Innocorp, Ltd.

The Evidence Behind Our Products

A resource for organizations evaluating Innocorp products

If your organization requires evidence of effectiveness before adopting a prevention product, this document is for you. It explains what research supports our products, where that research comes from, and how our approach connects to what the field knows about behavior change. We have tried to be precise rather than promotional -- distinguishing what the evidence directly shows from what it informs.

In Brief

Fatal Vision® Goggles	Evidence-based: three peer-reviewed studies found measurable effects on attitudes and behavioral intentions related to impaired driving. Not listed in a formal program registry. Consistently shown to be highly effective at engaging an audience -- and engagement is the essential first step in any prevention program. Without it, no message, curriculum, or follow-up activity can fully do its work.
Concussion Goggles	Evidence-based for empathy-building: one peer-reviewed study found significant increases in cognitive empathy among healthcare providers. The outcome studied is caregiver empathy, not patient behavior change.
Fatal Speeding® & other programs	Evidence-informed (also called research-based): built around the same engagement principle as our other products and grounded in research that establishes engagement as critical to behavior change. No product-specific controlled study.

Understanding the Question

When people ask whether a prevention product is “evidence-based,” they usually mean one of two different things -- and the answer differs depending on which they mean.

Evidence-based

The program itself has been studied in a controlled research design -- typically a randomized controlled trial -- and shown to produce specific outcomes. Many funders require programs to be listed in a formal registry, such as a government clearinghouse, to meet this standard.

Evidence-informed (also called research-based)

The program is designed around approaches and principles that research has established as effective -- even if the specific program has not itself been through a formal study process. The design draws on the evidence; it is not the subject of it. You may hear this described as research-based -- the terms refer to the same standard.

What the Research Shows for Each Product

Fatal Vision® Goggles

> *Three peer-reviewed, published studies have examined Fatal Vision Goggles and found measurable effects.*

Jewell (2004)	Found that experiential use of the goggles -- wearing them and performing tasks -- produces greater attitude and behavioral effects than observation alone. Published in the Journal of Alcohol and Drug Education.
Jewell & Hupp (2005)	Demonstrated measurable attitude change toward drinking and driving in controlled research. Published in the Journal of Primary Prevention.
Hennessy et al. (2006)	Found effects on drinking-and-driving intentions, with stronger effects among individuals who already drink more -- demonstrating impact on at-risk populations. Published in the Journal of Drug Education.

These studies establish Fatal Vision Goggles as evidence-based for the specific outcomes they measured: attitude change and behavioral intention related to impaired driving.

A note on registry listing: peer-reviewed research and formal registry listing are related but distinct standards. Innocorp products are not currently listed in any program registry. We address what that means -- and what options exist for organizations whose funders require registry listing -- in the section below.

Concussion Simulation Goggles

> *A peer-reviewed published study established that our concussion goggles increase empathy among healthcare providers.*

Hardin et al. (2024)	Found significant increases in cognitive empathy among speech-language pathology graduate students following a structured experiential learning session using concussion simulation goggles. Published in the American Journal of Speech-Language Pathology.

This study is specific to empathy-building in clinical training contexts. Organizations seeking evidence of patient behavior change or injury reduction outcomes should note that this study addressed caregiver empathy, not those outcomes directly.

Fatal Speeding® and Other Engagement-Based Programs

> *These programs do not have product-specific controlled studies. They are evidence-informed -- a standard also called research-based -- built around approaches that research has established as effective in producing behavior change.*

Describing a program as evidence-informed is not a concession -- it is an accurate description of how most prevention programs in the field are developed. The distinction matters because it is rarely the tool alone that produces outcomes. What the research consistently shows is that the facilitation process surrounding a tool -- how it is introduced, how participants engage with it, and how the experience is processed and connected to behavior -- is what drives results.

Fatal Speeding is built around a three-phase delivery protocol: establishing a baseline experience, simulating the impairment or risk condition, and a structured debrief that connects the experience to real-world decision-making. This structure is not incidental -- it reflects what the research on engagement and behavior change tells us works.

The Research Behind Our Approach

A central question for any evidence-informed program is: what research supports the approach? For Innocorp products, that research centers on engagement -- specifically, whether engagement is important in the process of behavior change. The answer, drawn from decades of research across multiple fields, is clearly yes.

Attention is the gate	Research on persuasion and communication consistently shows that attention is a prerequisite for influence. A message, however well-designed, cannot reach someone who is not paying attention. Experiential engagement is one of the most reliable ways to produce and hold attention in prevention contexts. (McGuire, 1989)
Experience produces different learning	Hands-on, experiential learning produces qualitatively different -- and more durable -- learning than information delivery alone. The body and emotions are involved, not just the mind, creating memories and insights that passive instruction cannot replicate. (Kolb, 1984)
Active participation builds efficacy	People develop stronger confidence in their ability to act on knowledge when they have actively engaged with an experience rather than simply received information about it. Self-efficacy is one of the key drivers of behavioral intention. (Bandura, 1977)
Information alone often fails	Research on corrective information shows that presenting facts to people does not reliably change their attitudes or behavior -- and can sometimes strengthen the original belief. Experience-based approaches work differently: they create personal discovery rather than external correction, bypassing the resistance that information delivery can trigger. (Nyhan & Reifler, 2010)
Behavior change requires intention	Attitudes, perceived norms, and self-efficacy drive behavioral intention, and intention drives behavior. Engaged, experiential learning can influence all three of these factors in ways that passive instruction typically cannot. (Fishbein & Ajzen, 2010)

A Note on Program Registries

Some funders require programs to be listed in a formal evidence-based program registry. Innocorp products are not currently listed in any registry.

Organizations whose funders require registry listing may wish to consider positioning Innocorp's experiential tools as supplementary components within a listed program -- providing the hands-on engagement element that most listed programs do not include on their own. We are happy to discuss how our tools have been used in this way by other organizations.

It is also worth noting that SAMHSA's National Registry of Evidence-based Programs and Practices (NREPP) -- the registry most referenced in this field -- was discontinued in 2018 and no longer exists as a formal review and listing process. If a funder requirement references SAMHSA registry listing specifically, we encourage clarifying whether that requirement has been updated to reflect current options.

A Note on How Some Organizations Have Classified Our Products

We believe in transparency, and that includes being straightforward about a classification dispute that practitioners in this field may encounter.

The Great Lakes Prevention Technology Transfer Center (PTTC) has classified impairment simulation goggles as "ineffective" in prevention materials distributed to practitioners. We have engaged directly with the organization's leadership regarding this classification and have raised substantive concerns about its evidentiary basis. We share those concerns here so that organizations relying on this guidance can evaluate it with full information.

The classification rests on a behavioral change standard.

The Great Lakes PTTC defines effectiveness as demonstrated prevention of substance use -- meaning a program must show that it changed participant behavior, not merely attitudes or intentions. That is a legitimate standard for evaluating a complete prevention program. Our concern is that it has been applied to a component tool as though it were a standalone program, which is a category mismatch.

The cited studies do not support a finding of ineffectiveness.

The classification cites Jewell and Hupp (2005) as supporting evidence. That study found significant immediate attitudinal shifts, with participants who wore the goggles demonstrating greater declines in favorable attitudes toward drinking and driving than control groups. The authors noted that effects diminished without reinforcement -- a finding that speaks to program design and sustainability, not to the absence of initial impact. A study showing positive effects that require reinforcement to sustain is not evidence of ineffectiveness; it is evidence of how prevention works.

No peer-reviewed study has directly measured subsequent behavioral outcomes -- actual driving behavior -- following use of impairment simulation goggles. The absence of that study means the evidence base is incomplete, not that the evidence shows ineffectiveness. "Insufficient evidence for demonstrated behavioral impact" is the accurate characterization. "Ineffective" is not.

No single tool is evaluated in isolation in responsible prevention science.

The Prevention First report cited by the Great Lakes PTTC explicitly states that Fatal Vision Goggles may be useful as one component of a comprehensive prevention program -- and does not conclude that they are ineffective. Applying a whole-program behavioral standard to a component tool, and then classifying that tool as "ineffective," misrepresents what the evidence says.

> *Our position is that the available evidence supports a classification of "limited evidence" or "insufficient evidence for demonstrated behavioral impact" -- not demonstrated ineffectiveness. These are meaningfully different conclusions, and we believe practitioners deserve the more accurate one.*

What Registry-Listed Programs Actually Show About Impaired Driving

Understanding what the behavioral change standard actually requires -- and which programs meet it -- puts the evidence question in important context. Two distinct challenges explain why educational prevention tools are rarely, if ever, listed in behavioral change registries.

The first challenge is that changing human behavior is genuinely difficult to accomplish. Behavior is shaped by habit, environment, social norms, economic incentives, peer influence, and enforcement. No single educational experience -- however well-designed -- can reliably overcome all of those forces. This is not a criticism of any particular tool. It is a foundational reality of prevention science that applies equally to every program in the field.

The second challenge is that even when behavior does change, measuring the specific contribution of one tool is extraordinarily difficult. It requires longitudinal study designs, population-level data, and control of confounding variables. That infrastructure is rarely available to prevention tool developers.

The programs listed on registries that have demonstrated measurable behavioral change in impaired driving are not educational programs. They are systems-level, enforcement-based, and policy interventions.

Community Trials Intervention to Reduce High-Risk Drinking (RHRD)	Rated Promising on CrimeSolutions. Reported statistically significant reductions in DUI and nighttime crashes. Components include law enforcement sobriety checkpoints, responsible beverage service training at alcohol outlets, and community mobilization. Not an educational program.
Community-Level Intervention on Alcohol-Related Motor Vehicle Crashes (California)	Rated Promising on CrimeSolutions. Found statistically significant reductions in alcohol-related motor vehicle crashes in a randomized trial. Components include enhanced law enforcement operations, undercover inspections of alcohol outlets, and restrictions on retail alcohol access. Not an educational program.

This pattern is consistent with the broader research literature, which has found that educational prevention programs -- as a standalone strategy -- have not been shown to be effective in reducing traffic crashes and have little effect on actual driving behavior. What changes driving behavior at the population level is enforcement, policy, and systems change.

> *No standalone educational program in impaired driving prevention meets the behavioral change standard that registry critics apply to Fatal Vision Goggles. Holding an experiential education tool to a standard that only enforcement and policy interventions can meet is not a legitimate comparison -- it is the wrong yardstick applied to the wrong category of tool.*

Fatal Vision Goggles are an educational engagement tool. The outcomes educational tools are designed and evaluated to produce are attention, attitude change, and shifts in behavioral intention -- the proximal precursors to behavior change that enforcement and policy interventions then reinforce at the systems level. The goggles produce those outcomes, as three peer-reviewed studies confirm. That is the appropriate standard for evaluating a tool of this kind.

Frequently Asked Question

Are Fatal Vision® Goggles evidence-based?

Yes. Fatal Vision Goggles are supported by peer-reviewed published research -- including a randomized controlled trial -- that demonstrated significant effects on attitudes toward drinking and driving and on intentions to drink and drive. Three studies have been published in peer-reviewed journals examining the goggles and finding measurable effects:

- Jewell, Hupp & Luttrell (2004) -- Journal of Alcohol and Drug Education
- Jewell & Hupp (2005) -- Journal of Primary Prevention
- Hennessy, Lanni-Manley & Maiorana (2006) -- Journal of Drug Education

Fatal Vision Goggles are not currently listed in a formal program registry. It is important to understand why, because the reason reflects two distinct challenges in prevention science, not a shortcoming of the product.

The first challenge is that changing human behavior is genuinely difficult to accomplish. Behavior is shaped by habit, environment, social norms, economic incentives, peer influence, and enforcement -- not by any single educational experience. Expecting a tool, a program, or even a full curriculum to reliably produce lasting behavior change is asking more than the science of behavior change itself supports. This is not a limitation unique to Fatal Vision Goggles. It is a foundational reality of prevention work.

The second challenge is that even when behavior does change, measuring the contribution of a specific tool is extraordinarily difficult. It requires longitudinal research designs, population-level data, and the ability to isolate the effect of one tool from the many other factors -- enforcement, media, peer influence, policy -- that shape behavior over time. That infrastructure is rarely available to prevention tool developers, and it was rarely achieved even by programs that tried.

This is part of why SAMHSA discontinued its registry in 2018: the behavioral change standard it required was so difficult to meet in real-world prevention contexts that the registry became impractical as a field guide for practitioners.

Tools like Fatal Vision Goggles are designed for a different and equally important purpose: building engagement, raising awareness, and creating the personal, felt experience of impairment that opens a conversation about risk. These are proximal outcomes -- the first steps in a behavior change process that no single tool completes alone. The programs that do appear on registries with demonstrated behavioral impact are community-level enforcement and policy interventions -- sobriety checkpoints, alcohol outlet operations, and law enforcement saturation patrols. They achieve distal outcomes because they operate at a systems level over time, not because they are a better version of what educational tools do. They are a different category of intervention entirely.

Holding an experiential education tool to the same standard as a community enforcement operation is not a meaningful comparison. It is the wrong yardstick applied to the wrong category of tool.

What the research consistently confirms is that Fatal Vision Goggles are highly effective at engaging participants and producing measurable shifts in attitudes and intentions toward impaired driving -- and that engagement is the essential first step in any prevention program. The goggles are designed to function as a powerful component within a broader prevention curriculum, not as a standalone intervention.

Further Reading

For organizations that want to explore the research behind our approach in more depth, we recommend the following:

> *The Engagement Factor: The Critical Variable in Prevention and Outreach* -- Dr. Michael Aguilar
> Written by Innocorp's founder, this book explains in plain language how engagement works in prevention contexts and why it matters for behavior change outcomes. It draws on communication theory, behavioral science, and nearly three decades of practical experience. Available as a free download at fatalvision.com.

Citations

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