Improving Safety Leadership

*Using industrial/organizational psychology
to enhance safety performance*

By Joshua H. Williams

SAFETY PROFESSIONALS ARE charged with reducing employee injuries and promoting a strong safety culture within their organizations. To achieve this, they must gather and apply information from many sources, including psychology. In fact, much information has been gleaned from one of the most powerful and proven subdisciplines in psychology, applied behavior analysis.

Little existing research in the safety field draws from industrial/organizational psychology (IOP), however. This is unfortunate because IOP has been extensively used in other organizational improvement efforts, such as employee selection, job placement, team building, performance management, executive assessment, leadership and training (Cascio; Saal and Knight 1995).

To become optimal safety leaders, safety professionals should look to IOP as a supplement to behavior analysis. This article explains what IOP is and examines its impact on safety leadership. The styles and behaviors of optimal safety leaders are reviewed, as are motivational styles that predict good safety leadership. In addition, specific guidelines to motivate employee safety and guidance on increasing employees' organizational commitment are offered, along with tips for improving organizational safety culture.

Explaining IOP

For the past century, IOP focused on the selection and placement of individuals in organizational settings. Viteles helped define the field by clarifying, "In formulating a program of industrial psychology the maximum efficiency of the individual in industry and his optimum adjustment are looked upon as complementary facets of a single objective" (Saal and Knight (1988) 10). That objective is improved

organizational performance—including safety, quality and productivity.

During World War I, IOP researchers developed and administered the Army Alpha and Beta intelligence tests to more than 1.75 million soldiers. These tests were used to place enlisted soldiers in specialized areas where their talents would be best used (e.g., officer training school). These researchers also developed specific, objective criteria for job performance evaluations that were used to select and promote officers. During World War II, IOP researchers focused on personnel training, instead of selection and placement. Situational stress tests were conducted to better prepare soldiers for the intense distress and frustration of combat. This included flight simulator assessments of fighter pilots (Buckley; Cohen).

Today, IOP is primarily used in the selection, placement, training and development of individuals in organizational settings in order to improve productivity, quality and safety (Cascio). This article addresses organizational training and development, with the primary focus on improving safety leadership.

Optimizing Safety Leadership

Despite current trends that encourage managers and executives to stress worker participation and teamwork in order to tap into human creativity and ingenuity (Saal and Knight (1995) 4), heavy-handed, fear-driven management styles still pervade much of the organizational landscape (Geller and Williams). The end result is low employee morale, high turnover, apathy, low job satisfaction and cynicism. For safety professionals, this can impede implementation and maintenance of sound safety

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initiatives. Improving leadership skills among safety professionals increases the likelihood of successful implementation of safety improvement efforts, improved safety culture and reduced injuries (Geller and Williams).

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Leadership Styles

1) Legitimate power.
2) Reward power.
3) Coercive power.
4) Expert power.
5) Referent power.

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Effective Leadership Styles

The first (and best known) IOP classification system for leadership styles comes from French and Raven, who believed the best leaders use a combination of the following five leadership styles:

1) **Legitimate power** stems from employee recognition that certain people have the appropriate organizational position to lead others (e.g., supervisors). When using legitimate power, good safety leaders:

•exercise authority consistently to increase credibility and promote perceptions of fairness;

•do not remind employees of differences in organizational levels;

•communicate with employees in a confident, respectful manner;

•actively listen to employee concerns and take corrective action to make improvements (Saal and Knight 1995).

2) **Reward power** means leaders have the authority and resources to administer valued rewards or to help others obtain desired outcomes. Examples include controlling incentives and providing exemplary performance evaluations. One effective (and underused) form of reward power is sincere, personal praise from a respected leader. When using reward power, good safety leaders should consider several guidelines.

•Safety rewards should focus on proactive, process-oriented behaviors and activities instead of outcome numbers (e.g., OSHA recordables).

•Rewards should be symbolic of safety achievement. Safety shirts, plaques and certifications may hold more meaning for safety than financial incentives. Employees should help select the rewards.

•Financial incentives may create a sense of entitlement among employees, making the incentives difficult to eliminate. In addition, incentives based on injury data may lead to injury underreporting.

3) **Coercive power** represents a leader's authority to impose penalties for noncompliance. In most cases, reward and recognition are significantly more effective than punishment in motivating optimal long-term performance (Saal and Knight 1988). Excessive use of punishment creates resentment among employees and damages an organization's overall culture. When coercive power is required, several factors should be considered.

•Provide sufficient warning before resorting to punishment. If punishment must be used, administer it promptly and consistently.

•Stay calm and neutral when applying punishment. Never use it for retaliation or make it personal.

•Ensure that other organizational systems do not encourage noncompliance.

•Treat employees with dignity and respect.

4) **Expert power** involves the ability to meet organizational objectives and goals. Technical knowledge and relevant experience, particularly if it is rare in the organization, are components of expert power. Effective leaders exhibit expert power when they:

•promote an image of expertise and credibility;

•act confidently and decisively, even in difficult situations;

•stay informed and current, especially with technical knowledge and safety research;

•provide employees leading-edge education and training.

5) **Referent/charismatic power** involves employee feelings of similarity to and liking of the leader. This powerbase relies primarily on interpersonal relationships, and less on authority, rewards, punishment or task knowledge (Bass). When using this power, leaders:

•impart an extreme vision, a message that breaks away from the ordinary;

•use bold, unconventional techniques to accomplish group goals;

•make one-on-one appeals to employees in order to achieve organizational objectives;

•communicate with passion and enthusiasm.

Effective safety leaders use a combination of all five leadership styles to motivate and influence employees.

Effective Leadership Behaviors

Seminal IOP research at Ohio State University yielded an instrument called the Leader Behavior Description Questionnaire (LBDQ) (Saal and Knight 1995; Yukl). The researchers who developed the LBDQ viewed leadership as a set of behaviors, not personalities. In terms of leadership, the emphasis was on training specific, desired behaviors instead of "finding" natural leaders. The following 12 items represent general behavioral categories from more than 1,800 specific leader behaviors originally used in development of the LBDQ. By demonstrating these behaviors, safety professionals can improve organizational safety culture and reduce injuries.

1) **Consideration.** The leader regards the comfort, well-being, status and contributions of followers.

2) **Initiation of structure.** The leader clearly defines his/her own role and lets followers know what is expected.

3) **Representation.** The leader speaks and acts as a representative of the group.

4) **Demand reconciliation.** The leader reconciles conflicting organizational demands and reduces disorder in the system.

5) **Tolerance of uncertainty.** The leader is able to tolerate uncertainty and postponement without anxiety or upset.

6) **Persuasiveness.** The leader uses persuasion and argument effectively; s/he exhibits strong convictions.

7) **Tolerance of freedom.** The leader allows followers scope for initiative, decision and action.

8) **Role retention.** The leader actively exercises the leadership role rather than surrendering leadership to others.

9) **Predictive accuracy.** The leader exhibits foresight and the ability to predict outcomes accurately.

10) **Production emphasis.** The leader applies pressure for productive output.

11) **Integration.** The leader maintains a closely knit organization; s/he resolves intermember conflicts as they arise.

12) **Influence with superiors.** The leader maintains cordial relations with superiors, has influence with them and is striving for higher status.

Self-Motivation Styles of Effective Safety Leaders

Safety leaders must also motivate employees to exhibit optimal safety performance. This can be a challenge because shortcuts often make a task faster, more comfortable and more convenient than completing it in a safe manner (Geller and Williams). Before discussing ways for safety leaders to motivate employees, their self-motivation styles should be considered, since some styles are more effective than others in accomplishing organizational goals.

Four self-motivation styles (adopted from Murray's needs theory) are relevant to this discussion (Saal and Knight 1988).

1) **Need for Affiliation (nAFF).** Leaders high in nAFF are motivated by group cohesion and healthy interpersonal relationships. They often attend to the emotional needs of others and have a strong desire to be liked by individuals in their cohort.

2) **Need for Achievement (nACH).** People with high nACH take responsibility for solving problems, are often competitive and are concerned with successfully completing their tasks.

3) **Need to Avoid Failure (nAF).** Unlike nACH individuals, those high in nAF typically avoid challenging tasks and are drawn to tasks that are simple in order to ensure success—or so difficult that failure can be blamed on the nature of the task, not personal skill.

4) **Need for Power (nPOW).** People high in nPOW are motivated to exert influence over their environment. This category is broken into the need for personal power (i.e., controlling others is an end in and of itself) and the need for institutional power (controlling others for the good of the institution).

Effective leaders are typically high in nAFF, nACH and nPOW (for institutional power) and lower in the need for personal power and nAF. IOP research demonstrates that many effective leaders are especially high in the need for institutional power (Saal and Knight 1988). Employees are likely to understand that safety professionals with a high need for institutional power are protecting the organization's greater good by developing safety rules and regulations, implementing new safety initiatives, providing safety education and training (and even spearheading disciplinary procedures).

Motivating Employee Safety

Effective safety leaders motivate employees to perform tasks in a safe manner, even when shortcuts are more comfortable, convenient and faster (Geller). Understanding expectancy theories of motivation can help safety professionals in this area.

Expectancy models of motivation help explain the pursuit of certain outcomes and objectives, including improved safety performance. One such model is:

$$V_j = f\sum_{K=1}^{n}(V_k I_{jk})$$

where:

V_j = **valence of the outcome**
I_{jk} = **instrumentality of outcome j for attaining outcome k**
V_k = **valence of outcome k**
n = **number of outcomes**

In this model, employees will only work toward a given outcome if the result is valued (i.e., valence) and employees believe (i.e., instrumentality) that they can achieve the outcome and that its attainment increases the probability of attaining other positive outcomes (Yukl).

In industrial safety, the desired outcome is 100-percent safe work practices (to reduce the chance of injury). The first step is for employees to make the connection between safe work behaviors and the reduced chance for injury; this may occur through proper education and training. Next, employees must believe environmental factors allow for safe behaviors. Many factors may cause employees to believe they cannot achieve 100-percent safe work practices; these include outdated equipment, lack of operating space, excessive production pressure, inadequate hands-on training and peer pressure to take shortcuts (Geller and Williams).

When employees believe that they can perform their jobs 100-percent safe—and that doing so reduces the chance of injury—they will operate more safely more often. Safety leaders must also provide more positive recognition for safe work behaviors (Williams and Geller). This further reinforces employee commitment to perform tasks in a safe manner.

The Safety Leader's Role in Increasing Organizational Commitment

Motivating employees requires organizational commitment. Employees who feel committed to the organization will more likely engage in safe work practices, provide feedback to others regarding safety and be involved in proactive safety initiatives.

Organizational commitment consists of: 1) strong support and acceptance of the organization's values

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Gauging Safety Culture

Effective safety leaders strive to improve and track safety culture. One way to do this is to survey employees' perceptions of management and peer support for safety, as well as personal responsibility for safety. By answering these questions, employees provide insight regarding what needs to be addressed.

Management Support for Safety
•Site management is more concerned about keeping injury statistics low than with truly keeping people safe.
•Site management is willing to invest money and effort to improve our safety performance.

Employee Support for Safety
•Employees in my work area caution each other about unsafe behaviors.
•Besides working safely myself, I am willing to do other things to help improve workplace safety.

Personal Responsibility for Safety
•When I see a safety hazard, I am willing to correct it myself if possible.
•I am willing to put forth a little extra effort to improve workplace safety.

Safety Management Systems
•The site uses a consistent procedure for dealing with employees who violate safety rules.
•When asked to perform a new job, I receive enough training to be able to do so safely.

and goals; 2) a willingness to exert considerable effort for the organization; and 3) a strong desire to remain in the organization (Saal and Knight 1995). The challenge to safety professionals is to find ways to increase organizational commitment.

According to IOP research, certain factors are strongly correlated with organizational commitment; these include perceived personal competence (r=.63); leader communication (r=.45); and job scope/variety (r=.5) (Saal and Knight 1995). Increasing these three factors will likely improve employee commitment to the organization—including its safety policies, procedures and initiatives.

Perceived Personal Competence

For most employees, feelings of competence extend beyond task fluency to involve sincere, personal recognition for one's ability and performance. This is particularly true with safety, where employees may work for extended periods without hearing one-on-one praise for their safe behaviors, activities and achievements. Therefore, employee feelings of personal competence can be increased by noticing, then praising safe work practices more frequently—and by providing corrective feedback when at-risk behaviors are observed.

Leader Communication

Effective safety leaders provide high-quality recognition to workgroups as well as individuals. This involves sincere, personal praise with prosocial behaviors, as well as nonthreatening corrective feedback when job behaviors are less than ideal. Effective communication also involves active listening, where leaders genuinely empathize with employee concerns.

Job Scope/Variety

Employees engaged in many, challenging tasks have a stronger sense of organizational commitment than those who do not feel challenged. Therefore, safety professionals should design safety initiatives to encourage active employee participation.

Increasing organizational commitment is fundamental to the pursuit of legitimate, long-term culture change. A healthy safety culture is fundamentally important in building and maintaining world-class safety performance.

The Safety Leader's Role in Improving Organizational Culture

The manner in which organizational power-holders exercise their leadership styles and skills directly impacts the organization's culture (Yukl). Culture represents the collective feelings, thoughts, behaviors, attitudes and values of a firm. Understanding organizational culture is important because "such an awareness can facilitate systematic changes in organizational behavior that can lead to enhancements of a variety of organizational performances . . . and a sense of belonging and community" (Lawson and Shen 42). Improving safety culture leads to a more-open, employee-friendly work environment and should ultimately result in fewer on-the-job injuries.

Unfortunately, culture change is often resisted because it is perceived as a loss of stability, clarity and predictability and it may take years to accomplish. According to Lawson and Shen, the first step in culture change is the acknowledgment that loss is a universal force. Because change is inevitable, leaders must create a vision that the organization will be strengthened as a result of cooperative change efforts.

Culture change is especially important with safety. Traditional safety approaches are top-down and compliance-driven. Leading-edge organizations are moving toward more positive, employee-driven philosophies to manage safety (Saal and Knight 1995).

IOP efforts will be more successful when the corporate safety culture is healthy. In such settings, employees take the initiative to correct safety hazards when possible; participation in safety-related activities is encouraged through respect and positive recognition; safety-related issues are openly communicated without fear of punishment; training systems are interactive and effective; and regular safety-related feedback between coworkers is appreciated (Geller and Williams). Conversely, when the culture is fear-driven and negative, employees may have less trust and buy-in with new IOP efforts.

The Safety Leader's Role in Tracking Safety Culture Change

The challenge for leading-edge organizations is to accurately track corporate safety culture and meas-

ure improvements over time. Safety leaders can better understand an organization's safety culture by engaging in high-quality conversations with a representative sample of hourly employees. Safety culture surveys should supplement these conversations. Effective surveys accurately assess employee perceptions of management and peer support for safety, as well as personal responsibility for safety; they also enable an overall assessment of safety management systems such as discipline processes, incident investigation procedures, near-hit reporting and training. Employees from all organizational levels (e.g., supervisors, contractors), areas (e.g., warehouse, lab) and job types (e.g., maintenance, operations) should participate.

These surveys can be developed in-house or purchased from outside sources. If externally developed tools are used, a corresponding norms base should be developed for benchmarking against other firms within the same industry. The surveys must also be valid and reliable, and the results should be shared with all personnel. Examples of safety culture items follow.

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Optimal safety performance is contingent on an organization's safety culture. Effective safety leaders strive to improve and track this culture. Improvement requires a bold, clear vision and the ability to motivate and involve employees in various change efforts.

Recommendations for Safety Leaders
Because safety literature contains little IOP research, basic theories from the field have been provided. In the author's opinion, the success of IOP in other applications should be extended to safety in order to improve safety culture and reduce injuries. To that end, the following recommendations are offered.
•Develop an integrated style of leadership, drawing from the five leadership styles. Develop and articulate a clear vision of future safety goals and measure progress toward those goals through one-on-one discussions with employees.
•Follow the guidelines from the LBDQ to improve safety leadership behaviors (e.g., recognize employees' safety contributions; clearly define group safety goals and expectations; communicate about safety with sincerity and passion; and empower employees to initiate and manage important safety initiatives).
•Improve employee safety motivation by recognizing safe work practices more frequently and explaining that these practices lead to less chance of injury, a more-open, interdependent safety culture, and other potential rewards in the future.
•Increase organizational commitment by providing high-quality, personal recognition and by developing challenging safety initiatives that increase employee involvement and ownership.
•Eliminate fear-driven leadership, break down interdepartmental barriers, and institute vigorous education and retraining programs.
•Periodically measure and track safety culture changes using valid and reliable surveys.

Conclusion
To truly improve safety performance, safety professionals must draw on all available resources. To date, IOP research has been sparse in the safety literature. Lessons from IOP may help safety professionals become optimal organizational leaders, better equipped to "fight the good fight" and improve safety culture and performance. ∎

Improving safety culture leads to a more-open, employee-friendly work environment that should produce fewer injuries.

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