White Paper

Employee well-being:

Looking beyond health care cost savings to measure business performance gains

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Yale SCHOOL OF MANAGEMENT
Center for Customer Insights

As the challenge to manage health care costs and reduce employee health risk continues, human resources professionals now have even more reason to advocate for health and well-being programs. A new research study, conducted by Optum® in partnership with the Yale Center for Customer Insights, asked and answered this key question:

Is there a relationship between investment in employee health and stock market performance?

The findings add to the library of evidence that correlates award-winning employee well-being programs with improved business performance. This white paper details these thought-provoking findings and the conservative methodology that uncovered them.

Study methodology

Earlier studies pioneered the groundwork that began to build evidence for the connection between health and well-being investment and a company's financial performance. In alignment with earlier studies, the research in this new study was also based on secondary data: in this case, it was a nationally acclaimed award that recognizes employers with exceptional commitment to improving their employees' well-being and overall quality of life. This award served as a proxy for a company's investment into employee wellness.

The focus was on publicly held companies that won either a top- or second-tier award (N=58, half were award winners).* For companies that won the award multiple times in the four-year period, only the first instance of winning was used in the sample creation. (This methodology served to increase the sample size but still controlled for differences from overall market timing.)

The research study was designed using a double robust approach, meaning that it employed both matching and regression to minimize differences between the award group and the control sample and to control for outside factors, which might also influence performance.

It's important to note that earlier studies did not use a matched sample but instead compared performance to the overall stock market or the Standard & Poor's (S&P) 500.

Why is this study so relevant now?

For decades, human resources professionals have focused on building health and well-being return on investment evidence focused on medical cost savings. However, medical cost savings is not a metric commonly tracked as a performance indicator by business leaders within a company. As a result, it's historically been difficult to gain support outside of human resources for employee health and well-being initiatives.

*In 2010, 2011, 2012 or 2013.

Matching controls

From a matching standpoint, for each award winner, a company was selected as a control and contained all the following criteria:

- In the same industry as defined by the North American Industry Classification System (NAICS) code, and
- Of similar size* (based on revenue and number of employees of the winner's award year)

The figures below identify the balance achieved between the control and the award winner based on revenue distribution and employee count distribution.

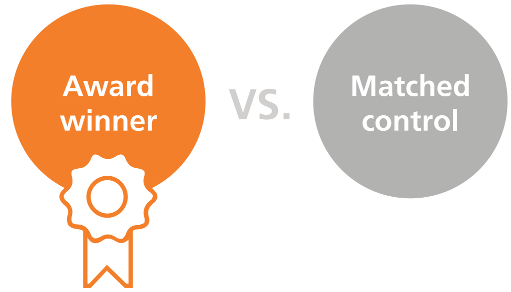
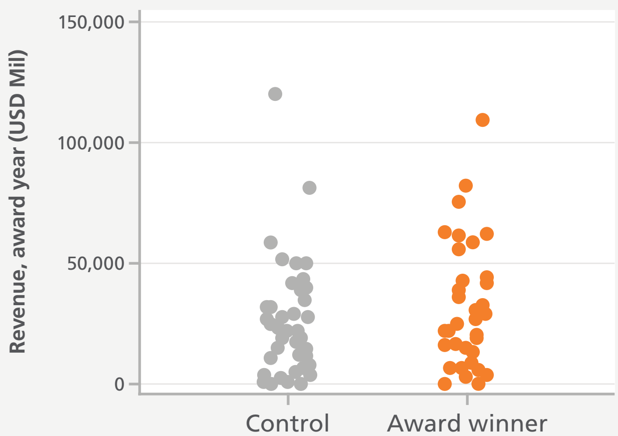
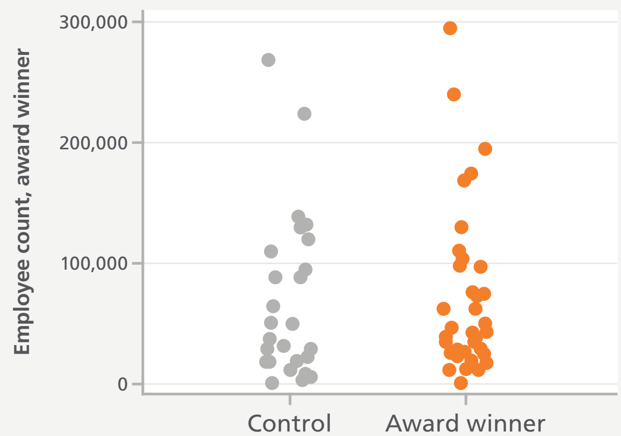


Figure 1: Revenue distribution



Variance ratio = 1.01

Figure 2: Employee count distribution



Variance ratio = .92

The variance ratio is an indicator of the degree of balance achieved in the matching process. The closer the variance ratio is to one, the higher the confidence level in the assurance in the validity of the findings.

Regression analysis

The study used a regression analysis instead of a simple analysis to enable the researchers to examine the relationship between multiple variables of interest, including metrics such as share price growth and earnings per share.

*Company size and industry are two of the important factors that influence stock market returns and might also be correlated with investment in wellness programs.

Key findings

There were three meaningful findings. Most significantly:

1 Share price growth one year post-award is positively correlated with receiving an award.

Simply put, the study found that companies that won the award — the proxy for investing in employee wellness — had a significantly higher share price growth one year post-award.

On average, share price growth for award winners was $4.34 to $4.68 higher than non-winners one year post-award. (The range of share prices in year zero (baseline) in the dataset is $5.05 to $91.73 with a mean of $41.78, so the $4 impact is meaningful in terms of percentage of share price.)

This finding remains notable when including controls for revenue (size), earnings per share (profitability), revenue growth, industry control and award year. This is necessary to control for the remaining differences between the award winners and the matched control group.

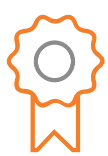
In addition:

2 Earnings per share one year prior to the award year is predictive of winning an award, suggesting that more profitable companies invest in employee health.

The study also showed that:

3 Award-year earnings per share and the price-earnings ratio are not negatively impacted by robust investment in employee wellness.

Share price growth one year post-award is **positively correlated** with receiving an award.

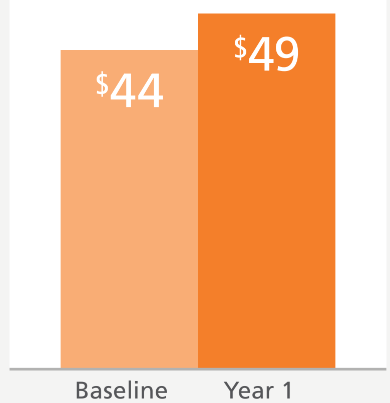


Earnings per share one year prior to the award year **is predictive** of winning an award, suggesting that more profitable companies invest in employee health.

Award-year earnings per share and price-earnings ratio **are not negatively impacted** by robust investment in employee wellness.

Average share price (control)

Average share price (award winners)



Share price growth (award winners)

$4.34–$4.68

Previous research supports the newest study

The three previous studies established a connection between wellness programs and financial performance and provided a foundational perspective that helped advance studies, such as this one, that validate the relationship between investment in employee health and stock market performance.

The stock performance of C. Everett Koop award winners compared with the S&P 500[1]

Objective: Explore the link between companies investing in the health and well-being of their employees and stock market performance.

Methods: Stock performance of C. Everett Koop National Health Award winners (n = 26) was measured over time and compared with the average performance of companies comprising the S&P 500 Index.

Results: The Koop award portfolio outperformed the S&P 500 Index. In the 14-year period tracked, Koop award winners' stock values appreciated by 325 percent, compared with the market average appreciation of 105 percent.

Conclusions: Demonstrates the higher market performance of socially responsible companies that invest in the health and well-being of their workers when compared with other publicly traded firms.

Tracking market performance of companies with the highest scores on the HERO Scorecard[2]

Objective: Evaluate the stock performance of publicly traded companies that received high scores on the HERO Employee Health Management Best Practices Scorecard in collaboration with Mercer based on implementation of evidence-based workplace health promotion practices.

Methods: Companies with high scores in a corporate health and wellness self-assessment were simulated based on past market performance and compared with the past performance of S&P 500 companies over six years.

Results: Stock values of companies with high scores appreciated by 235 percent, compared with the S&P 500 Index appreciation of 159 percent.

Conclusions: Robust investment in workforce health and well-being is one of multiple practices pursued by high-performing, well-managed companies.

Tracking the market performance of companies that integrate a culture of health and safety[3]

Objective: Assess the hypothesis that the stock market performance of companies achieving high scores on either health or safety in the Corporate Health Achievement Award (CHAA) process will be superior to average index performance.

Methods: The stock market performance of portfolios of CHAA winners was examined under six different scenarios using simulation and past market performance in tests of association framed to inform the investor community.

Results: CHAA companies outperformed the S&P companies on all tests.

Conclusions: A healthy and safe workforce correlates with a company's performance and its ability to provide positive returns to shareholders.

Limitations of the current study

We acknowledge that even with the current controls, there may still be other correlated factors between investment in wellness programs and stock market returns. Companies that invest in wellness programs may also invest in other programs that enhance employee productivity. In addition, the relatively small sample size of the companies with outstanding investment in employee wellness may play a factor, and we cannot offer any comment on the impact of other types of investments. The sample is limited by the fact that we could only look at the performance of publicly traded companies, and many of the award winners were either private or subsidiaries of larger companies.

Conclusions

This doubly robust study demonstrates the relationship between investment in employee well-being and an organization's fundamental financial performance. Specifically:

Companies that invest in health and well-being programs are likely to demonstrate a meaningful lift in share price growth and measurably contribute to business performance.

Beyond health care cost savings alone, human resources executives may confidently use these meaningful findings to substantiate continued or increased investment in a comprehensive health and well-being strategy.

Study contributors

We acknowledge the important contributions of those who made this report possible.

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Sources:

[1] Goetzel, RZ, Fabius, R, Fabius, D, et al. (2016). The Stock Performance of C. Everett Koop Award Winners Compared with the Standard & Poor's 500 Index. *Journal of Occupational and Environmental Medicine*/American College of Occupational and Environmental Medicine, 58(1), 9-15. DOI: 10.1097/JOM.0000000000000632.

[2] Grossmeier, J, Fabius, R, Flynn, JP, et al. (2016). Linking Workplace Health Promotion Best Practices and Organizational Financial Performance: Tracking Market Performance of Companies with Highest Scores on the HERO Scorecard. *Journal of Occupational and Environmental Medicine*, 58(1), 16-23. DOI: 10.1097/JOM.0000000000000631.

[3] Fabius, R, Loeppke RR, Hohn, T, et al. (2016). Tracking the Market Performance of Companies That Integrate a Culture of Health and Safety: An Assessment of Corporate Health Achievement Award Applicants. *Journal of Occupational and Environmental Medicine*/American College of Occupational and Environmental Medicine, 58(1),3-8. DOI: 10.1097/JOM.0000000000000638.

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