Changing Unsafe Behavior Using Activators and Consequences

By Andrew Salvadore

To be productive and safe, tree care professionals, or any person for that matter, must understand their own behavior as it relates to safety in order to be productive and safe. Of course, let's not forget it is possible for one to be lucky for many years, and be safe and productive without applying any formal safety principles. If you are interested in achieving a predictable, sustainable, and safe level of production, you will need more than luck.

The ABC model of behavioral science (Geller 2001), founded by behavioral scientist B.F. Skinner in the early 19th Century, is a tool that can enable anyone to achieve a predictable and sustainable safe level of production when understood and applied in concert with four basic steps in changing behavior. Is changing someone's behavior easy to do? The answer is no.

Understanding Behavior

Before we define what ABC means, let's look at a scenario where behavior change can be applied in arboriculture:

Pick up two pieces of rope of the same length and color. Imagine each are 150 ft (45.7 m) long and used for doing professional arboricultural work. One is for rigging and one is for climbing. Select the rope designated for rigging. As you look and ponder, you realize you can't tell the difference between the two ropes. So you do what a typical production-oriented employee does, you guess and hope it is right. If you choose the climbing rope and use it for rigging you just ruined a climbing rope, need to replace it, and must never use it for climbing due to personal safety. This behavior is viewed as unsafe.

Now let's take the same two ropes and place green tape on each end of one and red tape on each end of the other. We generally know that green is somewhat reflective of safe and red is not. If I asked you to pick the climbing rope, which one would you pick? Would you pick the rope with green tape or the rope with red tape? You hopefully picked the green one, just like many others have in numerous presentations and practical hands-on demonstrations I have conducted. The tape is an activator that hopefully enables you and others to make the right choice. But, there is more happening than simply the colors green and red.

Now let's look at the previous task for choosing the right rope as a problem that needs to be improved. There are four basic steps to changing behavior. Steps three and four require applying the ABC model of behavioral science. The four steps are: ►

Define the problem. Similar ropes used for rigging and climbing get misused and damaged.

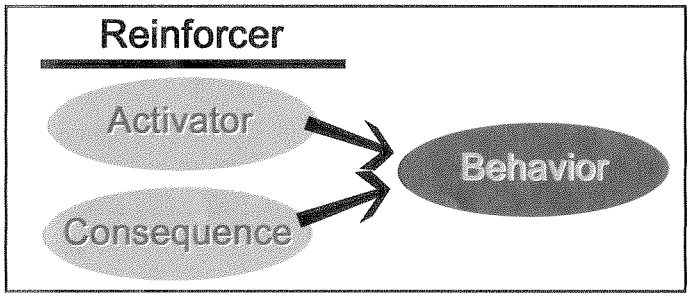
Design a way to change a behavior to fix the problem. Mark the ropes so they can be easily identified.

Identify an effective reinforcer associated with the problem. Reinforcers (Skinner 1968, 1971) for climbing safe and saving money are green, and red for rigging and danger.

Apply the reinforcer consistently to change or shape behavior. Red and green tape are applied to all rope based on their intended use.

In addition to the four basic steps to changing behavior there is another key element. This is to link or pair the reinforcers with something that motivates the person. By doing this you will create a sustainable change, so you don't have to sit and watch your employees every second of the day. Reinforcers and their effective use are one key to an effective safety program.

The convenience in the use of reinforcers is that they are embedded in the ABC model of behavioral science. Reinforcers are the As and the Cs.



The ABC Model

So what does ABC stand for? I can tell you that it doesn't stand for Always—Be—Careful.

In Skinner's model, the letters ABC have been defined two different ways. The first way is Antecedent—Behavior—Consequence (McSween 1995), and more recently as Activator—Behavior—Consequence (Geller 2001). To enable a field perspective and practical application of the ABCs, we will review the academic meanings to create an understanding, as well as apply it to actual field applications for a hands-on feel. Effective, predictable, and sustainable application of anything starts with a detailed understanding of its basic principles. Let's look closer and build on the basic ABC definition Activator—Behavior—Consequence.

To enhance the understanding of the ABCs and the reinforcers (A&C) consider the following areas of similarity and difference (types, pitfalls, effective use).

Activators

An activator is a reinforcer that occurs before a behavior. It sets the stage for instructions, is an indicator, tip, or clue, and best motivates behavior when linked with a consequence. When you link an activator and a consequence, together they become the strongest motivator of behavior.

Take a cooking stove for example. When you walk up to a hot stove and see that the cooking element is glowing red, do you touch it? Your answer is most likely no, of course not. It's not solely because you see the red stove element, it is because you know that the consequence of touching it may be a severe and painful burn. The red element and severe burn (reinforcers) are paired together.

Activators come as visual, audio, smell, taste, touch, and gut feelings. The activators are all sensory in nature except one. Gut feelings, also expressed as your collective unconscious (Gladwell 2005), are not one of the five traditional human senses previously listed. Have you ever walked up to a situation and just felt that something wasn't right? That is your gut feeling working. You need to listen to it because it is an activator and a consequence tied together so strongly that your brain is letting you know involuntarily. An experienced arborist can spot a dead or dying tree at a distance. They may even be able to determine with no physical examination that it is unsafe to climb or in need of removal. Although a professional arborist should use industry recognized techniques to document their diagnosis to prevent unfounded litigation, you get the point.

Consequences

Consequences occur after a behavior, exist in many types, powerfully influence behavior, can have a long lasting affect, and may be an activator for a future behavior. Different types of consequences include positive, negative, punishing, and ignoring. By virtue of their dictionary definition and our life experiences, we can all relate to each one and should have a common understanding without a detailed explanation. A common example to enable field perspective is getting a traffic ticket for driving through a stop sign. The ticket is painfully punishing. So why is the sign violated? If a police officer was standing by the street and holding the sign, would it be violated? No, and the reason is because the activator (stop sign) and the consequence (police officer issuing a ticket) are paired side-by-side in plain view of the potential violator.

Activator Pitfalls

Pitfalls of behavioral activators show they are not a strong influence, can have a short term affect, are overused, and are usually not linked or paired with consequences. If the smoke alarm in a room went off and you didn't smell smoke, you may not leave. If you saw smoke you would almost certainly leave. In the first instance, only an activator is present, while the second has both an activator and consequence present.

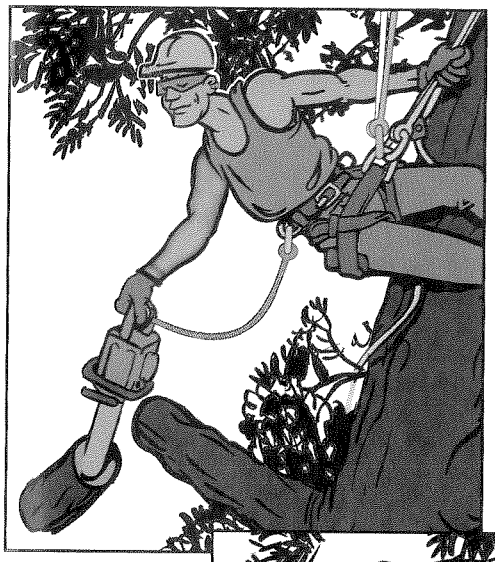
Consequence Pitfalls

The biggest pitfall that comes with consequences is that consequences are usually forms of punishment. Management usually finds it easy to walk up to a person and tell them what they are doing wrong. When was the last time you were out talking with a work crew to change their behavior using a detailed explanation of the consequences of an unsafe or at-risk behavior? Did you consciously link or pair the consequence to an activator and get the crew to recognize the link? If you have, your application of the ABCs of behavioral science is to be commended. If not, start today and you will see results.

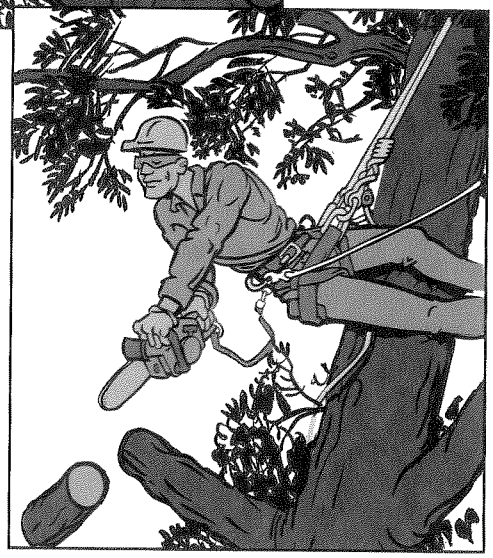
Applying the ABC Model

By now you have already seen many different ways behavior is affected using reinforcers (activators and consequences). Although there are

many ways to use reinforcers, some ways are better than others. Let's cover how to effectively use reinforcers to change unsafe and at-risk behavior.



This graphic shows an incorrect technique.



This graphic displays the right tecnique.

Activator Effective Use

Effective uses of activators require them to be positive, noticeable, variable, and demonstrated properly. How many times have you read safety literature showing a worker doing the wrong thing and it tells you not to do that? Always show the right way, especially in your published materials.

Consequence Effective Use

Consequences need to be positive, immediate, certain, meaningful, and linked to an activator. These are the four key points when you are trying to make effective use of a consequence. If you wait two days after an at-risk behavior occurs, you are less likely to change that at-risk behavior than interceding within a day, hour or even minutes of the at-risk behavior.

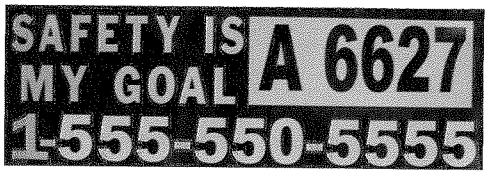
Here are a few examples of effective and ineffective use of reinforcers (activators and consequences).

Examples of activators and consequences linked together:

- 800 How's My Driving Vehicle Decal (activator), and bad driving report e-mailed and driver counseling (consequence) within minutes of the alleged unsafe driving practices (Farrell 2003).
- Job site behavior observations (activator) with immediate, certain, and meaningful feedback (consequence).
- Smashing a watermelon (consequence) by felling a tree (activator) into it.
- Police officer or video camera (activator) with an automatic ticket-issuing feature (consequence) on every stop sign.

Examples of activators and consequences *not* linked together:

- A large limb suspended (activator) above the ground while workers manually handle it without a tag line, exposing themselves to potentially fatal crushing injuries (consequence).
- Running a chain saw without the chain brake on (activator), being held while walking over logs and brush that could cause fatal laceration injury (consequence).
- Cutting a notch and back using a dull chain saw (activator), exposing all targets inside the danger zone to extreme, damaging force (consequence).



Understanding the academics of the ABC model of behavioral science and the four basic steps to changing behavior are essential for those managing a safety program or process. Although the academics are important, the field application and actual, effective use of reinforcers by the people doing the work is key. Using the ABC model reinforcers (activators and consequences) and the four basic steps to change unsafe work behavior to safe work behavior is essential for employee safety and a sustainable safety program.

If you consider this article as an activator and my promise to you that effective use of activators and consequences linked together can reinforce and produce a predictable and sustainable safe level of production, you already understand or have been changed. Either way, you are now on track, if not already realizing a zero incident work environment.

Literature Cited

Geller, S. 2001. *The Psychology of Safety Handbook*, CRC Press, Florida.

Gladwell, M. *Blink: The Power of Thinking Without Thinking*, Little Brown and Company, New York, 2005.

McSween, T. 1995. *The Values Based Safety Process*, John Wiley and Sons, New York.

Farrell, P. 2003. SAFETYFIRST (800 DECAL PROGRAM) www.safetyfirst.com.

Skinner, B.F. 1968. *The Technology of Teaching*, Meredith Corporation, New York.

Skinner, B.F. 1971. *Beyond Freedom and Dignity*, Hackett Publishing Company, New York

Andrew Salvadore is a CSP (Certified Safety Professional), CTSP (Certified Tree Care Safety Professional, and ISA Certified Arborist. He is the manager of safety training and compliance for Asplundh Tree Expert Co. (Willow Grove, PA). This article is based on a presentation he gave at the ISA Annual Conference in Providence, RI.