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There has been increased interest of late in the world of occupational safety on an approach to safety called Human and Organizational Performance or “HOP”. Often referred to as “New View”, “Safety-II”, or “Safety Differently”, HOP centers on the notion that danger, risk, and injuries are inevitable and safety systems must account for this (Cooper, 2020).

### **Beliefs, Approaches, and Science**

HOP is often presented in podcasts (e.g., Conklin, 2018), YouTube videos (e.g., SafetyVC, 2017), and social-media articles (e.g., Lawson, 2019) as in conflict with either a loosely defined idea of “traditional safety”, with behavior-based safety (BBS), or with applied behavioral science (ABS). The purpose of this article is to explore this discussion, so as to better understand the role of ABS in working with various organizational philosophies and strategies to better maximize our safety systems.

If we’re to understand the role of ABS within HOP, we must begin by examining both areas. According to promoters of HOP such as Baker (n.d.), HOP is a set of beliefs and values that can be used as a guiding philosophy of safety programs. This is analogous to the way an organization’s values are used as a foundation of various employee programs. Baker makes clear that HOP is not a program in and of itself, but is to be used when building programs and approaches to safety. Applied behavioral science (ABS), specifically applied

behavior analysis, is the science that explains why people do the things they do and focuses on the levers of behavior related to change, learning, systems, and the impact of environmental variables on performance patterns. In short, ABS provides the building blocks for organizational programs to become actionable.

ABS is not simply an approach to safety or leadership, it is not an opinion, or a philosophy to compare with another philosophy, program, or belief system. It is an objective science that explains behavior and the environment's impact on behavior. It is a field that, since the early 20<sup>th</sup> century, has produced peer-reviewed scientific advancements on replicable and systematic ways to create safe environments (e.g., Geller, 2005, Sulzer-Azaroff & Austin, 2000). What you do with that science is respective to the tools, products, and services offered by companies who specialize in the delivery of ABS services such as those using ABS tools in schools, clinical settings, or business.

This is similar to how other sciences are used in application and innovation. General Motors uses physics and other sciences as part of their proprietary approach to manufacturing automobiles and does so with a foundation of corporate values as the bedrock of their organizational culture. Toyota uses a different proprietary approach, with a foundation of different corporate values, but with the same science. You can compare Toyota's manufacturing systems vs. General Motor's and their respective corporate beliefs and values, but physics works the same at Toyota as it does at General Motors. Comparably, there are a number of companies marketing "BBS" or other behavioral services, each with different proprietary approaches, organizational beliefs, and values, but any ABS science referenced would be the same. You can compare their training systems, their assessments, and their consultative approaches, and you can compare the organizational beliefs that are the foundation of their service programs; however, the science of behavior works the same at each company. Thus, what are we comparing when comparing "BBS" vs. HOP or "Traditional Safety" vs. HOP?

Let's keep things simple and look at the facts.

## The Facts – The Science of Behavior

The fact is that there is a consistently evolving, empirically-validated, science behind learning and performance. This science is not new, but time-tested with thousands of studies exploring the laws of behavior, establishing predictable ways that behavior is learned and how behavior changes over time (Behavior Analysis Certification Board®, 2023).

Scientific advancements in ABS have consistently shown that the building blocks of behavior are the "A-B-Cs". Antecedents come before behavior and get behavior going, setting people up for success using things like training, job aids, reminders, rules, clear expectations, and guidelines to start behavior. If a person cannot demonstrate a skill, then you cannot expect this skill to occur on the job. If a person cannot state their job expectations, then a leader should not presume they will meet those

**ABS is not only compatible with HOP, it is the necessary and inevitable foundation of all behavior change.**

expectations. Antecedents are critical to getting behavior started, but science tells us that whether behavior continues is determined by what happens during or after behavior. **C**onsequences (outcomes) can occur naturally or be delivered by others, are respective to any individual, and can encourage and discourage behavior based on a number of factors including the importance of the consequence to the individual, when the consequence is delivered and by whom, and how often the consequence occurs. People do what they do because it works for them; this is a consequence. Something good happens or they avoid something bad, which keeps the behavior going. If something good did not happen or if something bad happened when they engaged in the behavior, then they would stop. Feedback, praise, peer recognition, and monetary incentives are all types of consequences, as are natural consequences such as the amount of time and effort output with a given task.

The development, testing, and context surrounding the effective use of antecedents and consequences is constantly being explored in journals such as the *Journal of Organizational Behavior Management* and the *Journal of Applied Behavior Analysis* (see Choi & Douglas, 2022; Gravina et al., 2018; Weatherly & Malott, 2008 for sample reviews).

## HOP Action = HOP ROI

HOP is a philosophy and a set of beliefs, with a set of core principles. Conklin offers six core HOP principles of HOP (Conklin, n.d.):

1. Error is Normal
2. Blame Fixes Nothing
3. Systems Drive Behavior
4. Learning Is Vital
5. Response Matters
6. Controls Save Lives

These principles are expected to influence the development of tools and programs that, in turn, will influence behavior (Baker, n.d.).



So let's make this actionable. Developing tools and programs, based on HOP principles and beliefs, requires behavior (a person or people developing these tools and programs). Behavior will only occur if there are antecedents to get that behavior going. The presentations, worksheets, job aids, and training on these principles and HOP components are all antecedents, designed to get behavior started. In this case, the behavior is developing tools and programs based on the foundation of HOP beliefs. But remember that the behavior will only continue based on the

consequences that occur during or after the behavior. If you're an organization looking to see behavior change as a result of your HOP investment, what consequence supports do you have in place to encourage behavior? What happens during and after the occurrence of those behaviors associated with developing new tools and programs based on HOP? Finding and using effective positive consequences to support behavior is critical to the success of HOP.

You invested in HOP for a reason. There is something that you're looking to accomplish. This accomplishment must be measurable or you wouldn't know how to tell if your investment is paying off.

If someone makes an error, engages in a safe behavior, or engages in any other behavior for that matter, these behaviors are all governed by the laws of behavior and can be understood by examining the environmental context surrounding each behavior. Whether the behavior is part of a system based on HOP beliefs, Operational Discipline guidelines, or some other set of organizational values, policies, or procedures, that behavior is governed by same the laws of behavior.

The success of any set of values, beliefs, and guidelines depends on getting people to behave in a way consistent with those values, beliefs, and guidelines. Thus, the success of HOP depends on understanding what behaviors are necessary to achieve your organization's desired outcome, shaping those behaviors, supporting improvements, and creating a culture of understanding and support.

1. **Pinpoint** the critical behaviors expected at each level of the organization that align with HOP beliefs and fundamentals.
2. **Align** behavior with your safety and performance goals and the context surrounding the behaviors.
3. **Set people up for success** by clarifying expectations and rationale, offering training and other resources to ensure people can demonstrate the expected skills, eliminating barriers to meeting performance expectations, and making improvements to applicable safety systems to provide the appropriate tools, policies, guidelines, and other system supports.
4. **Encourage improvements** in behavior change using coaching, feedback, and individualized positive reinforcement, helping people see the positive impact of their HOP-related behaviors.
5. **Involve all applicable levels** of the organization to ensure there is a consistent system of support.
6. **Track progress** to see what's working, what's not, and why.
7. Make **data-informed decisions** to efficiently maximize safe performance through systems of support.

## Conclusion

The success of any set of values, beliefs, and guidelines depends on getting people to behave in a way consistent with those values, beliefs, and guidelines. Thus, the success of HOP depends on building and supporting behaviors. Luckily, there is a science that explains, in a replicable, predictable, and sustainable manner, how to create lasting behavior change within any system. And this science of behavior also has underlying principles of behavior that have been studied for decades and are consistent with the core principles of HOP. For example, ABS uses assessments to both proactively and reactively understand the

context surrounding desired and undesired performance and bases solutions on these assessments (see Austin et al, 1999; the BCBA Task List 5th edition, 2017; and Echeverria & Wilder, 2023 for more information), has tools used to guide a focus on the environmental cause of the problem and not blame the victim involved (e.g., Malott & Kohler, 2021), and has an entire sub-discipline of ABS focused on the role of systems (see Volume 29, 2009 of the *Journal of Organizational Behavior Management* for a special issue on systems). ABS is the science of learning and performance with the central premise being the role of the environment on behavior change.

Active and open dialogue between safety professionals is critical, as there will always be a need for safety systems and new approaches to safety will continue to be promoted. However, we can't forget that each day, while we're having this dialogue and building these new approaches, there are people working in at-risk environments in need of good foundational values and good programs that use evidence-based science that is predictable and replicable. If you throw a ball in the air, you can predict how and when the ball will return to the ground and you can replicate this. You can use this. If you see safe behavior, then this is because there are antecedents working to get that behavior going and there are consequences encouraging that behavior to continue. You can predict this. You can replicate this. And you can use this anywhere. This is what you want, particularly when dealing with dangerous environments. Safety should not be left to opinion, bias, and trial-and-error. People do what they do because it works for them. People need to be set up for success and good things need to happen when behavior occurs if you want that behavior to continue. That's not my opinion, that's just science.

**Finding and using effective positive consequences to support behavior is critical to the success of HOP.**

If you're having success with your safety approach, products, and services then I commend you for the service you provide to helping workers come home safely to their families each day. If you have published a recent controlled study that advances the discussion of safe behaviors and environments, then please share, as this is great for the consumer, and I will integrate your findings into the planning of my next applied work and research projects in this space. If conflict arises in a science such as ABS, this conflict is resolved through scientific exploration. Controlled, replicated, and peer-reviewed research takes opinion and bias out of the discussion, and focuses simply on scientific data that can be trusted and validated. Each principle of HOP requires behavior; thus, is governed by the laws of behavior explored and advanced by ABS research. So let's work together to build safe environments.

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## About SCCi

SCCi is a global consulting and coaching firm specializing in the delivery of Applied Behavioral Science (ABS) solutions to improve workplace culture and maximize key company results in areas of leadership development and safety. Whether looking to train up a new team of leaders, implement a new safety system, or build a team of leaders using the most current standards in performance improvement, SCCi's team of expert coaches and consultants can help you meet and exceed your business needs.

For more information on sustainable culture change visit [www.scci.biz](http://www.scci.biz) or contact [info@scci.biz](mailto:info@scci.biz).

<https://scci.biz>

## About the Author



**Dr. Nic Weatherly** is a globally recognized expert in Applied Behavioral Science with over 15 years of success leading progressive people operations and culture change. Dr. Weatherly has been published in numerous peer-reviewed scientific publications, co-authored the book *Deliberate Coaching*, and has given or contributed to nearly 100 scholarly presentations and workshops worldwide on training, safety, and leadership topics. He has a Master's and Ph.D. in behavior analysis from Western Michigan University and is a Board Certified Behavior Analyst-Doctoral®.