



HERO Industry Research Review

Safety Culture Intervention Case Study May Inform Potential Approaches to Culture of Health Interventions

Study Title: Improving Safety Culture Through the Health and Safety Organization: A Case Study

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Publication: Journal of Safety Research, Volume 48, February 2014, 7 - 17

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Study Overview

The influence of organizational culture is considered an important determinant of the success of health and well-being programs. While this study's focus was solely on safety culture, it provides insights on how interventions may influence a culture, which may relate to health and well-being programs. It is often assumed that a company's safety department is established, is a business priority, and is therefore part of the organizational culture. However, safety initiatives often compete with other business priorities such as production demands, which means companies find themselves trying to determine how to make safety a higher priority. Safety research that demonstrates how to do this successfully is minimal, creating the need for a validated, universal approach to building a culture that prioritizes safety. Although research is limited, it has been suggested that the priority of safety (e.g. safety culture) progresses as a result of supervisor actions related to safety, practices and performance of the Health and Safety Organizations (HSO) and Committees (HSC), and the importance of safety within an organization as perceived by the employees. The purpose of this study was to use the HSO and the HSC within one company to determine if increased safety interactions among the members of these groups with leadership, supervisors, and employees could improve the safety culture of the workplace.

Methodology

The study took place in an industrial plant made up of 275 employees and was executed over a two-year period, with several years of monitoring prior to intervention launch. Throughout the study, emphasis was placed on three main interventions:

1. HSC meeting processes to eliminate dull and inefficient meetings, including direct work with an advisor to develop problem-solving capabilities
2. HSO goal setting and feedback to educate on how to set regular safety performance goals and objectives
3. Safety representatives' commitment to establish unified representatives committed to safety

To analyze the intervention outcomes, several methods of measurement were incorporated throughout the study's lifecycle. It is important to note that because culture is difficult to measure, the authors relied on both quantitative and qualitative forms of measurement.

Measurement	Purpose
Documented HSO and HSC meeting minutes	Analyzed meeting effectiveness, including the number of meetings held and safety issues resolved
Danish Safety Culture Questionnaire	Evaluated workers' perception of how the HSO reacted when accidents occurred, safety training, how seriously safety feedback was received, and commitment of the safety representative
Safety-related interactions	Documented the number of interactions in which safety was mentioned or discussed within the organization, even if informal and brief
Interviews and questionnaires	Obtained employee attitudes about safety, climate of safety in the workplace, management commitment to safety, and unsafe behaviors being practiced by employees

Results

Overall, the author concludes that the intervention did influence safety culture. Specifically, the number of formal meetings doubled and safety issue resolution quadrupled. The employees' perceptions and satisfaction of safety increased, which was most likely a result of receiving feedback from their HSO, safety training, and newfound commitment from the organization's safety representatives. Significant increases were experienced in safety-related exchanges between supervisors, safety representatives and employees. Finally, senior management, including the CEO, demonstrated a greater commitment to

safety, and although injuries continued to occur on the job, fewer occurred, demonstrating movement in a positive direction. A summary of the study results is included in the table below.

Measured Outcomes	Baseline	Post Intervention
Unique safety issues discussed at HSC meetings	~20/yr	YR 1 = 62/yr YR 2 = 115/yr
Safety issue resolutions	2/yr	YR 1 = 32/yr YR 2 = 50/yr
Safety attitudes and satisfaction	Unsatisfied workers	Satisfied workers*
Exchanges delivered from the production manager	Minimal	1x/wk
Exchanges between the supervisor and safety representative	8	24* (58% increase)
Exchanges between the supervisor and workers	31	63* (41% increase)
Top management commitment to safety rating	2.91	3.09*
Lost time injuries	18/yr	YR 1 - 16/yr YR 2 - 12/yr

**statistically significant change detected*

Study Conclusions

Improving safety-related interactions positively impacted the safety culture within this organization. At the end of the two-year study, the HSC was able to better understand where accidents originated and developed preventive measures to avoid future accidents, improving company safety performance.

Overall, interactions between the HSO, supervisors, and employees increased through formal distribution of information (e.g. bulletin boards with safety meeting minutes), regular circulation of company-wide safety communication (e.g. company-wide safety column), visible management support (e.g. formal statements from the CEO), and safety performance as an agenda item at leadership meetings involving supervisors, production managers, and employees. Finally, the renewed commitment to safety from the safety representatives resulted in the development of weekly safety themes that were ultimately communicated to the employees as a directive from production managers.

Reviewer Commentary

The author stated three limitations of this study, each a result of its' real world setting: 1) the strategy did not align with common scientific standards (e.g. ability to statistically control for influencers), 2) the inability to isolate the effect of a single element within the intervention, and 3) the difficulty in measuring culture, causing the need to use mixed methods. Despite these limitations, this study reported a noteworthy impact that will not only benefit safety in regards to development and cultural change, but may also be applied to wellness. The smaller company observed in this study may be relatable to the ~250,000 manufacturing companies in the US that employ 500 employees or less. Despite the importance of statistically sound research interventions, company leaders are often more inclined to trust information that is relatable to their business, which may result in actual implementation. Therefore, the industry could benefit from a greater pool of real world studies.

There are several aspects from this study that could be utilized to enhance wellness culture:

- **Wellness committee purpose and processes:** Although companies are encouraged to establish a wellness committee, the makeup (e.g. members), purpose, and processes are often unclear. Companies with a wellness committee in place could leverage the makeup of the HSC (e.g. include supervisors), the outline of a formal meeting structure (e.g. 4/year), and the meeting discussion context (e.g. wellness related concerns with the intention to solve for problems) to strengthen the wellness committee.
- **Wellness champion network initiatives:** Companies committed to implementing a wellness champion network could rely on the safety representative process identified within this study. Specifically, ensuring that wellness champions are supported with a structured program that demonstrates unity across all aspects of the organization and encourages autonomy in initiating alternate initiatives.
- **Wellness culture survey:** Companies are often encouraged to assess the needs of employees prior to the implementation of a wellness initiative. In addition to needs, employers should leverage the intent of this study's Danish Safety Culture Questionnaire in order to understand the employee's attitude toward the company's healthy lifestyle offerings, including management support.
- **Leadership support:** Although it is becoming more common in wellness culture initiatives, the support of the C-suite, senior- and mid- level managers for wellness is critical to success. As seen

in this study, organizational leaders should be encouraged to regularly communicate the benefits and importance of wellness through formal statements.

Worth noting is that this article is one of the few culture change intervention studies that has been identified by HERO's Culture of Health study committee as part of a recent comprehensive review. Although it positively contributes to the literature, there is a need for more evidence to advance the health and wellness industry. As companies strive to build a culture of health in the workplace, total worker health – combining health protection and health promotion programs¹ – continues to surface as an opportunity for integration and future research. With the parallels between the interventions of this study and the initiatives underway to transform a company's culture of wellness, utilizing this study's approach for future studies focused on an integrated approach to health and safety could be ideal. Although complexities exist in examining culture of health, a combined safety and wellness culture intervention that incorporates both quantitative and qualitative measures would strengthen the evidence base that exists.

About the HERO Reviewer

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Colleen Saringer, Vice President, Wellness Consultant, works for Alliant Insurance Service's National Employee Benefits practices. Colleen is responsible for partnering with companies in the strategy, design, implementation, performance, and evaluation management of their corporate wellness programs. Colleen works to ensure that a company's wellness program is evidence-based and in line with industry best practices.

Colleen has worked in corporate wellness for over 15 years. She has a Bachelor's Degree in Health Education, Health Promotion and Sports Medicine from Bowling Green, OH; a Master's Degree in Exercise Science from Cleveland State University, OH; and a PhD in Exercise Psychology from Georgia State University. Colleen's research objective is to understand the influence of behavioral policies in the workplace as an integrated solution of a corporate wellness strategy. Although this interest extends beyond physical activity, Colleen's goal is to continue to elaborate on her doctoral study efforts, which were to understand the effect of a physical activity policy on adults in the workplace.

References

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