

Balancing External and Internal Control

Behavior-based safety is founded on a primary principle that behavior is directed by preceding events (termed antecedent conditions or activators) and motivated by consequences. Rewards (or positive consequences) support behavior and increase the likelihood the behavior will occur again. A punisher (or negative consequence) decreases occurrences of the behavior it follows. In other words, we do things to receive positive consequences and to avoid (or escape) negative consequences. And, we stop doing things that lead to negative consequences.

Often certain events (or conditions) tell us what to do (or when to do it) if we want to obtain a pleasant consequence (a reward) or avoid a negative consequence (a penalty). These events are activators (or antecedents) which provide direction or instruction for particular behavior. Incentives, for example, are activators which announce the availability of particular rewarding consequences if a target behavior occurs. In contrast, disincentives threaten the occasion of negative consequences if a certain behavior is performed. The influence of incentives or disincentive depends on the size, immediacy, and certainty of the consequences they announce. Generally, consequences (whether positive or negative) are more powerful as motivators of behavior when they are large (a valuable reward or severe penalty), immediate (available soon after the behavior), and certain (likely to occur after the target behavior).

This activator-behavior-consequence (ABC) sequence is a basic principle of human motivation, founded on years of rigorous behavioral science research. This principle is indisputable and immutable. Yet I've seen or heard numerous statements from consultants and safety professionals that seem to deny this principle. Examples include, "intentions and goals motivate behavior," "incentives don't work," "behavior-based safety produces only temporary results," "people cannot be motivated by others, they can only motivate themselves," and

“slogans, posters, games, contests and safety incentives should be eliminated.” I believe the people who made these or similar misinformed statements are reacting against the notion of external control which they attribute to behavior-based safety. They might also realize the need for internal control if long-term behavior change is desired. Yes, internal control is important, but the ABC principle is relevant here too. Let me explain.

Internal Activators and Consequences

Activators and consequences can come from the outside or inside. We receive directions, rewards, or punishers from others (outside), and we give ourselves internal directions, rewards, or punishers (inside). For example, a goal is an activator that can be a powerful motivator if it specifies achievable consequences. And, the goal can be given to us from others, or we can give ourselves our own goal. A goal from others is an external activator. But, if we believe in the goal and feel a sense of commitment to achieve it, the goal becomes internalized. Receiving a reward for reaching a goal is an external consequence, of course. But, this might not be the only consequence in this situation. The reward might be viewed as only a token of appreciation for a job well done. Internal consequences like pride, feelings of accomplishment, greater belongingness with one's work team, and an increase in self-confidence and self-esteem are actually more important if long-term involvement is desired.

Realizing the importance of internal controls (activators and consequences) influences the way we should exert external control. When a person does something only for external consequences, the person does not develop an internal rationale for the activity. This often happens when the external consequences are powerful -- soon, certain, and sizable. Thus, when the outside controls for safety are obvious and sizable (as in a big reward to win for no injury or

a job to lose for an injury), people feel no obligation to develop an internal justification for their actions. Their behavior is adequately controlled by external consequences.

Suppose the external consequence (like interpersonal feedback or a trinket for safe behavior) is only a “token of appreciation” and not large enough to fully justify the effort needed to follow all safe operating procedures all of the time. If people follow the safety requirements in this situation (which might be a big “if” under certain circumstances), they develop internal controls to justify their behavior. In other words, when people perform without sufficient external motivators they legitimize their actions with internal activators and consequences.

Instructive and Provocative Research

Pioneering research by Professor Jonathan Freedman in 1965 demonstrated the need to limit external consequences if we want people to develop internal motivation. Dr. Freedman used a mild or severe threat to prevent seven- to nine-year-old boys from playing with an expensive battery-controlled robot. In the Mild Threat condition, the boys were merely told “It is wrong to play with the robot.” Alternatively, the boys in the Severe Threat condition were told, “It is wrong to play with the robot. If you play with the robot, I’ll be very angry and will have to do something about it.” Four other toys were available for the boys to play with when the experimenter left the room.

From a one-way mirror, researchers observed that only one of 22 boys in each condition touched the robot. About six weeks later, a young woman returned to the boys’ school and took them out of class one at a time to perform in a different experiment. She made no reference to the earlier study, but instructed a boy to take a drawing test. While she scored the test, she told the boy he could play with any toy in the room. The same five toys from the previous study, including the robot, were available. Of the boys from the Severe Threat condition, 17 (or 77

percent) played with the robot, compared to only 7 (33 percent) from the previous Mild Threat condition. Presumably, more boys in the Mild Treat condition developed an internal rationale for avoiding the robot; and as a result, avoided this toy when the external pressure was not available.

Other researchers have followed up this study, and demonstrated that people are more apt to develop internal motivation when external rewards or threats are relatively small and insufficient to completely justify the target-behavior. This phenomenon has been referred to as the “less-leads-to-more effect” and is most likely to occur when people feel personally responsible for their choice of action and the resulting consequences.

Thus, external consequences should not provide complete justification for the desired behavior. Rewards or penalties which overjustify the target behavior can motivate people to perform safely for the wrong reasons. We don't want people complying with safety rules only to gain a reward or avoid a penalty. Under these circumstances they are not likely to develop internal justification (or personal control) for the safe behavior.

In Conclusion

The ABC principle of external control should not be denied, but also considered in terms of internal activators and consequences. Indeed, for people to perform safe operating procedures over the long-term in situations where external controls are not available, they need to develop internal control. They need to give themselves internal activators to direct safe behavior and internal consequences of pride, dignity, and self-respect when they go out of their way for safety. Thus, optimal safety management requires intervention that promotes the right balance between external and internal control.

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Note: Dr. Geller will be teaching ways to balance external and internal controls for safety at three two-day seminars in 1996. Contact Safety Performance Solutions at (540) 951-7233 for more information.