

BEHAVIORAL SAFETY



Unions & Behavior-Based Safety

ALWAYS THE ODD COUPLE?

By GARY L. WINN, LINDA J. FREDERICK and GREGORY M. CHURCH

A behavior-based safety program was crafted entirely by U.S. Postal Service employee and management personnel at a branch office in Morgantown, WV. During the first year of the initiative within this multi-union environment, motor vehicle and other reportable incidents decreased 60 and 17 percent, respectively. This outcome makes the observed results more promising and suggests that written and verbal feedback work to reduce property damage and minor-but-still-reportable incidents. Using recent expert assessments of common problems with BBS programs, the authors conclude that BBS can thrive in a union environment when use of discipline is limited and when management personnel are among those observed.

Remember the popular 1970s TV show *The Odd Couple*, which featured Oscar Madison (played by Jack Klugman) facing off against his roommate Felix Unger (Tony Randall)? In each episode, these disparate personalities engaged in one conflict after another—arguing about everything from food preferences to housekeeping. Despite their fundamental differences, these two characters managed to work as partners. Along the way, each gained a measure of respect for the other.

In the real world, behavior-based safety (BBS) has emerged as a popular approach to safety management. As evidence of its growing popularity, in February 1998, ASSE hosted a symposium focused on BBS and its applications in safety management. The August 1998 issue of *Professional Safety* was dedicated to the topic as well. In a summary of the ASSE symposium, Manuele compared leading BBS approaches using the general categories of “culture-change model” and “worker-focused model” (32).

This increased attention reflects the fact that BBS has become a staple of many safety management programs and has even found acceptance and support in non-mainstream applications such as environmental management (Brown

and Hodson 30+). Despite this growing popularity, the role labor unions play in establishing a thriving BBS program is a topic that is rarely discussed. Do unions embrace BBS in a general way? Or, are BBS and a unionized environment forever doomed to be “the odd couple”?

BBS IN THE UNION ENVIRONMENT

One influential union, United Auto Workers (UAW), has expressed strong reservations about BBS. In a recent (unpublished) manuscript, UAW suggests that BBS focuses on unsafe acts of workers and amounts to “blaming the victim.” The union asserts that BBS proponents focus on downstream factors, primarily seeking to correct behaviors associated with production rather than those related to product or process design (Howe 11). It is here, Howe says, that the payoff for safety improvements would be greater. In the union’s view, engineering improvements should come first, but are sometimes ignored.

The paper raises some important points about BBS. Because of its focus on overt behavior (actions that can be observed and measured), BBS typically places little emphasis on occupational health problems that stem from root causes such as ergonomic stressors, dust or noise that are external to BBS programs. In fact, the union contends that BBS

PHOTO BY GARY L. WINN

The plan called for an employee-defined behavior observation program using written and verbal feedback. Its ultimate goal was to reduce the number of unsafe driving and walking behaviors.

reduces, rather than builds, worker participation. Furthermore, while UAW readily embraces Deming's system of quality improvements, it believes BBS is actually inconsistent with these principles (Howe 20). The union believes that BBS is not process improvement, which is the germ of success in total quality, but is actually the germ of conflict.

THE MORGANTOWN POST OFFICE

Unaware of UAW's strong anti-BBS position, co-author Church, a member of the post office management team, drafted a plan to implement behavior-based safety in a unionized branch office in Morgantown, WV. The plan called for an employee-defined behavior observation program using written and verbal feedback. Its ultimate goal was to reduce the number of unsafe driving and walking behaviors.

Background & Method

This U.S. Postal Service (USPS) region, and particularly the Morgantown branch, had experienced a high rate of traffic incidents involving mail carriers—a problem recognized by both management and labor. To address these and other USPS-reportable incidents, Church explained the BBS concept to the local USPS manager, and suggested that management and labor participate in a BBS program of their own design and execution. In his management position, Church's responsibility was to lower traffic crashes and USPS-recordable incidents associated with mail processing and delivery.

The idea of a "home-grown" program was welcomed by the district safety manager (who had expressed concern about the high rate of USPS motor vehicle crashes in the area) and by co-author Winn, a safety management professor at West Virginia University (who welcomed the program as a real-world test of the generalized BBS process). He agreed to consult from the outside, if necessary, but to let the study take form on its own.

According to the branch's National Assn. of Letter Carriers (NALC) safety representative, management and labor at this branch have historically cooperated on matters of safety. "Supervisors gave us the responsibility to stop mail delivery to customers who couldn't or wouldn't correct safety complaints such as hazardous steps or unrestrained dogs. We have a trusting relationship with management when it comes to safety."

Multiple safety programs had been implemented at the branch—many of which were perceived as "plans of the month" by both management and union members. In most cases, program failure was attributed to lack of management commitment and lack of focus on root causes. A previous behavior observation initiative failed because its goals were unclear; behavior reinforcement schedules were not specified; and training was deficient. In addition, only union workers were observed, underscoring the argument that workers are the sole target of BBS. As a result, branch employees were skeptical about trying another behavior observation program.

In late Summer 1997, the plan was drafted in concert with NALC, the largest of the three unions at the local branch. Once the Local 783 president agreed to the program, the 61 Morgantown-based NALC members agreed to start the program in December 1997. The other two unions represented onsite adopted a "wait and see" posture.

Application of BBS in a union environment is rare, as is the absence of paid consultants, which was the case in this study. In fact, although the study's primary investigators conferred regularly, neither party interfered or participated in any direct way. For example, Church facilitated observer training and prepared upper management to accept and endorse the program, then backed away. From that point, the success of this initiative rested entirely in the union's hands.

Study Procedures

One cornerstone procedure was agreed upon at the outset: Unsafe behavior observed by any carrier during the course of his/her daily activities would not be subject to discipline. According to the NALC union steward, "This was the single issue that might have killed the study before it even started, but we all agreed not to make most unsafe acts open to normal discipline. Corrective or constructive feedback only, not discipline." The only exception—agreed to by all—was receipt of an assignable traffic citation from the police—what the post office termed "willful disregard of safety practice." As the union steward concludes, "Sometimes, discipline is the only way to get the correct behavior, but we have avoided discipline more often since we started this program."

Participants

All NALC members employed at the Morgantown branch completed a standardized training program developed by union representatives and local management. Employees learned which behaviors to observe; how to use written feedback forms; and criteria for eligible participants. In addition, trainers provided suggestions about what to say during an intervention for unsafe behavior (or a reinforcing opportunity to praise correct behavior).

Initially, all participants were supervised by both union representatives and management. Later, carriers were on their own to observe each other during the driving segment of the work day. In this context, the term "carriers" refers to those who drive to a predetermined location, then walk a pre-determined route. These employees also carry and load mail into and from their USPS vehicles.

Midway through the study, the other two unions represented at the branch inquired about joining the study. All sides agreed it would be best to wait until the program had been operating for one year.

Within three months, as planned, supervisors backed away from the project and the carriers assumed control. This three-month period was key to success, Church explains. "We needed this time [three months] to build trust . . . both sides recognized this as time well spent."

Study Design

The number of total USPS-reportable accidents (including those that involved walking, mail handling and delivery) and, as a subset, USPS-reportable motor vehicle crashes, were used to assess the effectiveness of this particular intervention. The independent variable was the written and verbal feedback about observed behaviors. Verbal feedback was defined as a brief corrective or reinforcing conversation; written feedback was recorded on a card when carriers were within sight but out of conversation range. These union-developed cards were given to the observed worker at the next best opportunity or returned to a locked box at day's end. According to Church, returning the cards was an act of honor.

The basic question that this before-and-after study attempted to answer was, "Does BBS work in a union environment?" Another objective was to learn whether written and verbal feedback, as

prescribed within the guidelines of this program, would lead to fewer vehicle crashes and other USPS-reportable incidents. In addition, it was hoped the study would indicate whether a BBS process can start up spontaneously and whether an outside consultant is mandatory. Because of the study's heuristic nature, no rigid experimental controls were devised or implemented.

Hypotheses & Data Collection

It was hypothesized that the number of vehicle crashes and USPS-reportable incidents would decrease after the BBS program was implemented. Although written feedback cards were not officially counted, Church reports that "close to 244 cards [were returned] over the study period."

In addition, no attempt was made to quantify the number of times verbal feedback was delivered. According to union representatives, however, everyone involved gave or received some type of feedback nearly each day. To reinforce the feedback process, management and union representatives met weekly to share information gleaned from the previous week's observations.

The nature of reinforcement for appropriate behavior has been the topic of much debate. In this case, the two sides agreed that only written or verbal reinforcement would be offered—no material reinforcements would be used.

On any given day, each NALC carrier could both observe and be observed, and all involved were aware of this. As a target, carriers were asked to observe about 10 percent of co-workers' driving behaviors per week. Eligible observations for carriers included the standard operating procedures from the following list:

Driving behaviors that prompt positive feedback:

- Sets hand brake properly.
- Driving speed appropriate for road conditions/surface.
- Reacts to pedestrian hazards.
- Cleans and uses mirrors.
- Backs vehicle safely.
- Files pre-trip inspection three to four hours before departure.
- Closes door while vehicle in motion.
- Curbs wheels during mail pickup.
- Uses seat belt.

Mail-handling behaviors that prompt positive feedback:

- Follows designated walkway.
- Uses appropriate lifting and bending techniques.
- Stores dog spray within easy reach at all times.
- Bypasses hazardous stairs or steps.
- Does not "thumb" mail while walking his/her route.
- Checks for acceptable tread on shoes.

After a few months, union and management agreed that management personnel should be observed as well. Management activities eligible for obser-

vation included enforcing established safety guidelines (even at the expense of production); and driving and walking behaviors in or around the office. Initially, managers were uncomfortable about being observed; according to union representatives, this is no longer an issue.

Study Results

To measure program effectiveness, 1) the total number of all USPS-reportable incidents recorded during the study period was compared to the same period in 1997; and 2) USPS-reportable motor vehicle crashes (the study's original focus) were identified and compared to those recorded in 1997. The number of total accidents dropped from 24 to 20 (17 percent) and vehicle crashes dropped from five to two (60 percent).

This rather coarse analysis was then taken a step further. USPS has a low reporting threshold—that is, a policy of reporting even the most-minor incidents. For example, vehicles contacting each other with no visible damage to either, or an employee complaint of injury, would be considered USPS-reportable incidents. (These are incidents that necessitated no medical attention.)

Therefore, each incident report was thoroughly reviewed and all "insignificant but USPS-reportable incidents" were eliminated. As a result of this "filter," motor vehicle crashes dropped even further, from five to one—an 80-percent decrease, while total incidents dropped from 24 to 5—a 79-percent decrease.

CONCLUSIONS

To gauge project success, the researchers applied Pounds' guidelines for evaluating the utility of a BBS program. According to Pounds, two main risks threaten program success: 1) observing only hourly employees (a problem cited by Howe); and 2) failure to train all employees, including management, in the "core principles of behavior change technology," which in turn "imbues managers, supervisors and hourly employees with a sense of ownership in this process" (3).

This study addressed both of these concerns: 1) Management was observation-eligible. 2) Both management and union workers were trained in order to foster a sense of ownership of the program. In addition, although the researchers recognize that this study did not address the causes of all unsafe behavior and conditions at the branch, this application seemed to work effectively without the threat of discipline and without input from outside consultants. Indeed, this project's first-year results seem to counter Howe's concerns about BBS in a unionized environment.

This project began as a sincere effort by labor and management to provide a

meaningful safety program and address identified problems. It did not begin as a research study with tight controls, nor was it an attempt to solve all safety problems at the branch.

Clearly, this study has several limitations. Despite these deficiencies, the researchers believe the findings provide insight about the real-world application of BBS. Unionized labor and management *can* work toward common safety goals with respect and ease. It also appears that something commendable is occurring at the Morgantown branch and that those involved should proceed with this effort—which is what the NALC and post office management intend to do. ■

REFERENCES

Brown, B. and S. Hodson. "Behavior-Based Safety Applied to Environmental Conditions at Celanese." *The Synergist*. July 1998: 30-32.

Howe, J. "A Union Critique of Behavior Safety." Unpublished manuscript. Detroit, MI: United Auto Workers, 1998.

Manuele, F.A. "Perspectives on ASSE's Behavioral Safety Symposium." *Professional Safety*. Aug. 1998: 32-37.

Pounds, J. "High-Risk Safety: The Six Biggest Mistakes in Implementing a Behavior-Based Process." *Performance Management*. Vol. 15, No. 4.

Gary L. Wimm, Ph.D., is an associate professor in the Safety and Environmental Management Program within the Industrial and Management Systems Engineering Dept. at West Virginia University, Morgantown. His main research interests are management process and transportation systems. He is a member of ASSE's Northern West Virginia Chapter.

Linda J. Frederick, Ph.D., CSP, is an assistant professor in the Safety and Environmental Management Program within the Industrial and Management Systems Engineering Dept. at West Virginia University, Morgantown. She teaches biomechanics of the workplace and occupational epidemiology, as well as research and statistics. Her research interests are ergonomics and workstation design. Frederick is a member of ASSE's Northern West Virginia Chapter.

Gregory M. Church, M.S., is branch manager of the U.S. Postal Service office in Buckhannon, WV. He recently completed graduate work at West Virginia University. Church is a member of ASSE's Northern West Virginia Chapter.

READER FEEDBACK

Did you find this article interesting and useful? Circle the corresponding number on the reader service card.

YES	34
SOMEWHAT	35
NO	36