SAFETY CLASSICS Peer-Reviewed

QUALITY OF BOORK LIFE Programs Through Employee Motivation

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Production managers and supervisors in the workplace are constantly faced with critical concerns of productivity and product quality. However, are they as concerned about the work environment and the safety and health of their workers? What happens when managers ignore employee requests for a safer workplace? What is society's responsibility in maintaining a safe working environment?

Safety professionals deal with issues involving all aspects of safety in the workplace. Lately they have been placing increased emphasis on the concept of quality of work life (QWL). Advocates of QWL programs argue that by emphasizing the proper design of the workplace by incorporating employee involvement, productivity and quality of working life can coexist as goals, an idea rejected by traditional autocratic management styles. During the past decade, managers and supervisors across the nation have discovered that programs designed with employee input were far more effective, were easily implemented, and created more trust between labor and management, than traditional management styles.

By emphasizing a concern for the worker's safety and health on the job, management can foster three concepts critical to productivity and morale: 1. knowledge and understanding of safe and healthful work practices; 2. a strongly shared belief that top management is truly committed to safety and health; and 3. a climate of trust.

IN THE MANUFACTURING PLANT, at the construction site and on the shop floor, production managers and supervisors are faced with constant, critical concerns of productivity and product quality. But how often are they concerned with the work environment and the safety and

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Safety's Role in Quality of Work Life Programs

As safety professionals, we are concerned with workplace issues involving all aspects of safety. Lately, we have been researching the topic of quality of work life (QWL). Many articles concerning QWL appear in industrial and labor relations trade journals. Others are found in applied psychology journals and in the popular press (e.g., *Business Week*,

from the archives

The safety profession continues to evolve as its practitioners adapt to the changing world of work and business, apply advancements in science and technology, and respond to world events. Yet, regardless of the era, safety professionals consistently demonstrate strong dedication to making the world a safer, healthier place.

This article from the 1989 Professional Safety archives explores the concept of quality of work life. The authors examine the role of safety in these programs, and the responsibility of society at large for maintaining a safe working environment. Harvard Business Review). The majority of authors cite QWL issues centered on worker-related topics such as job redesign, joint labor-management committees, flexible working hours, conflict resolution techniques and gainsharing plans (Chisholm, 1983). Many companies have initiated extensive QWL programs that increase employee participation and also reduce worker stress. This type of organizational intervention has as its goal the increase of productivity but is not usually designated or thought of as a stress management program (Jaffe et al., 1986).

The efforts directed toward resolving the above issues have proven useful in improving the quality of work life. Although not accepted by all, many companies have responded to the challenge to improve product quality and productivity by turning to this management style popularly called QWL. Advocates of QWL programs argue that by emphasizing the proper design of the workplace by incorporating employee involvement, productivity and quality of working life can coexist as goals, an idea rejected by traditional autocratic management styles.

In general, it appears that proponents of QWL programs have not included workplace safety on the agenda of QWL concerns. This is partially due to the following:

1. Safety is the only primary QWL issue that is legislated through a federally mandated law, the OSH Act of 1970. This law requires organizations to create a certain kind of work environment and requires that legal action be taken against organizations that do not provide the correct environment. History has proven that when safety is not legislated, few organizations are motivated to do all that is necessary to ensure that people have safe work environments (Lawler, 1982).

2. To date, the bulk of efforts to improve the QWL have ignored unions and the process of collective bargaining. Most American unionists prefer to bargain collectively with employers over the issues of greatest importance to them. It is known that of 1,536 major private-sector collective bargaining agreements in effect in the U.S. in 1978, about one-third provided for joint committees to deal with safety issues, while between 5% and 6% provided for joint committees to deal with productivity (Lewin, 1981).

3. Traditionally, much of the enthusiasm for worker safety has been generated only after a devastating accident has occurred involving either the loss of many lives or the loss of a prominent individual. However, results from a recent study conducted by ASSE (1987) indicates that most CEOs view safety professionals favorably and believe that a safety program is a vital part of a successful corporation. It is the authors' opinion that if worker safety is an integral concern of every QWL program employees will become safety problem solvers and safety supporters.

In most organizations, company policy places the ultimate responsibility for providing a safe working environment with the CEO. Division managers and line supervisors are accountable for the effective implementation of all safety and health programs (Williams, 1987). In fact, the primary legislation of safety and health, the General Duty Clause of the OSH Act states, "Each employer shall furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees."

Following the all-important individual and personal commitment toward all aspects of safety, a starting point for management to refocus their concerns toward workers in today's ever-changing workplace is to concentrate on effective ways to receive continuous, relevant safetyrelated input from all workers. Safety programs designed without worker input can easily cause implementation problems. Previous management styles included the philosophy that "management by directive" was by far the superior form of management-with very little input or involvement from line employees. Communication of safety policies was usually verbal and was not supported by a written program to which employees could refer for additional and more complete information. [In contrast, recent legislation from OSHA (CFR 1910.1200, Hazard Communication, May 1985) requires that certain written information regarding chemical data be made available at all times for employees' reference.] By using the autocratic method of management as an illusion of involvement, far too many managers were content to sit on the sidelines and watch workers struggle with the day-to-day concerns of maintaining a safe and healthful work environment.

Society's Increasing Interest in Safety & Health

Some managers tend to forget that today all business activity operates in a fishbowl (Swanson, 1986). These managers regularly engage in reactive delaying actions concerning worker safety issues. In doing so, they easily earn the reputation of not being interested in these issues and, in the eyes of the public, appear "unconcerned about the greater good of U.S. society." If a company adopts a wait-and-see strategy concerning safety, managers may find themselves caught off guard and thrown into the public spotlight in the event of a major chemical spill, a catastrophe involving multiple fatalities or other conditions creating public hostility.

Multimillion-dollar liability suits are among the forces creating the need to better promote safety and health in the workplace. Society's increased awareness of what constitutes a safe and healthful environment further spurs the marketplace to make socially desirable choices and to make those choices work (Viscusi, 1985).

Rethinking Employee Involvement

During the last 10 to 15 years, a big change has occurred. During this period, managers and supervisors across the nation discovered that programs designed with employee input were far more effective, were easily implemented, and created more trust between labor and management (Williams, 1987). Prior to the 1970s, the safety department was often the only department involved with planning efforts to ensure that safety and health standards were maintained. In the 1970s and 1980s, many managers found a more cost-effective approach: to plan ahead and install environmental safety and health controls before the process was actually established, constructed and installed in the workplace. Taking this method a step further includes utilizing employee input throughout all phases of the planning efforts as well as in safety and health programs to meet existing needs. In

QWL programs, this procedure is sometimes referred to as job design or job redesign.

Let Workers Participate

Technology changes about every 5 years. Costs associated with training and retraining of employees to cope with new technology is a line item on most companies' annual budgets. In whatever manner individual companies define the need, worker training and participation in safety and health issues must become a predominant daily concern. If management's emphasis remains fixed primarily on employees' current technological expertise to the exclusion of things like worker safety and health concerns, job satisfaction and job commitment will decline and eventually management/employee relations will suffer. Poor employee relations will inevitably lead to high turnover rates and the associated high costs of retraining new employees. High grievance rates, absenteeism and inferior product quality are other foreseeable consequences (Alber, 1979).

It has been demonstrated in a myriad of studies, both anecdotal and statistical, that the workers of the 1980s work more efficiently and have more commitment to their jobs when they feel they have some input into how the job is done. Both union and management officials see the team concept as a key method to improve worker morale and increase productivity (Holusha, 1987).

Safety Records Improve With Employee Involvement

In one noted QWL experiment, safety received top billing. In 1973 Ted Mills, funded by the National Commission on Productivity, found a coal mine president (Warren Hicks of the Rushton Mining Co.) who was intrigued by the potential of the QWL effort to improve the health and safety of underground mine workers. During the experiment, each crew of the experimental section functioned as an autonomous work team. The company sponsored training for all crew members to develop capabilities to perform any job in the section, from continuous miner to roof bolting. Each crew was given special training in state and federal mine safety laws, so that each miner would know precisely what constitutes a safety violation.

In January 1975, local and international union members were impressed with the experimental section's record for the first year of operation. Major ramifications for improved safety and productivity were noted. The experimental section mined 25% more coal than the least productive section of the mine. The experimental team also worked more safely than workers in the other two sections of the mine. The experimental section reported only seven accidents, with only one involving lost time (Mills, 1976).

In the experiment, both employees and management experienced a heightened sense of respect. Overall morale was also greatly improved. One employee, promoted to foreman, said, "The crew now respects me because of what I know and not just because I'm the boss." Another employee related, "Suddenly, we felt we mattered to somebody. Somebody trusted us. . . . The funny thing is, in the new system, we don't really get tired anymore. We probably work twice as hard as we did before [the experiment began], but [now] we don't get tired.... It's like you feel you're a professional, like you got a profession you're proud of ... all 27 guys in all three shifts" (Mills, 1976).

Three Contributions From Management

This study illustrates three important contributions management can offer employees to improve safety in the workplace. The findings are supported by research conducted by Watson (1986) during observations at seven manufacturing facilities, and also by Young's (1983) statements.

1. Knowledge and understanding of safe and healthful work practices. If people are expected to take initiative and responsibility for their own safety, they must be trained to identify present and potential hazards not only in the job they are performing, but in jobs being performed nearby. Training must include knowledge of federal and state regulations applicable to their own jobs and the jobs being performed nearby.

2. A strongly shared belief that top management is truly committed to safety and health. Workers must know that top management is willing to devote resources to improve safety and health in the workplace (Watson, 1986).

3. A climate of trust. In such an atmosphere employee morale can flourish, morale being "the mental state of a person which governs that person's attitude toward life" (Young, 1983).

Quality Circles & Safety Circles

Successfully incorporating worker safety concerns into a QWL program is a process demanding equal amounts of trust and determination among managers and workers. How should employees participate? What

DIFFERENCES BETWEEN QUALITY CIRCLES & SAFETY COMMITTEES

Quality Circles

•Operate only under a participative management style.

•Membership is voluntary. •Members are from the same work area.

•Members report to the same supervisor.

•Members receive specific problem-solving training. •Number of members var-

ies from six to 10.

•Management liaisons are specifically trained in management and human relations.

•Primary goals are to identify problems and to solve them.

Safety Committees

•Have persisted under an autocratic management style. •Membership is usually by

appointment. •Members usually represent a cross-section of the organization.

•Members report to different supervisors.

•Little, if any, problemsolving training is given to members.

•Number of members varies widelv.

•Management liaisons usually receive little training in management and human relations.

•While identification of problems may take place, others usually solve them.

Note. Adapted from "Quality Circles and Safety Committees," Table 1, by M.G. Cole, April 1984, *Professional Safety*, 29(4), 33-36. questions should be considered during the design phase of a safety program?

A New York Stock Exchange study in 1982 found that 65% of companies with more than 25,000 employees used quality circle programs, most having been started 2 years prior to the study. A 1984 Conference Board study found that 40 of 52 companies surveyed used quality circles (Gorlin & Schein, 1984). Westinghouse and Honeywell have made major commitments to quality circles in order to change their corporate cultures.

Many companies are currently utilizing safety circles, an adaptation of the quality circle concept, to involve employees in all phases of worker safety programs. An arguable point for management is that, ideally, quality circles should include safety-related issues. Safety should be an integral part of every production process and should not usually be discussed as a separate issue. Where worker participation in QWL programs is not already in place at a particular organization, safety circles are an effective method of engaging worker participation; each circle comprises normal divisions within a company's workforce, such as a certain craft, division or shop.

The actual characteristics of quality circles differ from situation to situation as companies adapt the basic model to their particular situation. Thus, the way in which circles should be designed and installed varies according to their membership, spending authority, agenda for meetings, rewards for performance, training for members, information shared, meeting frequency, leadership, installation process and power (Lawler, 1986). Quality circles have been shown to be superior to safety committees in garnering employee involvement for several reasons.

A key to overcoming resistance to quality or safety circles is to involve first-line supervisors from the very beginning. The support of these supervisors is essential if meaningful changes in the workplace are to take root. Managers have had a tendency to overlook the input of first-line supervisors because they view them as part of management and mistakenly assume that they will "just go along" with the changes. If supervisors view circles as detrimental to themselves, they will withhold their support, potentially dooming the program (Klein, 1984).

Safety professionals advocating worker safety as part of QWL have developed creative concepts to involve workers in the design phase of safety and health programs in the workplace. During his work at Beech Aircraft Corp. in the early 1980s, Williams (1987) stated, "It is impossible for three safety professionals to maintain all safety and health policies for more than 5,600 employees in three states without the direct involvement of all levels of management." He also found that "programs designed with supervisor and employee input were far more effective [than those without such input]" (Williams, 1987).

Approaching the Program

By adopting a set of attainable, defined goals or needs, workers have a framework within which to begin discussions regarding new safety programs. By identifying accompanying information (to know), workers are able to associate the safety program need with their input (supplying information in order to find out what must be known about the need). Thus, workers can easily see the importance of their input, which adds to their sense of ownership of the safety program. The following are examples to guide worker discussions.

1. *Need*: Program should address a specific need or hazard potential.

Know: Review production operation to determine the degree of hazard potential (the possibility of an accident and what degree of injury could occur) and the number of people involved.

2. *Need*: Easy implementation and smooth integration with manufacturing operations.

Know: Perform individual job analysis to determine where safety modifications and controls are necessary.

3. Need: Cost effective.

Know: Conduct cost analysis of program, beginning with onset and including maintenance.

4. *Need*: Establish policies and procedures that are easily understood.

Know: Define methods of communication from management to workers, from workers to management, and from supervisors to workers and management.

Safety professionals must supply information to workers and management concerning relevant federal standards and standard industrial practices. Accountants can assist workers and safety professionals in performing cost analyses of proposed safety programs. Workers can supply input for the justification of a safety program that requires a cost savings or other benefits impacting positively on the bottom line.

Another approach to problem solving in the circle might involve the utilization of a checklist for attainable, short-term safe work goals. Questions to be addressed might include the following:

1. What is the specific hazard/hazard potential to be addressed?

2. How can this hazard be reduced or eliminated, and by what methods?

3. Why must this hazard receive priority for attention? 4. Who should be alerted to this hazard? (Include

those directly involved with the hazard as well as those working nearby.)

5. When should this work process be allowed to take place? (Based on degree of severity, the group may decide that the work should only progress during off hours when fewer employees are exposed to the hazard.)

6. To what area should the work be relocated?

Written Plan

A written plan is necessary whether or not a union exists. Employees can provide input for the written agreement, which should address the following items:

1. Unsafe conditions. How will these be identified and corrected? How will follow-up of corrections be handled? Who is responsible?

2. Unsafe acts. How will unsafe acts be identified and corrected? How will follow-up of corrections be handled? Who is responsible?

3. Employee concerns. How will these be identified and addressed?

4. Imminent danger. How will dangerous conditions be identified? What are the shutdown procedures? How and when can workers initiate shutdown?

5. Audit procedures. How will audits be conducted? How often? Who will participate in the audit process?

Group Dynamics

If people are willing to participate effectively and in meaningful ways, an enormous amount of ongoing coaching and teaching will be needed. Workers need to learn how to run meetings, how to solve problems, how to plan and organize themselves, and how to confront others in a productive, positive manner (Watson, 1986).

Few problems will be solved in a group where employees are reluctant to bridge the gap between silence and verbally venturing forth with their ideas in front of their peers. Not all employees are comfortable functioning within the context of a group, and some may never have participated in a work-related group discussion in the workplace. Some may have "sat through" training programs without ever offering their opinions or asking questions on a particular subject. Therefore, if it is to be successful, the business of group safety discussions must be handled carefully from the beginning.

A group facilitator is needed to encourage and organize worker participation within employee groups, safety circles or quality circles. "The risk/safety manager is in a good position to either originate or promote the use of quality circle techniques" as well as serving as facilitator (Cole, 1984). The facilitator begins the quest for group cohesiveness by instilling trust between himself and the group members. Trust among group members is the next goal on the long road to group cohesiveness. Facilitators must determine whether the environment they are creating is psychologically safe, humane and realistic in terms of the needs of the people who are working together. The group in which sarcasm prevails and where the sharing of any personal information can generate a cruel, witty retort is not an emotionally safe environment (Richardson, 1986), and certainly is not conducive to creating and discussing goals for safe work performance.

The problem of how to set goals for safe work performance or new safety programs is likely to emerge in groups that have been meeting for at least several months. Stress can be markedly reduced by setting these goals realistically, thus fostering a higher degree of expectation in meeting the desired goal successfully (Richardson, 1986). If unrealistic goals are set for the group, uneasiness, dissatisfaction and even reproach for group members are possible outcomes. Attainable realistic goals, stated in a gradual, short-term manner, will keep the group from focusing on negative aspects of the problem and will keep the challenge of working safely alive and well. The process of group problem solving should also include a communication arrangement to inform all levels of management and all affected employees. This may be directed by the group facilitator, who may be the safety manager in this case.

Confrontation and reinforcement are powerful tools in achieving sustained behavioral change. Management's recognition of and support for changes in worker behavior to achieve the desired safe work behaviors will stimulate workers to take responsibility for change. When workers are involved in setting safety-related norms for the group, they will be more motivated to help sustain the desired behaviors, aided by rewards such as gainsharing programs or other rewards.

More attention should be paid to training employees to confront one another when necessary. Confrontation is understandably difficult, and most people do not like to act as a policeman (the role of the "heavy") with their peers (Watson, 1986). However, if confrontations stem from a sincere personal concern for their fellow workers, an atmosphere of trust can be created in the workplace. Reinforcement in the form of praise and recognition can also contribute to the desired behavior change.

Commitment

The movement toward a safer workplace must be accomplished in a framework flexible enough to take advantage of opportunities as they present themselves. The emphasis is upon *guided change* rather than planned change (Lawler, 1986). Although changes may be slow and sometimes limited in scope, they are well worth the effort—especially in terms of lives saved. The ultimate goal of safety in the workplace is of primary importance in the quality of work life everywhere. **PSJ**

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