes. Further, a positive and optimistic manager can lead to the same behavior traits in employees [10].

Academic literature also suggests that some innovative leaders are going beyond simply managing stress and are striving to eliminate stress by making their employees' day-to-day work less stressful. These workplaces seek to proactively lessen stress by developing a workplace that involves:

- Guidelines for meetings, such as a clearly defined agenda, a firm starts and end time, and actionable outcomes rather than free-flowing discussion that leaves people feeling their time was wasted.
- Fostering connections between new and long-term employees with mentoring relationships.
- Celebrating successes on a regular basis to demonstrate how each member of the team helped the company to achieve a goal, showing employees how their work is meaningful.
- Allowing flexible schedules can go a long way toward reducing stress.
- Teaching employees how to use technology totheir advantage, by managing interruptions and avoiding the tendency to become slaves to their e-mail.
- Managing employees' stress by regularly reviewing team workloads and dynamics and sharing results [6].
- This study explores participants' workplaces and compares them to best practices from the CDC Health Scorecard and the CDC's validation study of that scorecard.

2. Methods

2.1 Survey Design

This study specifically aims to understand workplace wellness programs in the Midwest and Southern United States, according to the Centers for Disease Control Health Scorecard (CDC HSC). The CDC HSC is a 125 question, 264-point survey that covers a diverse set of workplace wellness initiatives, with categories such as stress management, organizational structure, physical activity, and tobacco control, and which provides a numerical score for each section. Participants were guided through CDC HSC to provide a quantitative baseline among respondents. During the survey, participants were encouraged to elaborate on their responses to explain the ways their employers address, or fail to address, health and wellness in their workplace. The study then analyzed the interview data to look for patterns and trends. The results were compared the respondents' CDC HSC scores against those that the Centers for Disease Control report for the organizations used to validate the HSC tool.

2.2 Evaluation Methodology

A case study methodology was chosen to answer the research question in this study for a variety of reasons. First, the research questions sought to explain a present circumstance: the current ways respondent organizations implement health and wellness programs. Second, the case study method is relevant because this study sought to obtain an extensive and in-depth description of the social phenomenon of workplace wellness. Third, a case study is appropriate because this study looks at questions of "how and why", versus questions of "who, what, where, or how many?" According to Yin's book *Case Study Research*, a case study method is also appropriate when the researcher does not need to control behavioral events, such as a laboratory experiment must [12].

Another reason a case study is appropriate for this research is explained in the book*A Case for the Case Study*. The authors contend that a case study provides a holistic approach to studying complex action and meaning, and state that "a case study can permit the researcher to examine not only the complexity of life in which people are implicated, but also the impact on beliefs and decisions of the complex web of social interaction" [7].

This study looks at organizations ranging from six employees to over 1,000, and the similarities and differences in perceptions are too rich to be condensed into a survey alone. In this study, a case study methodology can uncover the way employees feel about their employers' wellness programs in a way that the employers may not take the time to discover.

2.3 Population Selection

The population for the study included representatives of twenty-five organizations from the Midwestern and Southern United States.

Organizations in this study fell into the following categories of the Centers for Disease Control Healthcare Scorecard: retail/wholesale trade; professional, scientific, and technical services; transportation; warehousing; and utilities, construction, educational services, and manufacturing.

Participants from the organization included those in leadership positions, includingdirector, human resource manager, senior recruiter, or another level of notable responsibility or ownership. Participants also included employees that a held a variety of roles in their organizations. These roles included lead engineer, designer, supervisor, front-line manager, director and other roles within a typical organizational chart.

2.4 Data Analysis

The analysis of the data collected examined patterns and trends that emerged. All interviews were transcribed into typed text. This quantitative data was read and re-read for interesting themes, recurring themes, and outlying themes. The text of the interviews was then coded in multiple stages to find the meaningful themes mentioned above.

The coding of the interview strove to leave all possibilities open as the researcher developed conclusions from the study. The research coding looked at major themes underneath the data to uncover patterns in the way organizations manage their health and wellness programs. Organizing the transcriptions looked for explanations to phenomena and frameworks to further develop interesting, recurring, or outlying themes.

3. Results

The Center for Disease Control Healthcare Scorecard (CDC HSC) measures responses across fifteen categories, one of which being stress management. The reliability and validity of the CDC HSC was tested in a 2013 assessment [9], which found that "[t]he revised HSC is a reasonably valid and reliable tool for assessing worksite health promotion programs, policies, and environmental supports directed at preventing cardiovascular disease."

Participants in this study were asked to respond to the CDC HSC as a whole, but the researcher's evaluations focused in on the stress management portions of those responses. For purposes of comparison, information from the CDC Validation Study will be presented alongside the observed results from this study's participants.

1: Comparison of Study Results And CDC Validation Study Results

Comparison of This Study to the CDC Validation Study					
Health Score Card Categories	Total Points Possible	CDC Validation Study Scores	% of CDC Scores	Average for this Study	% of Scores
Stress management	14	10	71%	9	67%

Taking the sample size as representative of businesses in the studied area, the research finds that businesses in the study area measurably trail behind the standard set by the CDC Validation Study. The study's responses resulted in an overall lower average score for the stress management portion of the CDC HSC, and a lower percentage of the study's respondents met that average than the percentage of CDC Validation Study respondents that met that study's average. The researchers would note that the CDC HSC specifically awards points only for written and formal policies, but not for informal, non-written policies. This distinction did result in a small impact upon the scores for some organizations in the lowest-scoring category.

Organizational differences between organizations can be examined by looking into the qualitative data that was gathered while administering the CDC HSC to respondents. The researchers have categorized respondents into three categories, based upon breakpoints in the organizations' overall scores on the CDC HSC.

Table 2: Description of Organizations by Industry, HSC Score, and Number of Employees

HSC Score	Description of Organizations by Industry	Number of Employees
Category 1: 201-264 HSC Points		
252	Manufacturing	1500
242	Educational Services	350
237	Manufacturing	25
205	Manufacturing	1000
Category 2: 101-200 HSC Points		
160	Transportation, Warehousing, Utilities	25
154	Manufacturing	70
147	Professional, Scientific, and Technical Services	30
131	Transportation, Warehousing, Utilities	48
123	Manufacturing	100
117	Transportation, Warehousing, Utilities	500
110	Construction	500
103	Professional, Scientific, and Technical Services	125
101	Retail/Wholesale Trade	2500
Category 3: 44-100 HSC Points		
99	Manufacturing	450
72	Manufacturing	160
65	Manufacturing	43
62	Professional, Scientific, and Technical Services	7
56	Construction	6
44	Professional, Scientific, and Technical Services	13

Organizations within the highest-scoring category expressed qualitative data that provide a base for positive comparison against the middle-scoring and low-scoring organizations. In summary, the study found that stress management initiatives at high-scoring organizations tended to perform better on the following measurements:

- Number of overall initiatives addressing stress and stress management
- Leadership engagement with initiative implementation and maintenance
- Ease of employee access to stress management tools
- Organizational culture towards traditional stress-inducing workplace factors

High-scoring organizations described effective deployment of multiple forms of stress management within their workplaces; middle-scoring and low-scoring organizations were much more likely to have responses indicating only a single successful stress management initiative in their workplace, or to be unable to report any successful initiatives.

Respondents also indicated that many of these stress management techniques were explicitly endorsed by or directly involved participation from workplace leadership. A respondent for one of the high-scoring manufacturing groups described morning meetings wherein employees and leadership would share ideas on how to make the work processes and environment better. In being offered the opportunity to "find out what the downfall was yesterday, or how did production run yesterday, what's the plan today to do anything differently," the respondent felt that the organization gave employees an overview of the bigger picture, which, in turn, helped employees in terms of stress management through setting expectations and sharing knowledge regarding the coming day's production.

Ease of access was another trait that was found in many responses from the high-scoring organizations: these organizations made efforts to provide their employees with stress management opportunities that did not place unnecessary obstacles between the employees and those opportunities.

Example responses in this vein included one of the high-scoring manufacturing groups setting aside space within their floor plan for private "phone booth" cubicles to provide distraction-free space for employees, and the high-scoring educational services group providing counseling services that are both on-site and free to their employees.

In contrast, ease of access was cited as an issue by respondents at multiple middle-scoring organizations in the study. A respondent from a middle-scoring manufacturing group acknowledged that his employer has a history of helping those employees who are suffering from the pressures of workplace stress, but the onus for beginning that dialogue with management is on the employee themselves. Unlike the high-scoring organizations in this study, this manufacturing group does not make access to counseling or invitations for managerial discussion a part of the day to day process, potentially reducing the likelihood that employees will take the necessary steps they need to access the available care.

Respondents from these middle-scoring organizations also provided examples of stress management techniques that they considered to be implemented too poorly to realize any potential benefit. A respondent from one of the utilities groups noted that their workplace gave each employee their own office, the employees at the utilities organization felt that they "can't really get away from work." In contrast to the isolation of the aforementioned "phone booth" arrangements at a high-scoring organization, these private offices did not provide the respondent with isolation from stress, and therefore did not contribute significantly to stress management metrics. A respondent for another middle-scoring organization noted that the only quiet places set aside for the employees were prayer spaces for employees of Muslim faith; this eventually resulted in discontent amongst those employees not of Muslim faith, and the effort made by leadership ultimately lead to an increase in stress amongst their workforce rather than a reduction.

Study respondents from organizations that fell within the low-scoring category provided qualitative data that effectively echoed the issues found within the middle-scoring category respondents. However, the study does note that some of the smallest organizations in this category described stress management initiatives that would have elevated their score on the CDC HSC if the policies were formal and written initiatives. A respondent for the professional services group with seven employees described social activities that the CDC HSC does give points to, including the staff assembling for holidays and management taking the staff out to dinner on a regular basis. The same respondent noted that leadership is accessible and open to ideas on change and improvement, stating that "if there's something that we can make things easier [sic], like if there's a process, we kind of all collaborate to see what we could do to make it easier."

4. Conclusions

With its placement on the Healthcare Scorecard, the Centers for Disease Control have placed stress management as a workplace metric alongside more traditional wellness metrics such as tobacco control, hypertension, and weight management. Given the estimated costs that stress-related absences can impose upon an employer, and the scores of this study's respondents compared to the CDC Validation Study scores, employers may be able to realize financial savings through proper implementation of new stress management tools, or vetting and fine-tuning of initiatives already in place.

The qualitative responses gathered during this study have suggested that organization leadership seeking to manage the stress of their workforce should be prepared to take an active role in not just the implementation of potential initiatives, but the maintenance and daily deployment thereof. These initiatives should be woven into the fabric of the average worker's experience at the organization, and the ability to access stress management initiatives should be rendered as easy as possible to maximize the possibility that stressed workers will not face undue hardship in utilizing them. And, as stress can stem from a number of sources within a workplace, organizational leadership should prepare to implement a variety of stress management tools to provide a spectrum of potential relief to their employees.

References

2019 Annual Report, United Health Foundation (n.d.). Retrieved from
        https://www.americashealthrankings.org/explore/annual.
Allexandre, D., Bernstein, A. M., Walker, E., Hunter, J., Roizen, M. F., & Morledge, T. J. (2016). A Web-Based
        Mindfulness Stress Management Program in a Corporate Call Center. Journal of Occupational &
        Environmental Medicine, 58(3), 254-264. doi:10.1097/JOM.0000000000000680
Blake, H., & Lee, S. (2007). Health of community nurses: a case for workplace wellness schemes. *British Journal of
        Community Nursing, 12*(6), 263-267.
Brotman, D. J., Golden, S. H., & Wittstein, I. S. (2007). The cardiovascular toll of stress. *The Lancet,370*(9592), 1089-
        1100. doi:10.1016/s0140-6736(07)61305-1
CDC. (2014). *The CDC worksite health scorecard: An assessment tool for employers to prevent heart disease, stroke, and related health
        conditions.* Retrieved from http://www.cdc.gov/dhdsp/pubs/docs/hsc_manual.pdf.
Edington, Dee W., A. B. S., &Pitts, Jennifer S. (2015). *Population Health: Creating a Culture of Wellness* (J. R. David B.
        Nash, Raymond J. Fabius, Janice L. Clarke, Alexis Skoufalos Ed.). Burlington, MA: Jones and Bartlett.
Feagin, J. R. (1991). A case for the case study. Chapel Hill, NC, NC: Univ. of North Carolina Press.
Kivimäki, M., Nyberg, S. T., Batty, G. D., Fransson, E. I., Heikkilä, K., Alfredsson, L., . . . Theorell, T. (2012). Job
        strain as a risk factor for coronary heart disease: A collaborative meta-analysis of individual participant data.
        The Lancet, 380(9852), 1491-1497. doi:10.1016/s0140-6736(12)60994-5
Roemer EC, Kent KB, Samoly DK, et al. Reliability and validity testing of the CDC Worksite Health ScoreCard: an
        assessment tool to help employers prevent heart disease, stroke, and related health conditions. J Occup
        Environ Med. 2013;55(5):520-526. doi:10.1097/JOM.0b013e31828349a7
Schultz, Alyssa B., D. W. E. (2007). Employee Health and Presenteeism: A Systematic Review. *J Occup Rehabil, 17:547–
        579*
Work Related Stress on Employees Health. (2018, November 28). Retrieved June 23, 2020, from
        https://safetymanagement.eku.edu/blog/work-related-stress-on-employees-health/
Yin, R. K. (2009). *Case Study Research* (Fourth Edition ed.). Thousand Oaks, California: SAGE.