

HOW SENIOR LEADERSHIP BEHAVIOR INFLUENCES WORLD-CLASS SAFETY. Thomas R. Krause, Ph.D., Chief Executive Officer, Behavioral Science Technology, Inc., 417 Bryant Circle, Ojai, CA 93023

Introduction

For the past 20 years the author and his associates have been interested in developing methods for safety improvement. The majority of this work has been done at the site level working with employee-driven improvement processes. In the course of this work, and in studying those factors that distinguish organizations that are successful with these initiatives from those that are less successful and even from those that fail, the author has come to the conclusion that quality of leadership is the single most important distinguishing factor.

This brings into focus a critical performance question. How do we effectively influence the leadership behavior of senior managers in order to achieve world class safety? Answering this question requires addressing six areas that pertain to the role of leadership in safety performance and the compatibility of leadership with current improvement methods.

1) How is it that safety leadership assures performance improvement? We all recognize that organizational excellence requires leadership, but what does it mean to be a safety leader in practical terms?

2) Can safety leadership be defined in behavioral terms? Is it possible to approach safety leadership from a behavioral perspective?

3) Why should a senior leader be interested in safety? Some senior leaders are already motivated to improve safety for a variety of reasons, but it benefits us to consider what kinds of appeals can be made to senior leadership to give them reasons and justification for the level of interest that we want from them.

4) What does a zero-incident safety culture look like? These days we hear from a variety of companies, and leaders, that achieving a “zero-incident safety culture” is an objective. What would the day-to-day lives of employees at various levels in the organization be like, and how would they differ from the day-to-day lives of employees in the cultures that we actually live in?

5) Are there best practices in safety leadership? Is it possible to define in behavioral terms a set of practices that senior safety leadership should engage in to shape the kind of safety culture that we are looking for? What kinds of behaviors and practices would be appropriate for that kind of culture?

6) Is safety leadership subject to the same principles of behavioral science as that of front-line employees and supervisors? If we are interested in influencing the behavior of the senior leader concerning safety, we need to understand what the factors are that drive that behavior. Are these the same factors that drive behavior generally, as with front-line employees and supervisors, or are there different factors involved for senior leadership?

The purpose of this paper is to answer the six questions outlined above.

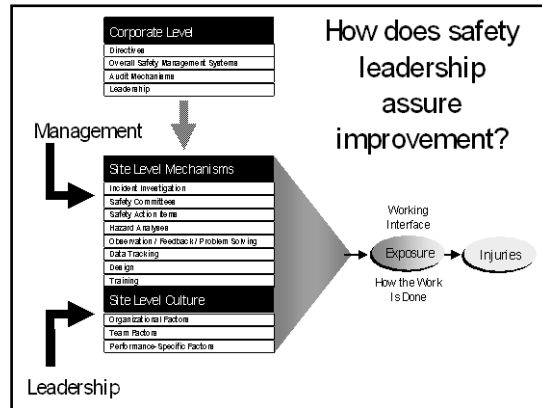


Figure 1. How does safety leadership assure improvement?

How Safety Leadership Assures Improvement

Let’s start by looking at the big picture concerning how an organization wishes to influence positive safety performance. In particular we are interested in the role of safety leadership to assure that performance. How is it that safety leadership assures performance improvement?

Safety leadership begins at the corporate level where directives and objectives are set. The corporate level recommends safety management systems and some number of site safety improvement initiatives, typically 8 to 12 kinds. In addition, the corporate level usually provides an audit mechanism for the sites to determine how well they are doing. At the site level these mechanisms include things such as incident investigation, safety committees, safety action items, hazard analysis, behavior observation and feedback, and problem solving, data tracking, etc.

Interestingly, most companies have discovered that two sites can have identical audit scores of their site-level safety improvement mechanisms, including identical or near-identical technology and similar workforces, and yet very different incident frequency rates. What accounts for this?

Just knowing about the strength of site-level mechanisms is not sufficient for determining the amount of exposure that will occur and the numbers of injuries likely to follow. In order to understand the big picture, we need to understand site-level culture.

By organizational culture we mean essentially “how we do things around here,” that is, the shared common values and behaviors of the organization with respect to safety. A related concept is safety climate, which denotes the atmosphere created by the organization around safety. Later in this paper we will look more specifically at the elements that define site-level safety culture, but for now let’s consider the role of management and leadership in relation to site-level safety improvement mechanisms and site-level culture. First, it is critical to distinguish management from leadership. Essentially, by management we mean “what gets done”, and by leadership we mean “how it is done.” Management influences site-level safety improvement mechanisms while leadership influences site-level organizational safety culture. Management’s task is to see that site-level safety mechanisms are in place, that they are done adequately, in a timely fashion, and so forth. Leadership’s task is to shape and influence the culture. That is, to

create a climate or set of conditions such that organizational norms and consistent behaviors create the right kind of safety environment.

Can Safety Leadership Be Defined in Behavioral Terms?

In order to connect safety objectives to safety outcomes, leaders perform critical behaviors, such as challenging assumptions, describing a safety vision, and providing feedback to other leaders on performance. This does not mean, however, that good leadership is always easy to develop. Senior leaders often don't know which of their behaviors are critical to safety success. They may not understand operations issues or basic safety concepts. In addition, senior leaders may have little or no knowledge of the relationship between cultural issues and safety performance.

Why Should a Senior Leader be Interested in Safety?

We assume that organizational leaders will be interested in safety because of their human compassion. No one wants to see an employee injured. However, we also observe significant variability from leader to leader. Some leaders are more effective in leading the organization around safety issues than others, even when most leaders are similarly compassionate.

This causes us to consider how we can appeal to the senior leader in such a way as to make safety a desirable objective and activity. We want to be able to give them as many reasons and as strong a motivation as possible to become excellent safety leaders. One very strong reason is the foundational role safety plays in the performance of the organization generally.

Consider the common performance objective of employee engagement. We want employees to be fully engaged, not only physically but also psychologically and intellectually. We want employees to contribute with their greatest potential. We want their ideas, their innovation, and, in some instances, their discretionary time. We want employees to be active, ongoing contributors in how we work and how we do it safely.

In order to do that the employee needs a sense of safety and security as a foundation. If employees are concerned for their own physical safety in the workplace how can we expect that they will develop the capacities outlined above? How will they be able to contribute to the extent that we want them to? It's in this sense that safety is foundational.

In the same way that safety is foundational to the performance of the individual it is also foundational to the performance of the organization. Employees perform better in teams and individually when they have a sense that the larger organization is concerned about them in general. One way to convey this sense of concern is by making the workplace safer. When the workplace is perceived as unsafe we actually convey, whether we intend to or not, just the opposite. When we demonstrate the care of the organization for the employee we in turn generate a sense of unity and engagement that leads to higher organizational performance. In fact, if our task is to improve the overall organizational culture, safety is an ideal place to start because it is highly visible, it has obvious meaning, it is relatively easy to get people to buy-in to and it sets the tone for other kinds of general performance improvement.

Some leaders will take the ideas above at face value. Others will question whether safety and productivity or safety and quality are not in fact a trade-off. The lower-level manager or supervisor, especially, may be inclined to see these things as in competition with each other. This person asks, “If you want me to improve safety that means I will have to add additional resources. From what area do you want me to take these resources?” Explicit in this question is the idea that safety functions independently of productivity, quality or other performance areas. In fact, experience shows safety and productivity often go hand in hand. Many organizations report that those locations that are highest functioning in general measures of productivity, quality, etc. are also the best at safety.

What Does a Zero-Injury Culture Look Like?

More and more organizations are talking about and striving for a zero-incident or injury-free safety culture. Many senior leaders have heard this phrase and have understood its meaning and taken it on as an objective. Some have a clear-cut vision of what a zero-incident safety culture really looks like. More often the vision is somewhat blurred, but the general idea is quite appealing. If you ask senior leaders what they mean by zero-incident safety culture they mean an organization that has a high value for safety and that has very low incident frequency rates. At the same time other leaders, given the opportunity to be straight forward in their views, will say that it would be nice to have a zero-incident safety culture, but in reality some number of incidents are inevitable and that it is overly optimistic to think that injuries can be eliminated all together.

What would an organizational culture look like that had zero injuries, or what would an injury-free culture be characterized by?

The author and his associates became interested in this question a number of years ago and did extensive research in the literature concerning organizational safety culture. We looked at a great number of studies that examined this question and narrowed the field down to 50 that presented empirically supported data on aspects of the safety culture that could be shown statistically to predict incident frequency rate. Through this work we found nine factors that characterized a high-performing safety culture. In our view, a zero-incident safety culture would be one that scored very high on each of the nine factors.

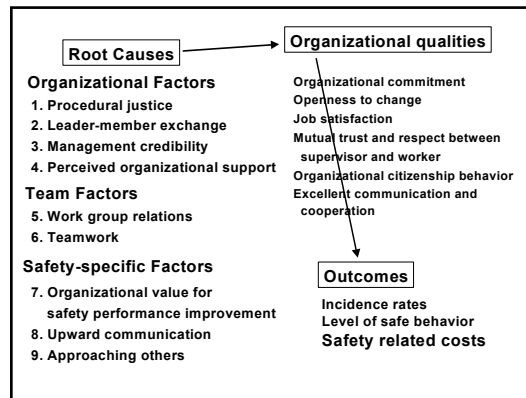


Figure 2. Nine Factors.

Figure 2 illustrates the nine factors. Note that factors 1 through 6 are generic, referring to organizational performance generally, and factors 7, 8 and 9 are particular to safety.

As Figure 2 shows we're interested in specific safety outcomes such as incident rate, level of safe behavior, and safety-related costs. We know that a list of organizational qualities predict these outcomes. Things such as organizational commitment, openness to change, level of job satisfaction, level of trust and respect between supervisors and workers, and so forth, predict positive safety outcomes. What we don't know is where these organizational qualities find their roots. What is it about Organization A, which is high in these organizational qualities and has good safety outcomes, that distinguishes it from Organization B, which is low in organizational quality and related safety outcomes. The nine factors shown here are the factors that distinguish these organizations from each other and that are the roots of the organizational qualities that lead to positive safety outcomes.

In this paper we will briefly describe each of the nine factors that predict positive safety outcomes.

1. **Procedural Justice.** This refers to the extent to which the individual worker perceives fairness in the supervisors' decision-making process. As a worker I'm concerned that decisions having an effect on me are made fairly, that is, on the basis of merit and good data rather than on prejudice or personal preference.
2. **Leader Member Exchange.** This scale refers to the relationship that the employee has with his or her supervisor. In particular, this scale measures the level of confidence that employees have that their supervisor will go to bat for them, look out for their interest and things of that kind. If I believe that my supervisor is not inclined to take my interest into account and represent me in the organization, I would contribute to low scores on this variable. If I think that my supervisor will take active steps to look out for my interest, I would contribute to a higher score.
3. **Management Credibility.** This refers to a perception by the employee that the things that management says are consistent with the things that management does. I find management believable and credible.
4. **Perceived Organizational Support.** This refers to the perception of the employee that he or she receives the support needed to accomplish the objectives of the organization. I may understand as an employee that the organization wants to improve safety, but I may not perceive that I am given the support necessary to do that.
5. **Workgroup Relations.** This refers to how well I get along with the people I work with. To what degree do my co-workers and I treat each other with respect, listen to each other's ideas, help one another out, and follow through on commitments made?
6. **Teamwork.** This refers to the extent to which I perceive that working with my team members is an effective way to get things done. These two factors, five and six, are related, but slightly different. The first factor, Workgroup Relations, has more to do with whether I enjoy working with and interacting with the people in my workgroup, whereas

Teamwork has more to do with the extent to which I think we are effective working as a team. (I could enjoy working with people, but not think we are able to get much done together. Or conversely, I could think that we are able to get quite a lot done together, but I don't particularly enjoy the process).

7. Organizational Value for Safety Performance Improvement. Scale 7, 8 and 9 are specific to safety performance. This scale measures the extent to which the employee perceives the organization has a value for safety performance improvement. Is it something people just talk about, or is it something people seriously give value to? The more I perceive that the organization values safety goals, the more willing I will be to invest in those goals myself.
8. Upward Communication. This factor refers to the extent to which communication flows freely upward through the organization. As a worker am I able to speak to my supervisor freely about safety issues and concerns? Are the supervisors able and willing to speak frankly to their own managers about safety concerns?
9. Approaching Others. This factor refers to the extent to which employees feel free to speak to one another about safety concerns. If I see co-workers engaging in at-risk behaviors am I willing to speak with them about it?

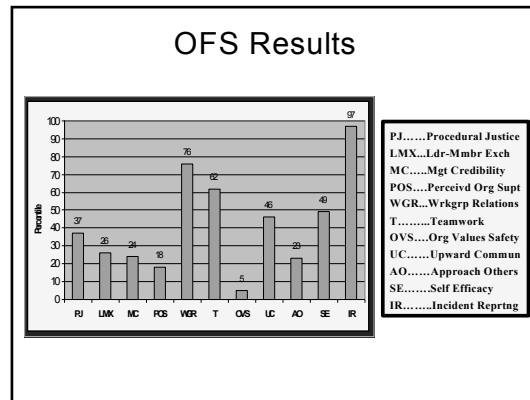


Figure 3. Results of an Organizational Functioning Survey.

As illustrated in Figure 3, these nine factors can be measured and expressed as percentile scores contrasting one organization with many others. This yields a profile that can be quite valuable to the organization for understanding the specifics of its organizational safety culture. In the case of the organizational safety culture shown in Figure 3 there are relatively low scores on all of the organizational factors and a very low score on organizational value for safety as well as approaching others. The teamwork scales are relatively high. Taken together this would suggest that people in this organization enjoy working together and are quite effective working in teams, but they do not perceive a strong value for safety within the organization, and that they do not feel the support or encouragement and do not see the organization as credible or fair in general. They are also not likely to talk to each other about safety concerns. Interestingly, this is an organization whose senior-most leader is very dedicated to safety improvement, and who has challenged the organization to move towards an injury-free culture. Their incident frequency rate

is quite low numerically, but still above average for their industry. It is apparent from this data that the organization's leadership is not getting a consistent message through the organization down to the worker level.

Best Practices and Safety Leadership

In working with many companies over the years we have found that certain management and leadership practices recur across those organizations that have outstanding safety performance. In this section we will outline what these key management practices and safety leadership practices are.

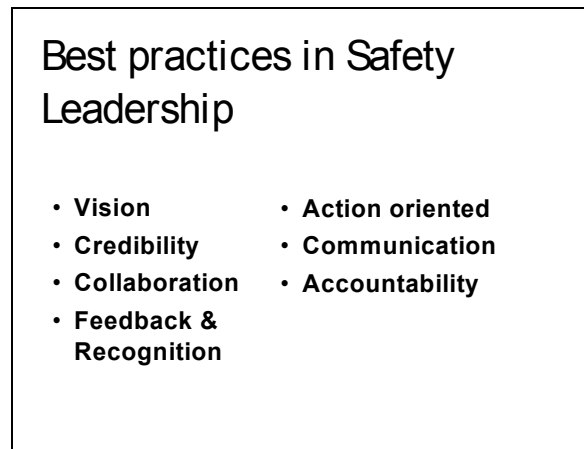


Figure 4. Best practices in Safety Leadership.

Vision

Safety leadership starts with vision. This means that the senior-most executive in the organization needs to be able to “see” what safety performance excellence would look like in that organization. (“Organization” here could refer to the entire company, a division or a site, and the leader and his or her reports would make up the leadership team for that organization). In addition to having a vision for safety excellence the safety leader needs to convey that vision in a way that is compelling. Being able to get that vision across to other members of the organization is done through word, but more importantly through action. This includes demonstrating a willingness to consider and accept new ideas and helping people to consider the impact of their actions on the safety of others. In addition this means being able to challenge and inspire people around the safety vision and values, and describing a compelling picture of what the future could look like when safety is fully realized.

Credibility

The excellent safety leader is credible to other people in the organization. When the safety leader says something other people believe him or her and do not question the leader's motives or understand them to be giving mixed messages. Being credible means being willing to admit one's mistakes to others, going to bat for direct reports, and representing and supporting the

interests of the group with the higher management. It also means giving honest information about safety performance even if it is not well received, asking for ideas on how improve one's own performance, acting consistently in any setting and applying safety standards uniformly.

Collaboration

By collaboration we mean working well with other people, promoting cooperation and collaboration in safety, asking for and encouraging input from people on issues that will affect them, helping others resolve safety-related problems for themselves, and encouraging others to implement their decisions and solutions for improving safety.

Feedback and Recognition

The excellent safety leader is good at providing feedback and recognizing people for their accomplishments. This person publicly recognizes the contributions of others, uses praise more often than criticism, gives positive feedback and recognition for good performance and finds ways to celebrate accomplishments in safety.

Accountability

The excellent safety leader gives people a fair appraisal of the efforts and results in safety, clearly communicates people's roles in the safety effort, and fosters the sense that people are responsible for the level of safety in their organizational unit.

Communication

The excellent safety leader is a great communicator. He or she encourages people to give honest and complete information about safety even if the information is unfavorable, keeps people informed about the big picture in safety, and communicates frequently and effectively up, down, and across the organization.

Value Safety

The excellent safety leader acts to support safety values and principles. This person leads by example regardless of position, title, or role in an organization, and he or she clearly communicates to employees that safe behavior in operations are expected.

Action Oriented

The excellent safety leader is proactive rather than reactive in addressing safety issues. This leader gives timely, considered responses for safety concerns, demonstrates a sense of personal urgency and energy to achieve safety results, and demonstrates a performance-driven focus by delivering results with speed and excellence.

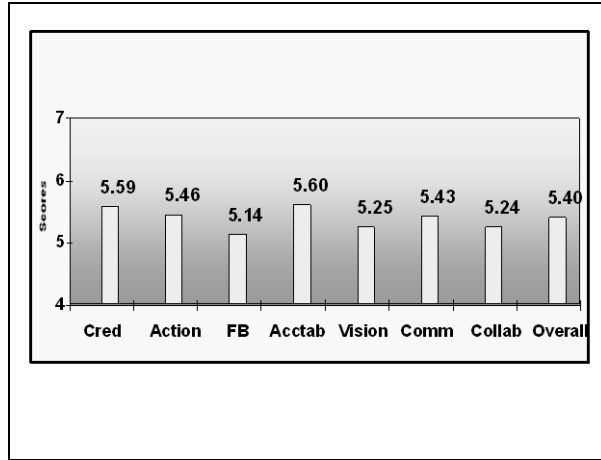


Figure 5. Survey results.

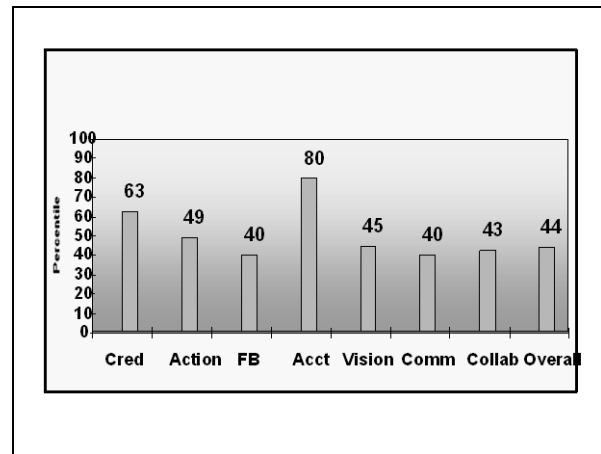


Figure 6. Survey results.

These leadership attributes can be measured with a 360-degree feedback instrument. This allows comparisons with other safety leaders so that the individual can identify strengths and improvement opportunities. Figures 5 and 6 illustrate typical survey results reports.

Are Safety Leadership Behaviors subject to the same principles as front line employee or supervisory behavior?

Yes, the principles that govern the behavior of senior leadership are identical with the principles that govern the behavior of front-line workers and supervisors. Doing the right things to influence that behavior may vary quite differently from the senior leader to the manager, supervisor or front-line employee. Senior leaders are often highly motivated, not very resistant to change, and the tasks before them are frequently highly enabled. However, getting safety leadership to perform the right behaviors encounters the same kinds of difficulties that are encountered in any type of behavior change, as seen in Figures 7, 8 and 9. The short-term consequences for not performing the senior leadership safety behavior are often soon, certain and positive while the long-term effects of failing to engage in these behaviors may be difficult to detect. For this reason individuals may be motivated by short-term positive consequences such as

convenience, saving time, not having to confront issues that are difficult, avoiding boredom and irritation, getting other work done, and maintaining the illusion of good safety performance.

A	B	C	
Other priorities	Failure to spend adequate time on safety activities	Injury	L U -
Putting out fires		Negative FB	S/L U -
Other people's job		Get other things done	S C +
No one else does		Avoid discomfort	S C +
Lack of training		Maintain illusion of good safety performance	S C +
Lack of focus			
Too far from day-to-day safety issues			
Fear of demands I can't meet			

Figure 7. ABC Analysis.

At the same time, senior leadership safety-related behavior is susceptible to soon, certain and positive feedback like any other kind of behavior. When senior leaders have a clear understanding of what critical behaviors are important for them to perform, and how they are related to the end point objective which is desired, the stage is set for the right behaviors to occur. Some method of providing feedback is necessary and in the course of gathering data about senior leadership safety behavior barriers will often emerge that previously went undetected.

A	B	C	
Not available	Failure to read all incident reports on a timely basis	Make uninformed decision	L U -
I'm Traveling		Miss a prevention opportunity	S/L U -
In a hurry		Unpleasant surprise	S/L U -
No one else does		Get other work done	S C +
Trivial & Boring		Save time	S C +
Priority		Avoid boredom and irritation	S C +

Figure 8. ABC Analysis.

A	B	C	
Not available	Failure to wear face shield	Injury	S U -
Peer pressure		Reprimand	S/L U -
In a hurry		Saves time	S C +
No one else does		Comfort	S C +
Lack of training		Convenience	S C +
Time of day		Peer approval	S C +
Scratched / dirty		Better vision	S C +
Risk perception			

Figure 9. ABC Analysis.

Conclusion: Leadership for the Future

As the business climate continues to change, it is critical that we think beyond traditional safety management paradigms that limit leadership activities to detached “prescribe and allocate” roles. Successful organizations are demonstrating that active safety leadership is not only definable, it is also effective. Leaders who harness this knowledge stand to gain significant improvements in safety and at the same time build a foundation for other kinds of organizational excellence.

BIOGRAPHY

Thomas R. Krause, Ph.D., CEO and Co-Founder of BST, is a licensed psychologist who has conducted research and interventions in the use of performance improvement methods for accident prevention, quality improvement, leadership development, and other targeted applications. Dr. Krause has overseen more than 1,500 implementations of employee-focused solutions worldwide in a variety of industries. A professional member of ASSE’s Valley Coastal Chapter, Krause is the author/coauthor of several books and numerous articles. He earned his Ph.D. from the University of California, Irvine.