Safety Management

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Too Much of a Good Thing?

# By Dave Rebbitt and Judith Erickson

**Figure 1** forts to improve occupational safety and health began with rules and compliance. Complying with these laws and safety standards greatly improved the workplace. As the understanding of incident causation became more sophisticated, other methods were used to engage employees and involve those on the front line in assessing and mitigating risks and hazards in a more proactive way.

As approaches continue to evolve, a new movement is gaining favor that the authors call *hypercompliance*: a process that consists of enhanced rules exceeding legislated and industry standards. This movement includes an unflinching zero tolerance for errors whereby rule breakers are harshly sanctioned or fired. The major question posed by this article is: Does hypercompliance tend to improve or hinder safety performance?

This article examines the evolutionary path that led to hypercompliance and why it appears to be a good solution yet has unintended consequences. Those consequences, although unintentional, defeat the established goal of hypercompliance. The authors examine the gap between academic knowledge and common practice and assumption; to do so, they use established facts based on more than 50 years of study and the successful application of theories in management and behavior.

### **Compliance: The Beginning**

To improve safety performance, compliance addresses basics. These involve laws, regulations, some nonlegislated or industry standards, and company rules. Compliance is simply managing and following laws or standards, primarily to avoid penalties for noncompliance.

However, compliance simply means meeting the minimum standards set forth by society in the form of legislation, which many companies realize. Early efforts to improve safety began with simple compliance, which was aligned with the scientific management theory of the 1920s. Also termed Taylorism, after its founder Frederick Winslow Taylor, this theory and practice focused on the industrialization of workplaces and efficiency. Taylor is mostly remembered for advocating piece work, or paying employees for each unit of work completed, such as material moved or parts assembled (Taneja, Pryor & Toombs, 2011). Taylor also believed there is one best way to perform a task. However, any such approach is doomed to fail because no two people perform the same task in the same way (Buckingham & Coffman, 1999).

Taylorism stressed "improved utilization and conservation of human and physical resources" (Wren, 2011, p. 17). Taylor is famous for using a stopwatch to time employees (Taneja, Pryor & Toombs, 2011, p. 63). He advocated inflexible control of the workplace, assuming that employees did not need to think independently. He believed that strong incentives such as quotas set by time and motion studies would boost production and profit. However, Taylor's scientific management

# IN BRIEF

Hypercompliance is about raising penalties around absolute rules.
Hypercompliance may be taking OSH in the wrong direction.
Raising penalties can

result in employee disengagement.

•More rules do not necessarily equate to a safer workplace.

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had dehumanizing effects that led to distrust and suspicion among employees, which in turn led to a public furor that resulted in congressional investigations concerning government employees (Boone & Bowen, 1984, p. 2).

While some saw a strong correlation between Taylor's ideas and efficiency, the application of these ideas did not always work. A study only a few years later found that application of these principles failed in 34 of 113 studied applications (Wren, 2011, p. 13). Also, some evidence indicates that Taylor may have fabricated some of his results (Boone & Bowen, 1984, p. 3).

Taylor's pioneering work in quality, cost accounting, ergonomics and human engineering, as well as the concept of measuring to manage, are still reflected in management and business today (Flynn, 1998). His success after the publication of *Shop Management* (1903) and *The Principles of Scientific Management* (1911) cement his place as the father of scientific management.

Another major contributor to the management field's scientific school of thought was Max Weber. He stressed the bureaucratic organization as a hierarchy with impersonal written rules, officials with expert training, performance measurement and corrective action. His original work had and continues to have major influence in today's organizations (Weber, Henderson & Parsons, 1947).

#### Motivation & Engagement

Eventually it became evident that rule-driven scientific management was not the key to greater organizational functioning. As a result, other researchers took a different approach toward organizational efficiency. In 1943, Maslow proposed a hierarchy of needs, progressing from basic physical needs such as food and shelter through emotional needs such as recognition and respect; it culminated in self-actualization, whereby employees could be self-fulfilled and creative (Maslow, 1943).

However, as positive and relevant as Maslow's theory about human nature may be, little evidence supports his assertions (Boone & Bowen, 1984, p. 107). Nonetheless, the hierarchy of needs concept is an invaluable contribution to the theory of motiva-

tion. Today, leading companies recognize that the most productive employees are those who feel needed, valued and respected (Flores & Utley, 2000).

In 1960, McGregor formulated his management theories X and Y. Both theories involve assumptions that managers make about employees. Theory X assumes that all employees are inherently lazy, hate work and therefore need to be motivated by fear. Theory Y assumes that employees can accept responsibility and can be motivated by rewards of achievement (Fry, 1976). McGregor (1957) advocated empowerment and open management. He believed that management by direction and control, or Theory X, is inadequate to motivate. Employees are not able to use their capabilities, are discouraged from accepting responsibility and are encouraged to be passive, thereby eliminating meaning from their work. They could develop into employees who resist change, lack responsibility and develop an unwillingness to follow.

In 1968, Herzberg looked at what motivates employees and coined the term *hygiene factor*. He described hygiene factors as those extrinsic to the job such as "company policy and administration, supervision, interpersonal relationships, working conditions, salary, status and security," contending that these factors lead to job dissatisfaction and the "primary cause of unhappiness on the job" (Herzberg, 2003).

On the other hand, motivators, or intrinsic factors, stem from individual personal needs such as recognition, achievement, responsibility, job content, and growth potential or advancement. Taylor had proposed that money was a powerful motivator in introducing piece work but Herzberg found that money was only a motivator as a means of recognition (Herzberg, 1974).

Through the 1950s and into the 1970s, businesses were working to influence and engage employees using various theories and practices. A less authoritarian approach, emphasizing behaviors and attitudes became more important and became another piece of the rule and compliance mind-set.

#### Beyond Compliance

Simple compliance cannot garner great safety performance because it only involves the required minimum. Ferry (1990) contended that minimum compliance yields minimum benefits. He believed there was a mistaken assumption that doing more would cost more, contending that going beyond compliance may prove less costly in the long run.

Exceeding compliance means moving to a higher standard and having company rules and processes beyond the basics. This helps companies avoid the "compliance trap" (Jacobi, 2012), whereby a company believes itself to be in compliance but can still be found out of compliance by an inspector or auditor, and still experience serious incidents.

OSHA states that Voluntary Protection Programs (VPP) sites have better performance than non-VPP sites as evidenced by positive correlations between injury rates and participation in the program (Corcoran & Shackman, 2007). Many companies have also moved away from simple safety programs that focus only on compliance to management system approaches. A key aspect of this advancing sophistication has been the adoption of more risk-based approaches in managing safety rather than solely detection and correction of physical hazards.

With more focus on employees, the concept of behavior-based safety (focusing on employee acts and behaviors) developed. Some models focused on attitudes and beliefs designed to improve communication and engagement. As management systems became popular, so did audits and the concept of continuous improvement in systems and processes. Safety incentives or rewards for safe behavior also increased.

#### The Cult(ure) of Zero

The concept of zero incidents implies that sustained perfection in an innately error-prone system is somehow achievable. This concept, as well as the belief in safety culture, arrived together and dominate the current safety landscape.

Belief in zero has a wide base and includes concepts such as zero fatalities, zero injuries or zero incidents (Roughton & Crowley, 1999). This zero concept stirs emotion since employees would agree that they or a loved one should not be injured, thereby becoming the one beyond zero. This has led to the zero-tolerance concept.

However, in reality people live inside a fallible human system. Therefore, even though reaching zero is highly admirable it is not a consistently achievable human goal. One problem with the zero goal is that if employees think it is not achievable, they may not be mentally committed to the concept.

Setting and reaching a goal means the goal must be achievable. Without a plan to get to zero that has both substance and thought, such goals can become counterproductive (Clemens, 2004; Ormond & Solomon, 2014). This mind-set has set the stage for hypercompliance.

# Hypercompliance

Hypercompliance is increasing rules and legislated standards to a higher level in order to ostensibly achieve better safety performance. It is a human trait to look at things in terms of structure. If events are not going exactly as planned or there are an unacceptable number of incidents, perhaps something new is needed to get past the current plateau. In such instances, more controls or rules are sometimes added to ensure uniform employee expectations and guidance.

Underlying hypercompliance is the belief that more rules, including more stringent ones, will make for a safer workplace. For example, if safe height is 6 ft, it is reduced to 3 ft. If safety glasses are required, goggles will be substituted. If compliance is not 100%, the penalty for noncompliance is raised. Hypercompliance is all about making more stringent rules in select areas and correlating them with zero tolerance for noncompliance.



Many large companies in different industries have engaged in this approach, primarily by making a list or rules that carry automatic heavy penalties. Large energy companies have such programs and they are becoming popular with their primary contractors as well. These rules are usually termed as lifesaving or absolute safety rules. Good examples can be found in the International Association of Oil and Gas Producers (IOGP) and Canadian Oil Sands. IOGP developed 18 lifesaving rules organized into eight core and 10 supplementary rules (IOGP, 2013). In Canada, there are seven main regional safety rules and 12 supplemental rules (OSSA, 2015).

Breaches of such rules are investigated and discipline is applied up to and including termination. The emphasis is clear. The most likely outcome for employees is termination when they are found to be breaking these rules.

These rules usually are well thought out and focus on areas where incidents are likely to occur. Pictograms well illustrate the intent of the rule. The rules themselves and the attention being drawn to them are understandable. Some rules are specific (e.g., Do not walk under a suspended load), whereas others are more specific (e.g., Wear a seatbelt; use PPE). They address specific hazards (e.g., Conduct gas testing) or activities (e.g., Do not use a cell phone while driving).

Therefore, a rule that stipulates that all traffic rules must be obeyed, regardless of one's location, makes sense. However, it establishes an entirely new reality when someone failing to come to a full stop at a stop sign can be terminated or barred from a workplace.

Another example is an employee forgetting to replace his/her safety glasses when reentering an area where eye protection is required. Because the rule is broken, the employee would be investigated and disciplined because of zero tolerance for unsafe acts and zero tolerance for rule breakers.

In raising the compliance bar, the workplace can theoretically become safer, as a higher standard is now in place. The rationale for hypercompliance is that the company believes it can be absolutely sure that no employee is overexposed to danger



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and that all employees are held to a higher, safer standard. Large companies communicate that sites are safer with zero tolerance for rule breakers, a supposed necessity to improve safety performance.

The universal rules of hypercompliance have little to do with risk. Their main focus is to demonstrate to the workforce that the company is committed to safety and will not tolerate any acts or omissions that are unsafe regardless of the risk actually posed. When a company terminates a rule breaker, it sends a clear message that safety is important and unsafe behaviors and acts will not be tolerated. There are no exceptions.

#### Hypercompliance: The Good Side

Much of the literature provided by companies around hypercompliance stresses factors such as:

- •zero tolerance for unsafe work;
- •zero tolerance for rule breakers;
- valuing safety;

•acting decisively to ensure a safe working environment.

These are all laudable goals and great intentions. As noted, if an industry or operation has reached a plateau and still experiences incidents, it can become frustrating when the way to improve performance is unclear. Doing nothing is not an option. Therefore, the approaches and systems must evolve. Since compliance originated by tightening rules, establishing new, more stringent rules seems a sensible response.

With tougher rules and higher penalties, it makes sense that incidents should diminish. Doing more of what is or has been successful is a natural response. Applying the same logic to crime, higher penalties and tighter enforcement by more police officers should result in an elimination of crime. The truth is that any approach loses effectiveness at a certain point.

#### Hypercompliance: Unintended Consequences

Sending a strong message to the workforce about accountability and communicating clear expectations is often mentioned in safety circles. No doubt, accountability and clear communication are necessary and essential for the system to function. However, what companies intend to communicate often is not what employees actually perceive. One of the greatest examples is committing to zero incidents. Does that mean employers do not want any incidents or that they do not want to hear about any incidents?

It is natural for managers and executives who feel that improvement is needed to propose additional rules or controls to clearly communicate their intent and expectations. These changes are often heralded with a communications or awareness phase. Currently, many companies involve their employees in workplace change, thereby attempting to obtain support and commitment. However, it is unclear if any frontline employees asked to have more stringent rules or higher penalties for those who break them.

The concept of hypercompliance seems to involve several specific issues. 1) Does this approach improve safety performance? Rules or standards that are simply more stringent may not actually do anything to reduce risk. This makes these standards less relevant to employees because such rules may be perceived as unnecessary and as detracting from improving safety.

2) Is it necessary to tell employees to comply or be fired? Is this a case of employees who simply will not follow the rules? Does it reflect a belief as in McGregor's Theory X that those employees must be motivated by fear?

3) Does this undermine the discretion of supervisors? Much responsibility and reliance is placed on supervisors and managers who are paid to exercise their judgment on a daily basis.

4) How many absolute rules can the average person memorize? Memory is not infinite. Usually short and simple messages work the best for the purposes of memory. Can every employee remember the critical seven or eight rules and the supplementary rules? With lists, most people can only remember considerably fewer than eight. Is the message too complex?

#### Should Hypercompliance Work?

After 50 years of trying to engage and empower employees, hypercompliance takes business back more than a century to the principles of scientific management. Virtually every company spends a great deal of time and resources trying to engage employees. Through the progression of the empowered workplace, there has been increasing evidence of higher productivity, profitability, job satisfaction and safety performance as well as lower occupational stress and absenteeism (Erickson, 2008).

People tend to crave stability and structure, and rules and accountability are part of that structure. However, this practice can be overdone. For example, does firing someone for making errors make employees feel valued? Most of the rules are specific to frontline employees but firing a supervisor and manager is possible. That would send a powerful message, but probably not one about a high commitment to safety. How do employees feel when they see a manager fired for making an honest mistake? When employees are targeted with a communication campaign for routine duties such as entering confined spaces or using fall protection they may not feel they are valued or capable members of the organization.

Like all such efforts, the reason hypercompliance is doomed to fail is that it suppresses the very goal it desires. The goal is an involved, engaged workforce that is actively involved in proactive measures to reduce risk in the workplace by using their experience, skills and initiative.

# Rules

#### The Necessity of Rules

Throughout safety and organizational literature, much has been written on the subject of rules. There seems to be general agreement that rules are an inherent part of organizational and safety programs to ensure protection of lives, property and resources. Since all organizational roles, including safety, demand some level of accuracy, all roles require employees to know and use some standardized steps or rules. However, as Buckingham & Coffman (1999) observe, "Required steps are useful only if they do not obscure the desired outcome" (p. 125).

Argyris, Putnam and Smith (1985), contend that there are two requisites for obedience: legitimacy and unilateral nature of authority relationships. This represents the classic view of traditional hierarchies with top-down control, clear division of labor and subunits, centralized decision making and standardized behavior patterns (Srivastva, 1983), with employees considered incompetent or not having time to come up with rules (Oedewald & Reiman, 2007).

In reality, rules and procedures are attempts to control the characteristics of humans. Oedewald and Reiman (2007), and Srivastva (1983) contend that rules are actually organizational constraints, progressively restricting freedom of action as they increase limitations to freedom of choice and discretion. Oedewald and Reiman (2007) question whether the rules are supposed to control or support activities. They also question whether the employee is in control or is being controlled.

Safety has its own set of additional rules. Petersen (1975) stated that safety work rules direct the safety program. These rules must be enforced and whenever broken, the perpetrator must be punished. However, one of Petersen's concerns about punishment after an act was that people may simply try not to get caught again. However, the possibility exists that such rule- or law-breaking may be indicative of distinguishing between good defiance and unacceptable violation (Peters, 1987).

Petersen (1975) also guestioned whether there is factual information or a true basis for initially formulating the rules. Other safety management authors have expressed similar concerns. Manuele (1993) states, "It should not be assumed that actions taken to be in compliance with laws, codes, standards and regulations address an organization's principal risks or that doing so, by itself, will attain effective hazards management" (p. 184). This concept is echoed by Hale, Borys and Adams (2011), who contend that establishing a causal link between the incident rates and some regulatory requirements may be difficult. In any case, initially employing a means of controlling the causes responsible for the presence of injurious agents should occur prior to regulation (Grimaldi & Simonds, 1975).

#### Potential Problems With Rules

Static rules present several problems. First, static rules do not capture the true complexity of organizational situations (Hale, et al., 2011). Second, they tend to reflect a gap between work as envisioned by more senior experts and the actual work performed by employees (Hale, Borys & Else, 2012). Third, it is impossible to create rules to cope with all eventualities and situations (Hale, et al., 2012; Oedewald & Reiman, 2007). Finally, no rule is ever final, especially in command-and-control regulatory environments. Therefore, if an incident occurs, the event often results in even more rules and regulations, thereby increasing both operational complexity and compliance difficulties (Hale, et al., 2011).

#### Too Many Rules

When organizational procedures are designed, smooth and efficient operations are the goal. Often employees are not considered (Oedewald & Reiman, 2007). Especially in inflexible and rigid organizations, some managers have a basic mistrust of people, thereby believing that their only recourse is to impose rules to achieve desired behaviors (Buckingham & Coffman, 1999). The effect of this philosophy forces employees to accept the status quo by conforming to the limitations of accepted patterns and rules.

If there are too many rules, it is possible that some rules may be overlooked or obscured, thereby increasing overall risk. This would mean that numerous rules in complex technologies could be less effective (Hale, et al., 2011). Buckingham and Coffman (1999) state that there are "many examples of steps hindering the very outcomes they were designed to facilitate" (p. 126).

The more employees are preoccupied with following rules, the less they are able to consider innovative solutions (Hale, et al., 2011) and may become unaware of new situations to which the rules do not apply (Oedewald & Reiman, 2007). This preoccupation can lead to more mistakes, which in turn induces more regulations, thereby creating a vicious circle (Hale, et al., 2011).

The rules that seem most problematic for employees are those that define specific actions or behavior, leaving the least room for individual choice because every time a rule is made, a choice is taken away (Buckingham & Coffman, 1999). These rules may save time and effort by clarifying tasks and responsibilities (Oedewald & Reiman, 2007), but they are "creating a culture of compliance that slowly strangles the organization of flexibility, responsiveness and, perhaps most important, goodwill" (Buckingham & Coffman, 1999, p. 117).

Detailed rules may cause resentment as employees feel they are not trusted because they are being watched. They also can feel dependent, not being able to take responsibility for their own actions or styles. This situation can be demeaning. Too many, especially detailed, regulations can discourage innovation, creativity, initiative and new ideas, reduce compliance and contribute to uncertainty (Hale, et al., 2011). Additionally, learning can be weakened (Oedewald & Reiman, 2007).

Another drawback of excessive rules is that if employees do not see rules as enhancing their safety, or as not relevant to their jobs, they are less motivated to comply (Hale, et al., 2011). This may lead to rule violations. If no adverse event occurs other than noncompliance, confidence in the rules can diminish as well (Hale, et al., 2012).

According to Hale, et al. (2012), two contrasting paradigms appear to exist in operation concerning a view of rules: top-down view versus bottom-up. Hypercompliance is a step back in time for safety and it flies in the face of all we have learned about human motivation. involvement and resultant safety performance.

These two models have been classified as models 1 and 2. Model 1 is the classic rationalist view of rules as constraints on behavior, established by those persons considered experts who are higher in the organizational hierarchy. Safe work consists of barriers and rules in order to successfully complete tasks. Rules are static and are not to be violated. There are strong limitations on employee freedom of choice and discretion, and employees are considered incapable of establishing rules.

Model 1 is predominant in safety management (Hale, et al., 2012). This is readily apparent when reading safety management literature that emphasizes the danger of not following procedures (Oedewald & Reiman, 2007), the majority of which discusses the prevalence and reasons for violations (Hale, et al., 2012).

Model 2 generally applies to complex, hightechnology operations whereby employees are the experts. The bases for rules are reflections of employees' reality and experiences, including social patterns of behavior. Interest in Model 2 occurred because of dissatisfaction with Model 1.

Hale, et al. (2012), propose a synthesis of the two models, combining the strong points of each, since there are lessons to be learned from both paradigms.

#### **High-Reliability Organizations**

Concurrently with hypercompliance, another approach focuses on organizational resilience and high reliability. These organizations push decision making down as far as possible and rely on expertise in the field rather than on rules and punishment. Such organizations are often called *learning organizations*, as they can recover quickly from problems or incidents. This quick recovery indicates organizational resiliency. They are committed to learning from failure and refuse to simplify what is inherently complicated (Weick & Sutcliffe, 2007).

High-reliability organizations are those that cannot afford large-scale failures because of the potential catastrophic consequences. This approach has its roots in the study of aircraft carrier flight deck operations, nuclear power plants, hospitals and air traffic control. In each of these instances, small failures must be understood, resolved and learned from before they can become or lead to larger-scale failures. This means paying attention to small failures or weak signals in the system. The organization must be resilient, or able to recover quickly from failures, but it is also expected to learn from failures.

Such organizations rely on mindfulness or being constantly alert to one's environment and situation (Weick & Sutcliffe, 2007). The principle of mindfulness can be compared to driving a car. We expect that traffic incidents will occur. We cannot assume that everyone will always follow the rules of the road. Sensitivity is maintained by being alert: scanning traffic signs, signals, possible obstructions and the behavior of the traffic (e.g., erratic drivers, varying speeds). Additionally, resiliency is maintained because we are ready to take alternate routes or approaches should such maneuvers be necessary.

Complex or tightly coupled systems need employees who are mindful. Tightly coupled systems (i.e., no slack in between stages of the process) have little time for recovery from failures, whereas loosely coupled processes have lags that can allow more time for recovery (Perrow, 1984). Highreliability organizations tend to be tightly coupled. They are preoccupied with failure and expect that failure is always possible and will occur within the system. As a result, they are reluctant to simplify, rationalize or take things for granted. These organizations require employees with expertise who are engaged and alert, paying attention to operations to enable them to move quickly and improvise solutions when unexpected failures arise.

#### Discussion

Many developments have been aimed at encouraging employee involvement to increase safety performance. Companies with an engaged workforce see many benefits (Piersol, 2007). Engaged employees affect safety and the company by going the extra mile on behalf of the company. An involved employee is much more likely to take ownership of the work site and act proactively to resolve problems, correct physical hazards and reduce the risk of developing unsafe conditions. Optimizing culture for involvement is tied to better safety results (Erickson, 2008; Williams, 2008).

Employees understand the necessity of compliance with safety and organizational rules. They do not want to be injured or worse. In high-hazard industries, employees are acutely aware of the importance and necessity of paying attention to absolute rules that allow for no margin of error. The rules are not new, but penalties for infractions have increased.

When too many rules have become restrictive and undermine employee discretion and initiative, employees will passively obey rules, expecting automatic consequences if caught breaching them.

With hypercompliance, penalties for specific violations have increased. This would seem to be demotivating. If employees have no control and no involvement, they will become less motivated and engaged (Herzberg, 2003).

Perhaps the final issue is that the absolute system must be administered by people. Mistakes are likely to be made and elements missed. Therefore, some people may break the rules but not be sanctioned. The perception of inequity can lead to widespread dissatisfaction and seriously erode the credibility of the rule scheme.

The purpose of organizational rules should be one of management's most basic responsibilities: focusing people toward performance (Buckingham & Coffman, 1999). Standardizing the ends to achieve this performance prevents management from having to standardize the means to attain these ends. In other words, the required outcomes should be defined, but not the detailed activities for achievement (Buckingham & Coffman, 1999; Hale, et al., 2012).

Rules should apply and be adapted to the diversity of real situations. They should be matched to the characteristics of the employees and to the situations in which the rules are required (Hale, et al., 2012). In addition, unnecessary rules should be eliminated (Hale, et al., 2011; Peters, 1987) and regulatory language simplified (Hale, et al., 2011).

With any organizational rule-setting, the employees' expertise and collaboration is essential to achieve final goals (Petersen, 1975). Employees should participate in the decision of what is unsafe because "part of rule-setting responsibility belongs to those people for whom the rules are intended" (Petersen, 1975, p. 200). Likewise, Buckingham & Coffman (1999) advocate defining outcomes, then letting each person find his/her individual means to meet those outcomes.

With overly strict rules, employee innovation and creative ideas can be suppressed (Oedewald & Reiman, 2007). When strict rules are changed, eliminated or relaxed they allow for more employee involvement, thereby encouraging employees to take more responsibility (Buckingham & Coffman, 1999). There is much evidence supporting employee involvement as a significant positive factor in helping organizations meet their goals.

#### Conclusion

Hypercompliance is a step back in time for safety and it flies in the face of all we have learned about human motivation, involvement and resultant safety performance. Much has been learned about human behavior since the days of Taylor. Regressive hypercompliance thinking, with its excessive rules and penalties, is an approach that will not lead to a safer workplace. Getting beyond performance plateaus takes critical thinking and new approaches, including those of an interdisciplinary nature. In evolution, there are many failures for every success. Perhaps it is time to move on. **PS** 

#### References

Argyris, C., Putnam, R. & Smith, D.M. (1985). Action science: Concepts, methods and skills for research and intervention. San Francisco, CA: Jossey-Bass.

Boone, L.E. & Bowen, D.D. (1984). *The great writings in management and organizational behavior*. New York, NY: Macmillan Publishing Co.

Buckingham, M. & Coffman, C. (1999). First, break all the rules: What the world's greatest managers do differently. New York, NY: Simon & Schuster.

Clemens, P.L. (2004, May). Practical injury-rate goalsetting. *Professional Safety*, 49(5), 38-40.

Corcoran, D.J. & Shackman, J.D. (2007). A theoretical and empirical analysis of the strategic value of beyond compliance occupational health and safety programs. *Journal of Business Strategies*, 24(1), Spring, 49-68.

Erickson, J.A. (2008, Nov.). Corporate culture: Examining its effects on safety performance. *Professional Safety*, 53(11), 35-38.

Ferry, T.S. (1990). Safety and health management planning. New York, NY: Van Nostrand Reinhold.

Flores, G.N. & Utley, D.R. (2000). Management concepts in use—A 12-year perspective. *Engineering Management Journal*, *12*(3), 11-17. doi:10.1080/10429247 .2000.11415077

Flynn, J. (1998, Nov.). Taylor to TQM: A century of manufacturing systems. *IIE Solutions*, 30-36.

Fry, L.W. (1976). The maligned F.W. Taylor: A reply to his many critics. *The Academy of Management Review*, 1(3), 124-129.

Grimaldi, J.V. & Simonds, R.H. (1975). *Safety management* (3rd ed.). Homewood, IL: R.D. Irwin.

Hale, A., Borys, D. & Adams, M. (2011, Nov. 28). Do more regulations equal less safety? Retrieved from http://mercatus.org/publication/do-more-regulations -equal-less-safety

Hale, A., Borys, D. & Else, D. (2012). Management of safety rules and procedures: A review of the literature (Research report). Wigston, U.K.: IOSH.

Herzberg, F. (1974). Motivation-hygiene profiles: Pinpointing what ails the organization. *Organizational Dynamics*, 3(2), 18-29. doi:10.1016/0090-2616(74)90007-2

Herzberg, F. (2003, Jan.). One more time: How do you motivate employees? *Harvard Business Review*,

81(1), 87-96. doi:10.1007/978-1-349-02701-9\_2

International Association of Oil & Gas Producers (IOGP). (2013, April 22). OGP lifesaving rules. Retrieved from www.iogp.org/Newsroom/News/postid/81/ogplife-saving-rules-published

Jacobi, J.A. (2012, April). The compliance trap. *Professional Safety*, 57(4), 69-70.

Manuele, F.A. (1993). *On the practice of safety*. New York, NY: Van Nostrand Reinhold.

Maslow, A.H. (1943). A theory of human motivation. *Psychological Review*, 50(4), 370-396.

McGregor, D.M. (1957). The human side of enterprise. *Management Review*, 46(11), 22-28.

Oedewald, P. & Reiman, T. (2007). Special characteristics of safety critical organizations: Work psychological perspective. Vuorimiehentie, Finland: VTT Technical Research Centre. Retrieved from www.vtt.fi/inf/pdf/ publications/2007/P633.pdf

Ormond, M. & Solomon, C. (2014, Oct.). Target zero. *The Safety & Health Practitioner*, 32(10), 43-45.

OSSA. (2015, May). Regional safety rules. Retrieved from www.ossa-wb.ca/regional-safety-rules

Perrow, C. (1984). Normal accidents: Living with highrisk technologies. New York, NY: Basic Books.

Peters, T.J. (1987). *Thriving on chaos: Handbook for a management revolution*. New York, NY: Knopf.

Petersen, D. (1975). *Safety management: A human approach*. Englewood, NJ: Aloray.

Piersol, B. (2007). Employee engagement and power to the edge. *Performance Improvement*, 46(4), 30-33.

Roughton, J.E. & Crowley, D. (1999, July). Zero incidents: Achieving a new safety culture. *Plant Engineering*, 100-104.

Srivastva, S. (1983). *The executive mind*. San Francisco, CA: Jossey-Bass.

Taneja, S., Pryor, M.G. & Toombs, L.A. (2011, July). Frederick W. Taylor's scientific management principles: Relevance and validity. *Journal of Applied Management and Entrepreneurship*, 16(3), 60-78.

Weber, M., Henderson, A.M. & Parsons, T. (1947). *The theory of social and economic organization*. New York, NY: Oxford University Press.

Weick, K.E. & Sutcliffe, K.M. (2007). *Managing the unexpected: Resilient performance in an age of uncertainty* (2nd ed.). San Fransciso, CA: Jossey-Bass.

Williams, J.H. (2008, Dec.). Employee engagement: Improving participation in safety. *Professional Safety*, 53(12), 40-45.

Wren, D.A. (2011). The centennial of Frederick W. Taylor's *The Principles of Scientific Management*: A retrospective commentary. *Journal of Business and Management*, 17(1), 11-22.