Safety Self-Management

A Key Behavior-Based Process for Injury Prevention

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Critically important safe behaviors are relatively infrequent and often performed alone. What motivates a worker to choose the "safe way"?

Many safety professionals believe that behavior-based safety is a one-to-one coaching process whereby one employee (the coach) completes a behavioral checklist while watching another work. Then, the coach gives the employee feedback by reviewing the "safe" and "at-risk" checks on that list.

This observation-and-feedback process is an important behavior-based safety method—one that can reap great benefits. Safe behaviors will increase, at-risk behaviors will decrease and work-related injuries will be prevented (Geller *The Psychology of Safety*; Krause, et al *The Behavior-Based Safety Process*; McSween *The Values-Based Safety Process*). Plus, interpersonal trust and group cohesion will increase, as workers experience interdependency with regard to personal health and safety (Geller *Understanding Behavior-Based Safety*).

However, one must recognize the application limitations of a one-to-one coaching process. This process requires the presence of another person (the coach), as well as a situation in which critical behaviors are likely to occur. What about the many times a person works alone? What about those important safety-related behaviors that occur infrequently and, therefore, are not likely to happen during a scheduled observation-and-feedback session?

Figure 1 illustrates such a situation. This worker is performing a critically important task. Its various components—from body position to use of certain personal protective equipment—are inconvenient and somewhat uncomfortable. In addition, the safe procedures are not the most efficient.

So, why does this worker follow safe operating procedures? Since he is working alone—with no one present to hold him accountable—he could take a shortcut. True, someone could check the equipment later to verify that he completed the lockout procedure, but no one can truly know *how* he completed it. Furthermore, the probability of incurring an injury while locking out equipment while assuming an awkward body position is likely minuscule.

So what motivates an employee to follow a certain list of procedures? How does an individual reach that level of commitment to safety? How can an organization help all employees hold themselves accountable for going out of their way for safety when working alone? That is the theme of this article. Although interpersonal observation and feedback are not relevant, the principles of behavior-based safety are applicable. In fact, the very essence of behavior-based safety is used for the process described here—safety self-management.

FIGURE 1

FIGURE 2

Self-Observation Checklist

TARGET BEHAVIORS	SAFE	AT-RISK	% SAFE
1) _____	☐	☐	☐
2) _____	☐	☐	☐
3) _____	☐	☐	☐
4) _____	☐	☐	☐
5) _____	☐	☐	☐
TOTALS:	☐	☐	

COMMENTS: _____

OVERALL % SAFE BEHAVIORS: ☐

WHAT IS SAFETY SELF-MANAGEMENT?

The methods and tools of effective self-management have been derived from behavioral science research and are consistent with the principles of behavior-based safety (Geller "Principles of Behavior-Based Safety"; *Understanding Behavior-Based Safety*).

Furthermore, the techniques clearly apply to situations beyond safety. In fact, these procedures and tools were developed and evaluated by behavioral scientists interested in helping people with personal adjustment issues (as seen in the clinical psychology setting); few (if any) of these issues relate to safety.

For example, Winston and Tharp's *Self-Directed Behavior: Self-Modification for Personal Adjustment*, a comprehensive review of self-management technology first published in 1970 (and now in its sixth edition), never mentions a safety-related behavior. The personal-improvement domains addressed include anxiety and stress; weight loss and overeating; studying and time management; depression and low self-esteem; smoking, drinking and substance abuse; exercise; and relationships with other people.

Although specific therapy procedures vary considerably across the various areas targeted by these self-management techniques, the basic principles are the same—and they parallel those used in behavior-based safety (Geller "Principles of Behavior-Based Safety"; *Understanding Behavior-Based Safety*). Therefore, it is not difficult to apply self-management principles to safety-related problems.

The best news? Some 30 years of rigorous evaluative research have shown that when these basic principles of behavior-based psychology are applied correctly to the various personal improvement areas listed here, self-management works (Watson and Tharp).

FROM OUTSIDE TO INSIDE DIRECTION

Watson and Tharp emphasize that all behavior passes through three sequential stages: 1) control by others; 2) control by self; and 3) automatization. For this discussion, consider control by others as "accountability" and control by self as "responsibility" (Geller *Beyond Safety Accountability*). Automatization occurs when behavior becomes a habit. If the habit is good, appropriate or safe, then the individual is "unconsciously competent." If the habit is bad, inappropriate or unsafe, a person is "unconsciously incompetent."

Other-directed behavior is at-risk when the instructions are incorrect. Self-directed behavior is at-risk when self-regulation does not match the safe directive (as in a calculated risk). Automatic behaviors or habits are at-risk when the performer is unaware of the mismatch between the safe directive and current behavior (as in most human error). Thus, safety self-management is a process of either matching self-directed behavior to a safety standard, or bringing at-risk habits into conscious awareness so the mismatch can be recognized and adjusted.

GETTING STARTED IN SAFETY SELF-MANAGEMENT

The first step is to recognize the need for improvement. In the realm of safety, this is often easier said than done. Most people believe, "I'm safe enough. If not, I would be getting hurt." That may sound like common sense, but it is not true.

From an individual perspective, the statement "It's not going to happen to me" makes sense and is verified every day. Asking people to stop believing this phrase is a mistake because a self-statement that is verified consistently by personal experience cannot be discredited. From a group perspective, however, this statement is not true—a fact verified by industrial injury reports. Thus, it is fair to say, "It's going to happen to someone."

This leads to a follow-up question: "Does anyone care?" People rarely answer "no," which means most people want to help reduce the probability that co-workers will get hurt, yet may not know how to "actively care."

One sure strategy is to always demonstrate the safe way. Doing otherwise may inadvertently teach others to take the same calculated risks and, therefore, place themselves in danger. For example, if one employee takes an at-risk shortcut, s/he may be teaching others to make an at-risk decision. In turn, they will teach others, who will teach others and so on, until at-risk behavior becomes the norm. With an entire workforce exposing itself daily to a particular risk, someone will eventually get hurt. From an individual viewpoint, this probability might be small; from a collective outlook, however, the probability approaches certainty.

SAFETY SELF-MANAGEMENT TECHNIQUES

Safety self-management starts with defining target behaviors that need to be improved. These might be safe behaviors a person needs to perform more often to meet a standard, or at-risk behaviors that should be performed less often. Although each individual can best judge his/her weaknesses with regard to complying with ideal safety procedures, a person should not rely solely on common sense to select these critical behaviors.

In addition, a person should not develop a long list of behaviors to change

at this point. Instead, s/he should target a few behaviors that are critical with regard to injury reduction. As success is experienced, more behaviors can be added.

Self-Observing & Recording

Self-knowledge is key to successful self-management. However, since most people believe, "I understand myself. I can remember my own behaviors," many see no need to systematically observe their own safety-related behaviors. Unfortunately, human memory is much less accurate than many believe.

To improve safety-related work practices, a person needs to establish a baseline record of safe and at-risk behaviors. In fact, before selecting a few critical safe behaviors to address, one might need to sample several safety-related behaviors in various situations.

Of course, once a person begins to self-observe and record behaviors, s/he will pay more attention to them. As a result, the record will likely reflect an overestimation of personal safety. This is a positive result, however, as it shows the benefit of bringing behavior to the self-directed stage for evaluation and improvement. A behavioral checklist facilitates this process.

Developing A Self-Observation Checklist

A self-observation checklist (SOC) should be:

- *portable and accessible* when target behaviors occur;
- *easy and convenient* to use;
- *noticeable,* so it can serve as an activator for making observations;
- *a record of both safe and at-risk behaviors,* which allows for computation of percent safe behaviors.

Figure 2 depicts an SOC that facilitates the recording process and is easy to use on a daily basis. It provides space for five target behaviors. Each time an opportunity for a particular behavior occurs, the person merely judges whether the behavior was safe or at-risk, then marks the checklist accordingly.

Opportunities to perform each target behavior can be tabulated on the SOC. At the end of a day or week, the number of safe and at-risk occurrences of each behavior can be tallied to calculate a percent safe score for each behavior. An overall "percent safe" can be calculated as well. Scores can then be charted on a graph in order to assess progress. The recording-and-charting process alone will produce significant improvement because it is a means of holding oneself accountable.

Using A Self-Observation Checklist

The most-accurate accountability occurs when behaviors are recorded soon after they occur. Noting specific activators and consequences of safety-related behaviors can provide valuable insight into the events that control other-directed and habitual behaviors. These observations should be recorded in the comments section of the SOC (Figure 2).

Such information is useful when developing a self-management plan. For example, comments about activators that precede at-risk behaviors indicate what situations require special attention. Information related to consequences that motivate specific safe and at-risk behaviors can help an individual choose safe behaviors.

As noted, the fewer critical behaviors targeted, the greater the impact. In addition, the greater the frequency of self-observing/recording per behavior, the greater the beneficial impact. Although the length of time needed to observe a specific target behavior will vary, in most cases, self-observations should continue for at least three weeks.

In summary, one may use the process of self-observing and recording critical safe versus at-risk behaviors to:

- increase awareness of personal safety performance;
- identify activators that influence other-directed and automatic behaviors;
- identify consequences that motivate certain safe and at-risk behaviors;
- gather data that can be used to develop a plan for improving behavior and tracking progress toward safety goals.

INTERVENING FOR SELF-IMPROVEMENT

In this phase, the individual derives a plan to improve certain critical behaviors that do not meet his/her safety standards. Let's now discuss several behavior-change strategies that can be used to guide development of this plan.

Activator Management

Activator management involves identifying environment, behavior and person factors that precede safe and at-risk behaviors. Strategies are then employed to eliminate negative activators that precede at-risk behaviors and to add positive activators. Safety-related activators can be identified by referring to baseline information collected during self-observations. The comment section on the SOC should provide some useful insight.

Self-observation draws attention to activators in the workplace. As a result, a person might become aware of an existing safety activator and use this reminder to bring at-risk habits under control.

On occasion, an employee may have the opportunity to design and post activators in the work area. In designing these activators, the employee should:

- Specify the behavior.
- Maintain salience with novelty.
- Vary the message over time.
- Activate close to the relevant response opportunity.

Some 30 years of rigorous evaluative research have shown that, when the basic principles of behavior-based psychology are applied correctly to many personal improvement efforts, self-management works.

To cultivate social support for such an effort, one must share this commitment with co-workers, friends and family.

FIGURE 3

I PROMISE

to conduct _____
self-observations by _____.

Goal Met: Yes No

_____
Signature (optional)

I would like this posted: Yes No

FIGURE 4

Safe Driving Contract

During the next four weeks, I, Joe Peterson, will increase my safety belt use from 50 to 95 percent. During that time, I will self-observe and record my safety belt use each day and graph the results. This graph will be placed on my locker. Each day that I reach my goal, I will add $1 to my vacation fund.

_____
Signature Date

During the next four weeks, I, Sally Stevens, will help Joe increase his safety belt use by providing encouragement on days when he does not reach his goal and recognizing his accomplishments on those days he does achieve his goal. In addition, to show my support of his commitment, I will set the right example and use my safety belt whenever I travel in a vehicle during this four-week period.

_____
Signature Date

- Imply consequences.
- Involve other employees if the activator is for more than self-direction.

For an activator to motivate action, it must specify the desired behavior and imply consequences. The most powerful activators alert the observer to positive consequences that will be gained—or negative consequences that will be avoided—by performing target behavior.

Self-Statements

Self-statements are activators—they cue certain safe or at-risk behaviors. For example, when entering a vehicle, one might say, "I'm only driving a few blocks. I don't need to wear my safety belt." Consequently, this person will not "buckle up." If, instead, this person says, "I need to buckle up to set a safe example. My behavior could influence others," then s/he will likely wear the seatbelt.

Self-directed messages take three basic forms: 1) self-instruction, 2) belief and 3) interpretation.

Self-instruction can be obvious, manifested as a clear inner voice that says, "I need to use my legs when lifting this box." Or, instructions might be suppressed and occur only as a "faded voice" so weak that only careful attention can reveal it. In this case, the challenge is to amplify this small voice and hear it reiterating the safe way to perform a task.

Beliefs are the underlying assumptions that provide the rationale for a certain behavior. They are rarely available within an individual's inner speech, but they certainly influence its content. Beliefs also determine whether particular self-instructions are clear or ambiguous.

Safety self-management means taking personal responsibility for doing the right things to prevent injury; it requires commitment and accountability.

It is a useful exercise to reflect on these beliefs and evaluate how they influence self-statements. "Do I truly believe safety should be a core value, uncompromised by fluctuating priorities?" "Can my behavior influence that of others, thus making me responsible to always set the safe example?" How a person answers these questions influences the nature and strength of self-statements.

This also explains why a powerful rationale or intuitive principle must be incorporated into safety training. If people hear instructions as only directions, with no personal significance, their behavior will merely be other-directed compliance; it will not reach the self-directed stage needed for personal responsibility.

Interpretations influence beliefs and self-instructions, just as beliefs influence interpretations. People often misinterpret information in order to protect their self-esteem. Under these circumstances, a person may lie about the at-risk behavior and, as a result, harbor misinterpretations, beliefs and self-statements that inhibit safety self-management. Conversely, situations that enable a person to talk about near misses and calculated risks provide impetus for safety self-management.

Mental Imagery

Mental imagery is using one's "mind's eye" to picture situations without actually being there. In the workplace, it is most productive to create a mental picture of positive consequences resulting from safe actions. By focusing on positive outcomes, a person can anticipate achievement, which increases his/her confidence and desire to reach goals. Imagery can also help clarify what must be done to accomplish those goals.

When using mental imagery for safety self-management, a person should:

- see him/herself performing the safe behavior with ease and convenience;
- visualize avoiding specific negative consequences via the safe behavior;
- imagine feelings of accomplishment following the safe behavior;
- take an active perspective;
- share this imagery with others.

Motivating imagery should be shared. In fact, personal testimonies of injuries or near misses are powerful motivators because they help listeners develop a mental image. Such testimony becomes even more motivating when listeners can picture themselves or family members in that particular situation.

Self-Rewards

In addition to imagining pleasant consequences after performing a desired target behavior, one can arrange to actually experience them. This is referred to as self-rewards. Three factors must be considered when using self-rewards: reward selection, delivery and timing.

Rewards should be individualized. Although the possibilities are endless, care must be taken to ensure that rewards are easy to use following target behavior(s). Rewards should be based on behavior, not affirmation or intention. First, a person must self-observe behavior systematically and self-deliver rewards according to criteria s/he has defined. Rewards should be administered as soon as possible after the target behavior has occurred.

During early stages of self-management, a person should reward him/herself simply for participating in the process. For example, one employee rewarded her involvement in self-management by adding $1 to her vacation fund each day she completed the observing-and-recording process. Remember, the most-successful self-rewards are readily accessible, individualized, valued, varied and follow the desired behavior as soon as possible.

Goal-Setting

Setting personal goals is a powerful way to self-manage safety. Behavior-based improvement goals should be set high, yet be achievable; they should specify expectations and track progress. The acronym SMART is one way to remember the qualities of the most-influential goals: Specific, Motivational, Achievable, Recordable and Trackable.

Goals should specify the target behavior(s) and the amount of change desired; some may impose a timeframe as well.

Goal-setting helps an individual focus on improving critical behaviors. By charting progress on a graph, a person can post the results publicly in order to gain social support from co-workers. This is particularly effective when each member of a work team is conducting a similar project.

Social Support

People in control of their self-management programs create a supportive social context for themselves. They seek out people who will appreciate their commitment to improve personal safety.

Social support can take many forms, and may be either formal or informal. Examples include simple words of encouragement from co-workers; positive feedback from supervisors for personal successes; and/or formal recognition of accomplishments from the workgroup.

To cultivate social support for this effort, one must share this commitment with co-workers, friends and family. To achieve this, one can:

- Sign and publicly display a simple promise card that indicates commitment to participate in a self-management process or to reach a certain safety-improvement goal (Figure 3).
- Sign a contract with a co-worker or friend that specifies the safety-related behavior(s) one wishes to improve and includes a brief outline of the plan to accomplish this goal (Figure 4).

CONCLUSION

Safety self-management means taking personal responsibility for doing the right things to prevent injury. When working alone, with no one to hold a person accountable, does s/he choose the safe behavior or a more convenient at-risk behavior? In other words, does the individual take a calculated risk? Safety self-management techniques can help a person choose the safe way consistently. Deciding to use these techniques requires commitment and personal accountability.

Unfortunately, not everyone feels personal responsibility for safety. Self-management only works for behaviors that are self-directed; for some people, safety-related behaviors are only other-directed. Therefore, safety professionals must help employees transition from other-directed to self-directed behaviors in order to improve industrial safety.

This article has reviewed seven self-management intervention strategies that are applicable individually or in combination to improve safety-related behaviors. 1) Manage environmental activators or conditions antecedent to a target behavior. 2) Develop and use self-statements to encourage desired behavior. 3) Use mental imagery to direct and motivate target behaviors. 4) Administer self-rewards strategically to support desired behaviors. 5) Set SMART goals regarding both the completion of certain self-management techniques and the achievement of a certain level of behavioral improvement. 6) Make an explicit voluntary commitment to complete a self-improvement project and/or to reach a designated level of behavioral improvement. 7) Enlist the support of colleagues. ■

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