The Relationship between Occupational Safety and Health and Employee Morale

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Background

The notion that occupational safety and health (OSH) performance is linked to business performance, including employee morale, has widespread appeal. Workplaces with active, visible safety leadership have fewer injuries, are often rated as better places to work, and have more satisfied, more productive employees who are less likely to change jobs (OSHA, 2002). The American Society of Safety Engineers (ASSE) has taken the position that safety and health management programs improve a company's bottom line, including productivity and employee morale (ASSE, 2002).

In 2005, BusinessWeek featured a special advertising section promoting safety's return on investment; one of the core messages was that safety improves employee morale, which in turn enhances business value (Colford, 2005). Gice (1995) contended that increasing job satisfaction will reduce workers compensation claims, and that the improvement of job satisfaction is just as important as hazard reduction in controlling workers compensation claims. Rechenthin (2004) found that poor safety programs could negatively influence company morale and make recruiting difficult particularly in high-risk industries. However, these claims linking occupational safety performance to employee morale are limited by a lack of data to support the contentions. The purpose of this research endeavor was to analyze the relationship between OSH performance and employee morale, using the Great Place to Work® Institute's lists (Best 100 large companies and Best 50 small/medium companies) as the construct for employee morale.

What is a Great Place to Work?

The Great Place to Work® (GPTW) Institute compiles a list of the best places to work in the United States. A Great Place to Work® is one in which you "trust the people you work for, have pride in what you do, and enjoy the people you work with." (GPTW® Website, 2008). See Figure 1 for the Institute's dimensions. Similar to participants in OSHA's Voluntary Protection Program, Great Place to Work® organizations, hereafter called Best Companies, self-nominate themselves and initiate the process. The Institute distributes a 57-item employee survey called the Great Place to Work® Trust Index to several hundred randomly selected employees at each firm (Levering, 2004). Each organization also completes a culture audit, which includes an openended questionnaire, and firms provide supplemental information for the Institute staff to review (Rohman, 2007). For the second year in a row (2007 and 2008), Google, a global technology

service provider based in Mountain View, California, is the number one Best Company to Work for in America. Best places to work cover a wide variety of industries including construction, manufacturing, and advertising. In fact, in 2007 the two top companies on the Small and Medium lists were a construction company (Holder Construction Company) and a mining company (Badger Mining Corporation). Table 1 provides a complete industry sector list with distribution. For a synopsis on how the best companies are chosen, see sidebar. The Institute's processes help companies improve corporate performance and raise the quality of work life for their employees. Moreover, using stock market performance indicators, their data illustrates that the publicly traded "Best Companies" consistently outperform other major stock indices, including the Standard and Poors 500 and the Russell 3000 (GPTW® Website, 2008; Lyman, 2007). In addition, they report that how employees are treated adds significantly to the competitive advantages available to the organization.



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Figure 1. Great Place to Work® Institute dimensions.

GPTW as a measure of employee morale

For this research, the Great Place to Work® Institute's list was used as a proxy for employee morale. The Institute's list has been utilized in previous research as a construct of employee

relations, employee attitudes, and employee morale. Ballou et al (2003) utilized the best places to work list as a proxy for successful efforts in creating high workplace attitudes. Moskowitz (1985) described the best places to work list as a measure of employee attitude and the relationship between employees and managers, while Romero (2004) describes the list as a measure of employee relations. In their study on employee morale McKnight et al (2001) provide a useful background on the definition of employee morale. They define it as the degree to which an employee feels good about his or her work and work environment, and use the term broadly to encompass constructs like intrinsic motivation, job satisfaction, work meaningfulness, organizational commitment, and work pride. While the term morale has been criticized as being too vague (Roethlisberger, 1941), more recently Weakliem and Frenkel (2006) suggested that the term employee morale is an underlying concept of many of the aforementioned constructs and should be used as a general term to refer to feeling about one's job.

Occupational safety and health component

Occupational safety and health is a component of the *Respect* dimension (Figure 1). Thirteen questions comprise the Respect dimension and are asked on a 5-point frequency scale, true or not true scale (almost always untrue, often untrue, sometimes untrue and sometimes true, often true, almost always true). One question is directly related to occupational safety and health – 'This is a physically safe place to work' (Lyman, 2008a). Two other questions are also related to occupational safety and health albeit they could have some other underlying meanings in human resources and labor relations. They are: 'This is a psychologically and emotionally healthy place to work' and 'Our facilities contribute to a good working environment'. The question regarding a physically safe place to work scored the highest, 96%, among the average scores of 100 Best companies in 2007 (Example Feedback Report, 2007) and also in 2008 (Lyman, 2008b). This means that 96% of employees among the 100 Best Companies to Work For answered 'often true' or 'almost always true' that their place of work is physically safe. Dr. Amy Lyman is the Director of Corporate Research, co-founder, and Chair of the Board of Directors of Great Place to Work® Institute. According to Dr. Lyman, "We've always seen physical safety as a basic item that employees expect to be present in any workplace."

Lyman (2007) reported information on certain aspects of the scale showing the differences between item scores between the Top 100 and the Bottom 100 (those companies who tried to be selected in the Best 100 but ended up in the Lower 100 among all nominations). According to Lyman (2008b), the 'physically safe' question is one on which we see the smallest differences between the Best and the Lower group. For 2008 among the Best 100 the positive response was 96% and for the 100 Lower it was 89%. Only twelve of the fifty-seven items on the survey reported average levels of positive response above 90%. This demonstrates that feeling physically safe is a very important component of being a great place to work. While manufacturing or mining can have a greater degree of obvious physical safety concerns there are issues in other workplaces that employees are concerned about such as lighting safety at night, ergonomic safety for people working on computers all day, and ventilation and air conditioning safety to keep out asthma producing materials (Lyman, 2008b).

Regarding the two other questions, 'Our facilities contribute to a good working environment' and 'This is a psychologically and emotionally healthy place to work', the differences between the Best 100 and the Lower 100 groups are larger when compared to the physically safe question. On the facilities question, 91% of employees in the 100 Best Companies answered 'often true' or 'almost always true', whereas 75% of the employees in the Lower 100 did (Lyman, 2008b). On

the psychologically safe question the difference increases to 20%, 83% compared to 63% (Lyman, 2008b). The range between the Best 100 and the Lower 100 demonstrates the difficulty in achieving each construct. These safety and health questions could be viewed as a tiered system of evolution, beginning with the physical aspects, evolving to facilities/design, and finally extending to the psychological well-being of employees. This relationship can be used by safety professionals seeking to go from good to great in safety and in helping to contribute to the organization being a great place to work. Consider that most average safe places to work are making attempts to comply with basic OSHA regulations which focus primarily with the physical aspects of work. Above-average safe places to work seek to go beyond OSHA compliance and might focus on such issues as facility design and safety, safety's relationship with work planning, and ensuring good communication for worker's to voice concerns about safety. However, for an organization to be a best safe place to work the psychological and psychosocial aspects must be addressed. This is difficult for organizations to be successful at, and to sustain success. A marker in the best companies is that they moderate the effects of stress both at home and work (Lyman, 2008b). Topf (2008) reported that stress can have a dramatic affect on safety and health performance.

Spigener (2008) reported that risk exposure can be introduced upstream through the decisions that leaders make regarding the systems that provide organizational consequences or that cause a state where employees are feeling psychologically unsafe. An employee who is feeling psychologically unsafe tends to be inwardly focused and can be more reactive and volatile depending on the extent of the stress, all of which can lead to a person losing focus in the moment adversely affecting organizational safety. For example, consider a shipping employee pressured by superiors to meet end-of-month deliveries. If occupational safety is not a shared value among employees and management, the management decision and company culture regarding end-ofmonth deliveries could result in a psychologically unsafe situation. Workplace violence prevention and wellness programs at work are key components of this psychological construct as well. These represent job enlargement area and growth areas for many OSH professionals. However, if they want to move their organizations and their safety performance from good to great these would be areas to consider and evaluate after they have satisfactorily addressed the physical and the beyond compliance aspects. It is quite possibly, the next step in the trajectory for the profession. Based on Lyman's comments and the analysis of the 100 Best and Lower 100 data, it is likely that some level of high safety performance is a necessity just to be a 'good' place to work. This could mean that the relationship between safety 'level' and employee morale is curvilinear as depicted in the chart in Figure 2.

Relationship between GPTW and occupational safety

In researching the Great Place to Work process, there are striking similarities between an organization's path to becoming a best place to work and the management philosophy necessary for a high performing safety culture. Erickson (1997) found that in high safety performing organizations, management communication is honest, open and understandable, employees are treated with respect, receive positive feedback, and suggestions are encouraged. These are all characteristics involved in becoming a best place to work. If these attributes are in place, and if safety is seamlessly integrated into the organization as a core value, the results within individual organizations are not surprising. For example, according to Tonya Vyhlidal (2008) Director, Wellness and Life Enhancement for Lincoln Industries, a manufacturing firm who has been on the best places to work list for five straight years, employee wellness and occupational safety are integrated comprehensively at Lincoln Industries. Lincoln contracts with a physical therapist and

a massage therapist to support proactive wellness programs. The benefits are seen not only because the number of work-related musculoskeletal disorders is at an all-time low, but it is these types of beyond compliance programs make Lincoln industries a great place to work.

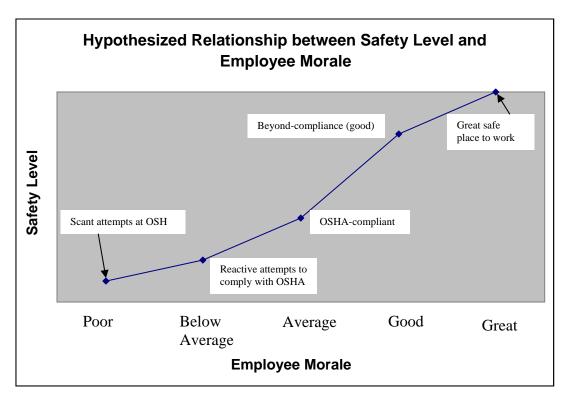


Figure 2.

Methods

All 150 firms (100 large and 50 small/medium) on the 2007 Great Place to Work® Institute's list were utilized in the research database. In order to evaluate the relationship between safety and employee morale, a comparison group of 'non' best places to work was needed. In creating such a comparison group, a matching procedure was used whereby each firm on the best places list was matched to a single firm not on the best places list. Matching is a strategy to deal with and control for extraneous variables and reduce bias (Portney and Watkins, 2000). The following matching criteria were utilized. First, a list of all possible comparison firms was generated based on industry type (Education, Retail, Construction, Manufacturing, etc.) and ownership (private, public, non-profit) in relation to the firm on the best places list. This information was found on Yahoo Finance and Hoover's, Inc., and then confirmed on the company's website. Secondly, and because the focus of the research was on employee safety, the potential comparison firm with the closest number of employees to the best place to work firm was selected as the comparison firm used in the matching list. Random selection was not utilized because of the effect of employee number on the dependent variables (safety measures). For example, if a best places firm with 50,000 employees were matched with a comparison firm with 1,000 employees there would be certain differences in safety function staffing, chances for OSHA inspection, etc. This would

yield confounding variations on the dependent variables. An assumption of this research is that the firms selected as matching firms would not be selected as great places to work if they were nominated.

This method of matching firms, and the assumption, is comparable to previous research where the best places were matched to firms not on the list (Simon and DeVaro, 2006; Fulmer et al, 2003; Filbeck and Preece, 2003). The difference is that the previous research used financial data (i.e., annual sales, revenue, etc.) as the final deciding match criterion because those research efforts focused on financial issues. The result was a list of 300 companies (150 pairs) matched by industry type, ownership type, and employee number. Independent samples t-tests confirmed the non-difference in employee numbers between best places to work and the comparison list. Large best companies were adequately matched based on employee numbers (p = 0.16). A match for the best small and medium companies were also adequately found (p = 0.81). The p-values (p > 0.05) indicate that the paired companies' employee numbers were not significantly different.

Measures of safety performance and safety commitment that could be located from publicly available sources were utilized as data. Data came from governmental websites, company websites, professional associations' directories, and publicly available publications. The variables collected for this research were: Voluntary Protection Program participant status; number of total OSHA inspections; number of OSHA inspections due to complaints and accidents; number of OSHA violations; number of OSHA violations classified as repeat, willful, and serious; dollar value of OSHA fines; number of ASSE members in the organization; and number of Certified Safety Professionals in the organization. Analysis of the data for each variable was made as pairs; only when data was available on at least one of the two paired companies were both companies included in the data analysis. In the results section, for example, consider the category "# of OSHA inspections due to accident or complaint". Sixty-five pairs were reported in the data; this means that 85 paired companies in the dataset reported zero OSHA inspections due to accident or complaint. This decision was made to ensure adequate comparison to maintain an equal number of best companies and matched companies in the analysis.

Voluntary Protection Program participant

In OSHA's Voluntary Protection Program (VPP), management, labor, and OSHA establish cooperative relationships at workplaces that have implemented a comprehensive safety and health management system. Acceptance into VPP is OSHA's official recognition of the outstanding efforts of employers and employees who have achieved exemplary occupational safety and health (OSHA, 2007). VPP and Great Place to Work are both self-selected programs that recognize exemplary achievements. We searched the VPP list from the OSHA web site dedicated to VPP companies for VPP status among the GPTW companies and their matched company.

<u>Hypothesis 1:</u> The best companies are more likely to be VPP participants compared to their peers not on the best companies list.

OSHA Citations

Citations for each firm and their subsidiary were found using OSHA's inspection search data. We used five years worth of data (July 1, 2002 – June 30, 2007). Only closed cases were included. Each firm was searched using the various firm names and any known subsidiaries. Because most OSHA inspections are programmed, there is no directional hypothesis associated with the number of OSHA inspections between the Best Companies and their peers. However,

OSHA also conducts inspections due to employee complaints and accidents. Employee complaints to regulatory agencies are a sign of a communication breakdown or a lack of trust within the organization and would not be indicative of a best place to work (Marrewijk, 2004). Best places to work are likely to have effective communication mechanisms for safety issues to be brought forth by employees, a system in place to resolve the situation, and a feedback process. Serious accidents can also be detrimental to employee morale in both the short term and the long term.

Violations that are more critical (willful, repeat, and serious) are not likely to be present in workplaces that are the best places to work. An organizational culture that allows these types of violations to occur is indicative of a low level of respect which would have a negative impact on employee morale (Marrewijk, 2004). Along the same lines, and because there would be less overall violations and they would be less severe in the best places, the total amount of OSHA fines would also be lower among the best places to work. Clarke (2006) makes the case to encourage employers to appeal any and all OSHA citations to reduce long-term OSHA liability. Therefore, data collection included initial and current status whenever possible to see if the best companies are somehow different from their peers in negotiating the elimination or reduction of fines and citations.

<u>Hypothesis 2:</u> The best companies will have fewer OSHA inspections due to complaints and accidents compared to their peers not on the best companies list.

<u>Hypothesis 3:</u> The best companies will have fewer OSHA violations (initial and current) compared to their peers not on the best companies list.

<u>Hypothesis 4:</u> The best companies will have fewer OSHA violations categorized as willful, repeat, and serious (initial and current) compared to their peers not on the best companies list.

<u>Hypothesis 5:</u> The best companies list will have smaller OSHA fines, measured in dollars, (initial and current) compared to their peers not on the best companies list.

Staff – Society Membership and Certification

Staffing of the safety function with educated and trained personnel is vital to the long-term safety success of an organization. The ASSE is the oldest and largest professional safety organization and has more than 30,000 members (ASSE, 2007). The ASSE has a website that allows membership directory searches by company name. We searched both for the name of the company and its subsidiaries to find ASSE members among the best places to work and the matched firms.

One of the most recognized accredited safety credentials in the world is the Certified Safety Professional (CSP) designation administered by the Board of Certified Safety Professionals (BCSP) (Camplin, 2008). Sixty-five percent of CSPs are ASSE members (Wilkerson, 2009). The BCSP also has a searchable directory by employee name, but not by company name. A search was conducted for CSP's in each firm by using the names of ASSE members in that firm. Each ASSE member was individually searched for within the CSP directory. Therefore, hypothesis 7 is written to include only those safety professionals who are both ASSE members and CSPs. We did not search for ASP, CHST, OHST or other certification.

Two insurance companies were on the best companies list. These firms and their matched pairs provide loss control services which are a function of their external business rather than their internal safety commitment. It could not be determined whether their staffing was for external or internal purposes. To account for that uncertainty, these four firms were not included in the ASSE member and CSP analysis.

<u>Hypothesis 6:</u> The best companies will staff more ASSE members compared to their peers not on the best companies list.

<u>Hypothesis 7:</u> The best companies will staff more ASSE members who are CSPs compared to their peers not on the best companies list.

Statistical Analyses

Each variable was assessed for normal distribution using the Kolmogorov-Smirnov test. None of the variables were normally distributed (p < 0.05). The nonparametric counterpart to the independent samples t-test, the Mann-Whitney U test, was utilized. This test examines the variables as ranks and tests difference between the two groups.

High and Low Risk Groups

All analyses were performed including all 150 matched pairs regardless of industry. It was observed that several industry groups within the data had less data than other groups. In other words, there were high and low risk groups within the dataset. A cluster analysis allows categories to be broken into similar groups based on a particular variable. The best variable available in this dataset to signify the difference between high and low risk firms was the number of OSHA inspections. See Table 1.

Results and Discussion

Results and data for each variable are shown in Table 2. Means are shown only to give the reader a sense of the data and to explore how the best companies compared to their peers; the data was not normally distributed and nonparametric statistics were used for the analysis. A level of significance of 0.05 was utilized.

Table 1: High and Low Risk Industry Groups.

| | Number of paired | Avg. # OSHA | Risk |
|----------------------|------------------|-------------|----------|
| Industry | companies | inspections | Category |
| Construction | 7 | 22.57 | High |
| Mining * | 1 | 14.50 | High |
| Hospitality | 5 | 7.20 | High |
| Manufacturing | 17 | 6.47 | High |
| Retail | 17 | 6.26 | High |
| BioPharma | 4 | 3.88 | High |
| Media | 6 | 1.67 | Low |
| Prof. Services | 28 | 1.39 | Low |
| Healthcare | 13 | 1.31 | Low |
| Education & Training | 1 | 1.00 | Low |
| Telecomm | 2 | 1.00 | Low |

| Information Technology | 14 | 0.86 | Low |
|------------------------|-------------|------------|-----|
| Finance & Insurance | 28 | 0.30 | Low |
| Electronics | 2 | 0.00 | Low |
| Advertising/Marketing | 5 | 0.00 | Low |
| | 150 (total) | 3.89 (avg) | |

• includes Mine Safety and Health Administration (MSHA) inspections

Table 2: Results – All companies.

| | Best Company or | Number of | | G · e |
|-----------------------------------|-----------------|--------------|----------|-------------|
| X7 2 - 1.1 - | Matched | companies in | M | Significant |
| Variable | Company | the analysis | Mean | p-value |
| # of OSHA inspections in the | Best Company | 150 | 3.22 | No |
| 5-year period | Matched firm | 150 | 3.85 | 0.202 |
| # of OSHA inspections due to | Best Company | 65 | 2.09 | Yes |
| accident or complaint | Matched firm | 65 | 3.54 | 0.023 |
| # of initial violations | Best Company | 150 | 3.23 | No |
| | Matched firm | 150 | 5.72 | 0.151 |
| # of current violations | Best Company | 150 | 2.80 | No |
| | Matched firm | 150 | 5.19 | 0.108 |
| # of initial serious, willful, or | Best Company | 52 | 4.88 | Yes |
| repeat violations | Matched firm | 52 | 8.52 | 0.008 |
| # of current serious, willful, | Best Company | 52 | 3.38 | Yes |
| or repeat violations | Matched firm | 52 | 6.48 | 0.006 |
| Total amount of initial penalty | Best Company | 58 | \$11,119 | Yes |
| | Matched firm | 58 | \$25,454 | 0.011 |
| Total amount of current | Best Company | 58 | \$5,402 | Yes |
| penalty | Matched firm | 58 | \$16,330 | 0.006 |
| Number of ASSE members in | Best Company | 55 | 4.24 | Yes |
| the organization | Matched firm | 55 | 1.84 | 0.001 |
| Number of CSPs in the | Best Company | 28 | 2.04 | Yes |
| organization | Matched firm | 28 | 0.89 | 0.001 |

Voluntary Protection Program participant status

<u>Hypothesis 1:</u> The best companies are more likely to be VPP participants compared to their peers not on the best companies list.

Of the 300 companies analyzed, only 6 were found to have VPP sites within their organization. Three came from the best companies and three came from the matched companies. Therefore, there is no relationship between best company status and VPP status. No statistical test was utilized.

OSHA Citations

The best companies group and the matched companies experience essentially the same number of OSHA inspections (p= 0.202). This result was expected as most OSHA inspections are the result of random inspections and simply having an inspection does not imply more or less employee

morale. However, it is hypothesized that the best companies will have fewer violations, fewer OSHA inspections due to accidents and complaints, and also fewer OSHA violations categorized as willful, repeat, and serious compared to their peers.

<u>Hypothesis 2:</u> The best companies will have fewer OSHA inspections due to complaints and accidents compared to their peers not on the best companies list.

Overall, best companies do experience fewer OSHA inspections due to complaints and accidents compared to their peers not on the best companies list (p=0.023). The best companies have effective mechanisms of communication and it apparently includes safety and health. Moreover, the best firms have fewer accidents that result in an OSHA inspection. However, interesting differences are found when analyzing the high and low risk industry groups separately. Among high risk industries, there was no difference in the number of OSHA inspections due to complaints and accidents between best places and their peers (p=0.410). Conversely, among low risk industries, there was a highly significant difference in the number of OSHA inspections between best places and their peers (p=0.001). The low risk best places had far fewer OSHA inspections due to complaints and accidents compared to the matching firms.

<u>Hypothesis 3:</u> The best companies will have fewer OSHA violations compared to their peers not on the best companies list.

The analysis showed that there were no significant differences between the best places and their peers in any of the six category breakdowns tested (All initial and current; high risk initial and current; low risk initial and current). See Table 3 for detailed p-values.

<u>Hypothesis 4:</u> The best companies will have fewer OSHA violations categorized as willful, repeat, and serious compared to their peers not on the best companies list.

Willful, repeat, and serious violations would be one signal of a breakdown in the safety management system and in communication such that the organization is unaware of their safety responsibility or does not care. These are not attributes of great places to work. Both the initial and current violations amongst all firms in the dataset were significantly different and supported the hypothesis [Initial (p=0.008) and Current (p=0.006)]. Among high-risk firms the data was also significant and supported the hypothesis [Initial (p=0.032) and Current (p=0.014)]. However, among low-risk firms, the results were not significant.

<u>Hypothesis 5:</u> The best companies list will have smaller OSHA fines, measured in dollars, compared to their peers not on the best companies list.

The results across all firms, high-risk, and low-risk firms were significant and supported the hypothesis. Best places have fewer violations (although not significant), fewer willful, repeat, and serious violations, and therefore have smaller monetary penalties when compared to their peers.

Table 3: Results, p-values – breakdown by high and low risk industry and all firms; Mann-Whitney p-values comparing high and low risk firms.

| Variable | High Risk | Low Risk | All ¹ |
|---|-----------|----------|------------------|
| # of OSHA inspections in the 5-year period | 0.665 | 0.074 | 0.202 |
| # of OSHA inspections due to accident or complaint | 0.410 | 0.001** | 0.023* |
| # of initial violations | 0.158 | 0.200 | 0.152 |
| # of current violations | 0.126 | 0.206 | 0.108 |
| # of initial serious, willful, or repeat violations | 0.032* | 0.053 | 0.008** |
| # of current serious, willful, or repeat violations | 0.014* | 0.109 | 0.006** |
| Total amount of initial penalty | 0.044* | 0.041* | 0.011* |
| Total amount of current penalty | 0.025* | 0.038* | 0.006** |
| Number of ASSE members in the organization | 0.003** | 0.004** | 0.001** |
| Number of CSPs in the organization | 0.001** | 0.480 | 0.001** |

^{*} denote a significant difference at the p <0.05 level between best places to work and their peers

<u>Hypothesis 6:</u> The best companies will staff more ASSE members compared to their peers not on the best companies list.

The results across all firms, high-risk, and low-risk firms were significant and supported the hypothesis. The best companies have more safety staff that are members of the American Society of Safety Engineers. Staffing the safety function with professionals who are members of the leading national safety society demonstrates that the employer recognizes the need for professionals who seek professional development, but it also demonstrates that the best places to work are staffing the function at a higher level than their peers. Because a certain level of safety is such an integral component and a necessity of being a best place to work, the results might seem surprising since these organizations may not need ASSE members on their staff any longer. However, these best places to work recognize the value of the safety professional in some aspect. That aspect might be going beyond compliance, although it is not evident in the VPP-status data. Going beyond compliance initiatives are not limited to VPP and it may be those non-OSHA compliance issues that have more an effect on employee morale and help to explain the differences on the Institute's question on "being a psychologically and emotionally healthy place to work". As stated earlier, such safety programmatic issues that would affect this construct might include wellness programs, workplace violence, and occupational stress.

<u>Hypothesis 7:</u> The best companies will staff more ASSE members who are CSPs compared to their peers not on the best companies list.

The result across all firms and high-risk firms were significant and supported the hypothesis. Among low-risk firms there was no difference between staffing of ASSE members who are CSP's between the best places and their peers. High-risk best places recognize that a higher level of safety expertise is necessary because of their industry and risk status. Thus, they view CSP certification as a necessity for safety staff. Low-risk best places firms, on the other hand, do not see the benefit of employing a CSP compared to their peers. The low-risk firms see the value of a

^{**} denote a significant difference at the p <0.01 level between best places to work and their peers

¹ As reported above in Table 2.

safety professional (see ASSE member only data above), but it is not necessary that the professional be a certified safety professional. This is an interesting finding and might explain the previous contention that safety professionals might be asked to take on larger responsibilities across all best places. For example, the best places, both high and low-risk, see the value in employing safety professionals, but only the high-risk best places need the safety specialist. This is an area for future research.

Conclusions

The results of this research demonstrate that occupational safety and health performance and management is a significant component of employee morale. A key aspect of this research is that the previous anecdotal claims are supported by this data. Organizations with high levels of employee morale have less OSHA inspections due to accidents or complaints, serious, willful, or repeat violations, and less monetary penalties. Moreover, these workplaces appear to have recognized the value of the safety professional. They staff their safety function differently than do comparison companies. They employ more ASSE members and for the high-risk industries, a greater number of Certified Safety Professionals.

The results also demonstrate that OSH performance can, and should, play a larger part in enhancing employee morale as companies seek to move from good to great. While beyondcompliance safety initiatives are an important factor in moving an organization from average to good, it is the psychological safety initiatives that appear to be a key component in moving an organization from good to great. Occupational safety professionals have opportunities for job enlargement in areas beyond the traditional function's scope in matters such as wellness program, workplace violence prevention, occupational stress minimization, off-the-job safety, and others. Recently, there has been discussion about the safety professional and job enlargement. At the 2008 ASSE Professional Development Conference, John Howard, NIOSH Director, and Edward Fouke, Assistant Secretary of Labor, encouraged safety professionals to seek ways to utilize their skill set in an expansive manner which contributes to the organization's value. The results of this study suggest that in the best places to work, ASSE members are getting involved in other aspects of human capital enhancement, for example wellness programs and other programs that make these companies the best places to work. This, combined with the other beyond compliance issues explained earlier, creates a situation where safety professionals are being sought in leading organizations not because of their technical safety expertise but rather because of their skill set in enhancing organizational resources. These results support the notion that maintaining a good safety management system can be a value-added function and that safety professionals play a key role in that endeavor. Future research should explore the role of the safety professional at the best places to work and how their safety skill set contributes to overall organization value.

Additional future research to advance the concepts presented here would include evaluating the best companies' safety and health management systems through case studies or other research endeavors. The comparison survey questions between the Best 100 and the Lower 100, provided by the Institute, are interesting data. A future study might be conducted between these companies that apply to be a best place to work to determine the safety and health management differences, and if they really are significant in moving a company from good (Lower 100) to great (Best 100). The support of the Institute in such a study would be necessary.

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