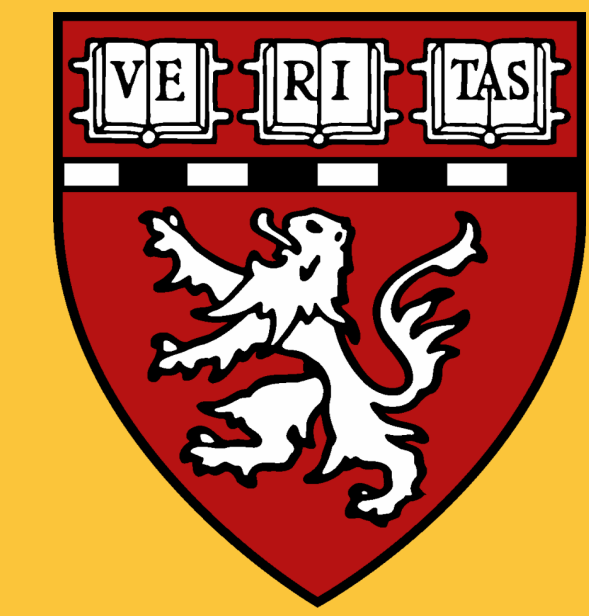


Evaluating a Novel Drug Education and Diversion Program: Implications for Research, Policy, and Practice

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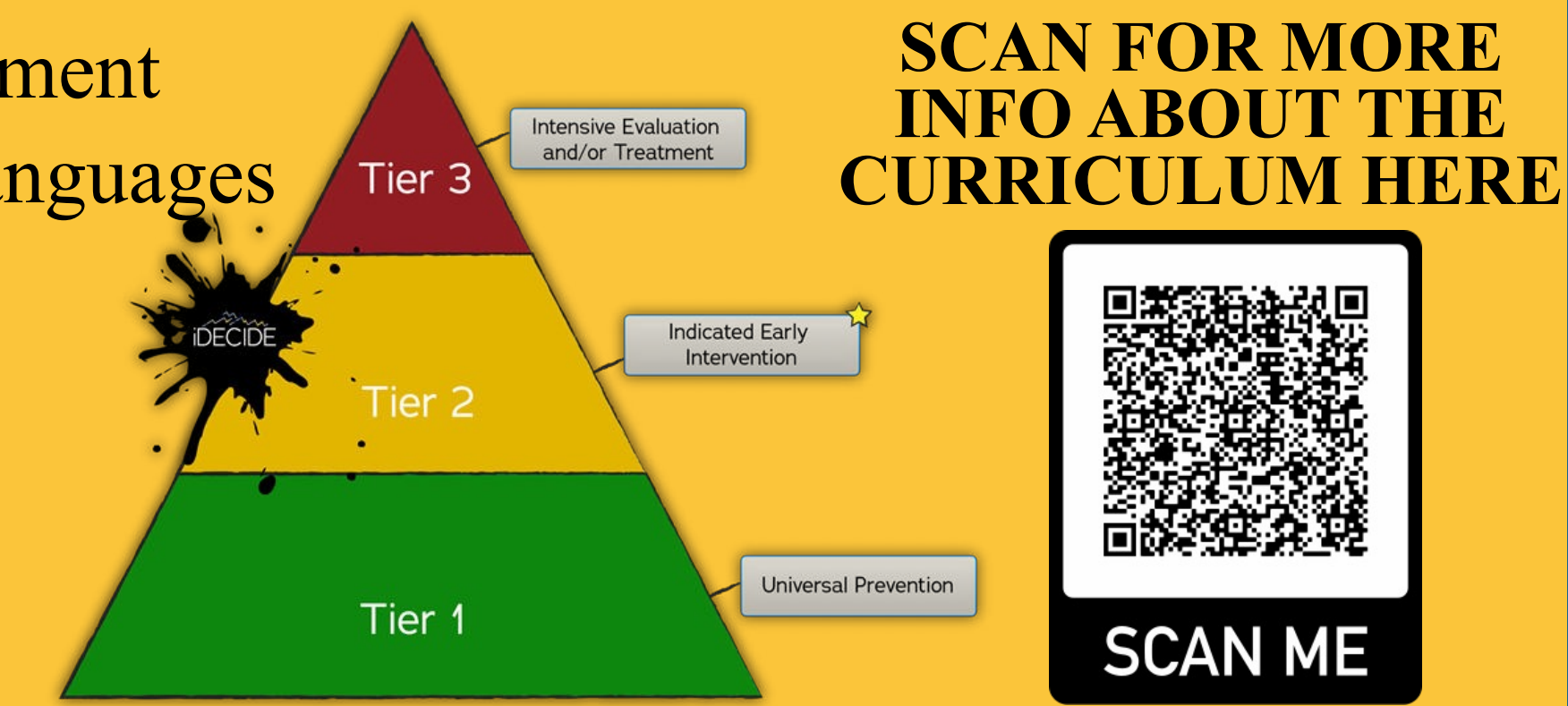


Rationale

- There is an increase in adolescents using substances at school, in part due to the advent of discrete devices that allow for easy concealment.
- Punishment (e.g., detention, suspension) is often the first line response by schools for addressing substance use.
- Punishment for substance use is an ineffective deterrent and may increase harm through multiple pathways, including: 1) stigma, 2) reactivity, 3) increased unsupervised time, 4) academic disengagement, and 5) failure to address underlying reasons for use.
- Punishment magnifies inequities, with students of color 4x more likely to be punished for substance use infractions without differences in reported rates of use at school.
- There is a lack of evidence-based best-practice guidelines for effective and equitable alternatives to punishment.

iDECIDE (Drug Education Curriculum: Intervention, Diversion and Empowerment)

- A **secondary prevention**, drug education curriculum for 6th-12th grade students to be used as an alternative to punishment
- Key features: 1) Drug agnostic, 2) Facilitated by non-clinical staff, 3) 1:1 or group-based, 4) Available in multiple languages
- Objective of iDECIDE is to provide students with:
 - Scientific understanding of the impact of substance use and addiction on the adolescent brain and body;
 - Understanding of common tactics used by industry to target young people;
 - Ability to identify and respond to personal impulses to use alcohol and other drugs; and
 - Sense of empowerment and a plan to make healthy decisions in line with their core values and future goals



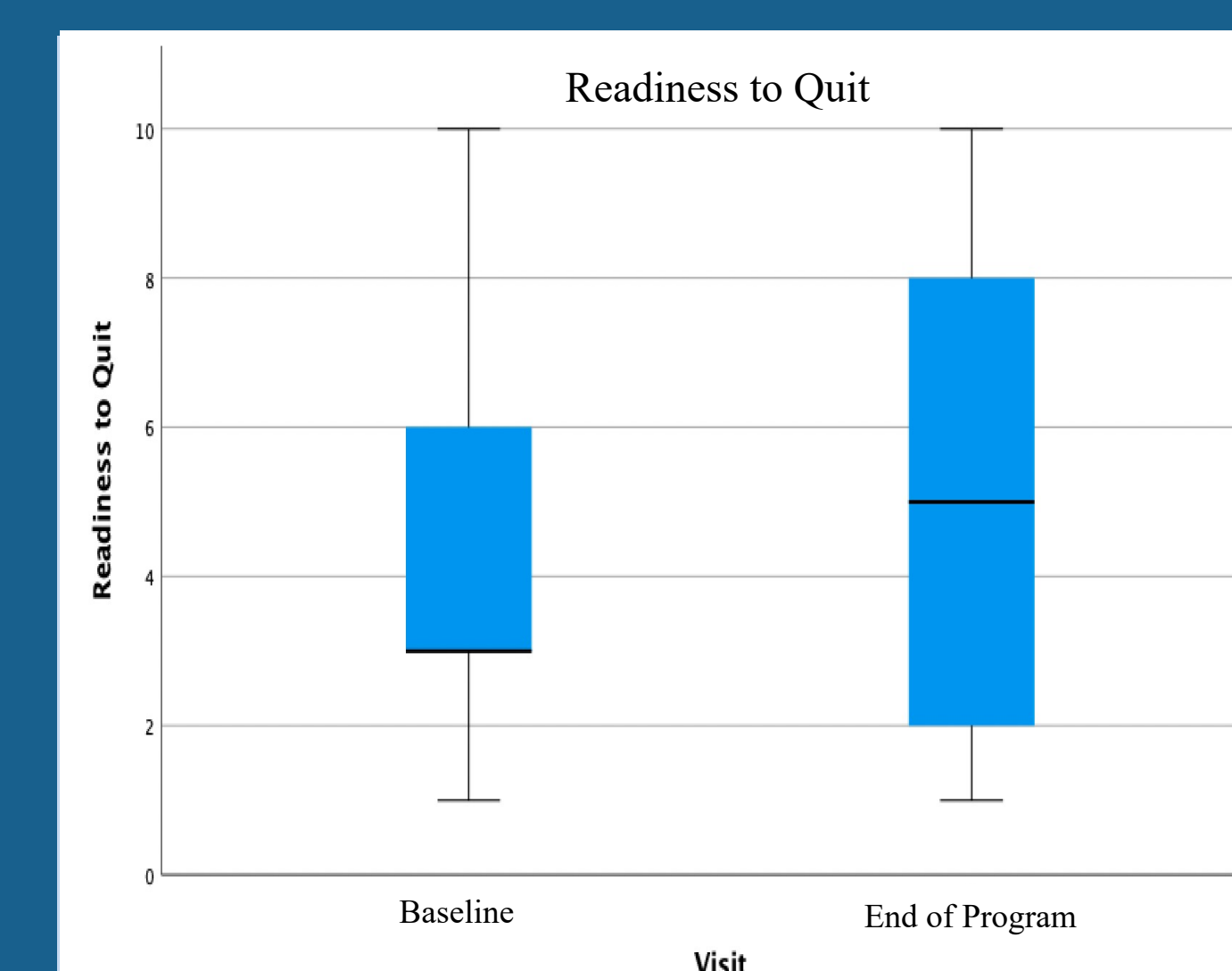
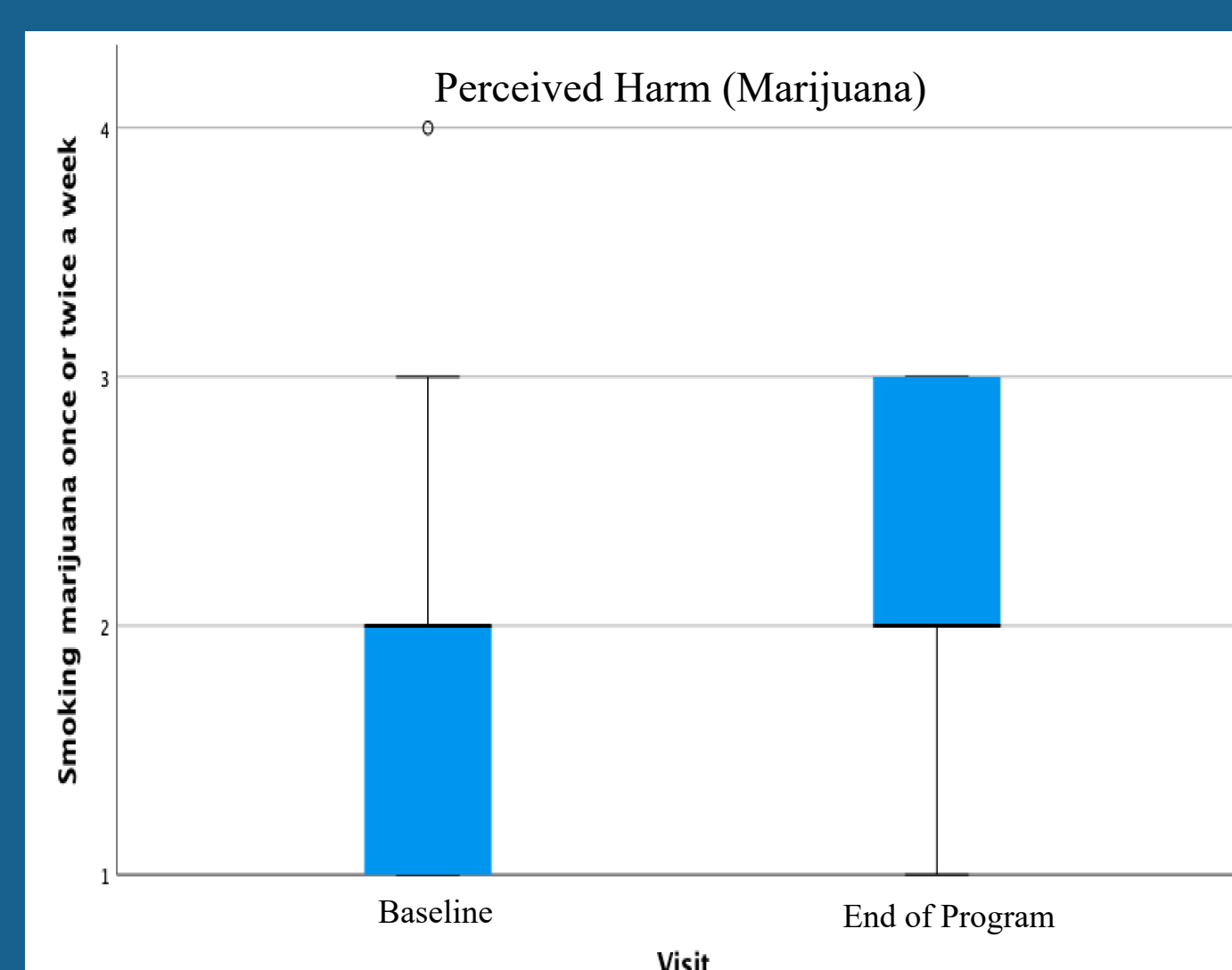
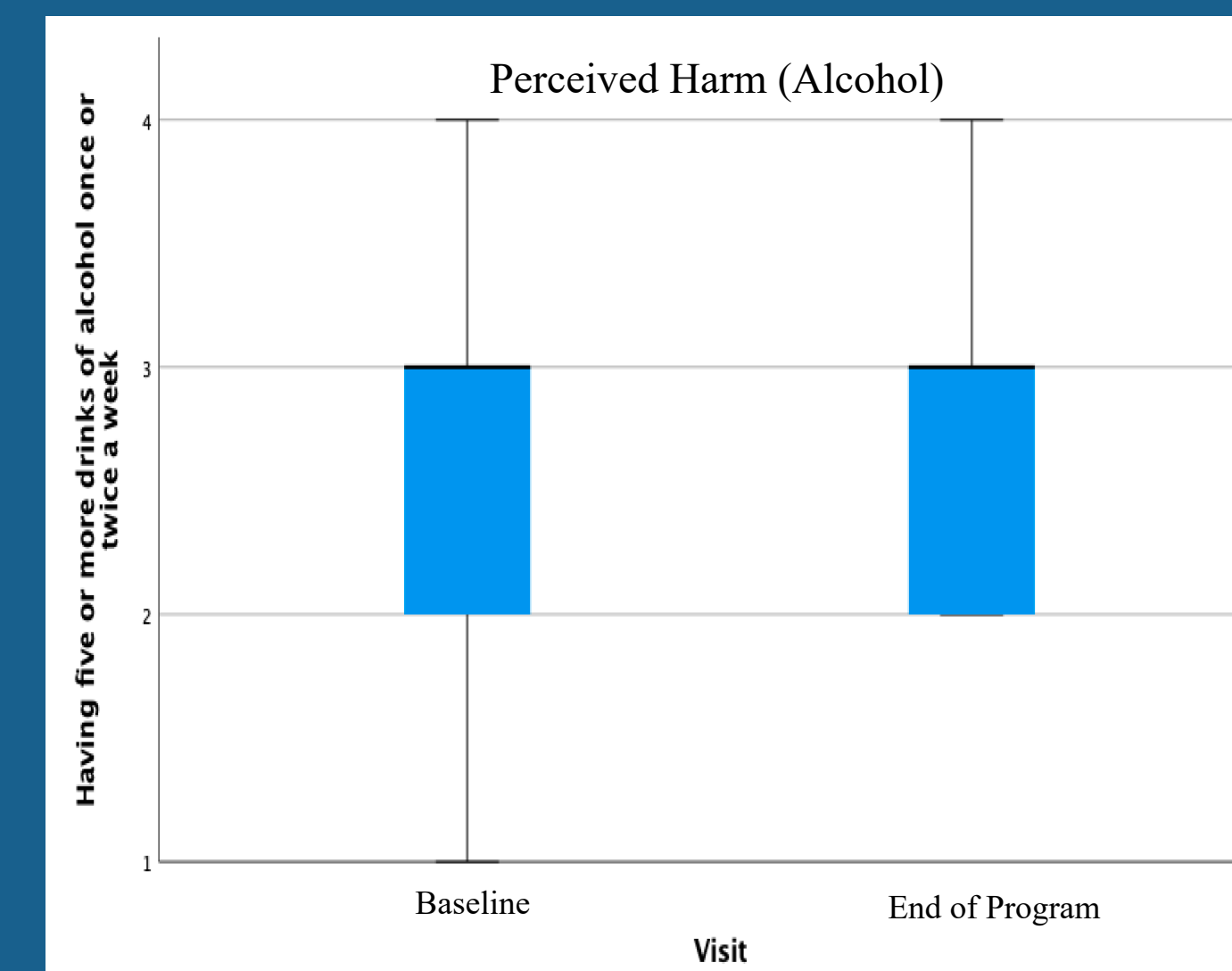
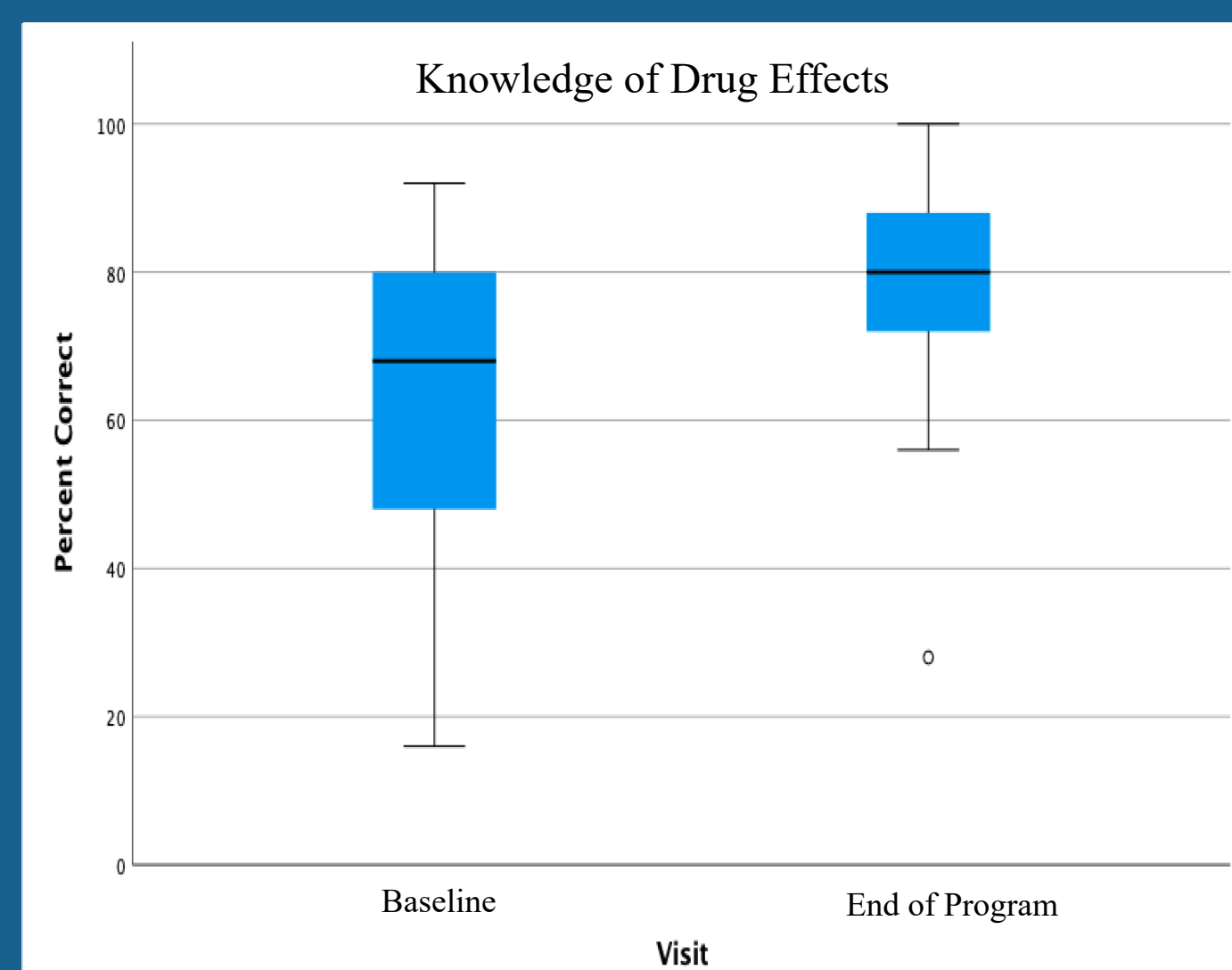
Pilot Efficacy Data

Methods

- Participants were 21 13–19-year-old adolescents
 - 7 high school students with daily or near daily substance use
 - 8 high school students with weekly but not daily substance use
 - 4 high school students with monthly substance use
 - 2 middle school students with any substance use
- Data came from baseline (pre-curriculum) and 1-week post-curriculum follow up:
 - Knowledge of drug effects and brain development (scale: 0-100% correct)
 - Perceived Harm (2010 National Survey on Drug Use and Health; scale: 1 (*no risk*) to 4 (*great risk*))
 - Readiness to Quit or Reduce Substance Use (Modified from Maryland Control Tobacco Resource Center: Brief Interventions; scale: 1 (*not at all ready*) to 10 (*very ready*))

Results

- Knowledge increased 22% after completing iDECIDE (63.4% to 77.4%).
- Perceived Harm of Substance Use increased for both having 5+ drinks once or twice a week (baseline: $M = 4.67$; end of program: $M = 4.93$) and smoking marijuana once or twice a week (baseline: $M = 4.67$; end of program: $M = 4.93$).
- Mean readiness to quit increased from 4.67 at baseline to 4.93 following the curriculum.



Module 1: Teen Brain Development, Neurobiology and Addiction, and Industry Tactics

Learning Objectives

By the end of this module, students will understand:

- | | | | |
|---|--|---|---|
| 1 | Why they were enrolled in this curriculum and what they will get out of it. | 3 | Industry tactics that target teens and other vulnerable populations. |
| 2 | Key features of neurobiology and addiction with a focus on teen brain development. | 4 | Their personal risk and protective factors for substance use and addiction. |

Module 2: Motives for Use and Specific Drug Effects

Learning Objectives

By the end of this module, students should be able to:

- | | | | |
|---|--|---|---|
| 1 | Assess their own substance use and how it affects their lives. | 2 | Understand the neurobiology and effects of alcohol and other drugs. |
|---|--|---|---|

Module 3: Identifying Triggers and Healthy Alternatives

Learning Objectives

By the end of this module, students should be able to:

- | | | | |
|---|--|---|---|
| 1 | Define and identify internal and external triggers to use alcohol and other drugs. | 2 | Establish healthy alternatives to deal with urges to use alcohol and other drugs by: <ol style="list-style-type: none"> Identifying realistic substance-free alternatives. Developing effective communication strategies, and Engaging in mindfulness. |
|---|--|---|---|

Module 4: Core Values and Setting Goals

Learning Objectives

By the end of this module, students should be able to:

- | | | | |
|---|---|---|--|
| 1 | Identify their core values. | 3 | Set actionable goals related to alcohol and other drugs use that will support healthier living and aligns with individual core values. |
| 2 | Set short- and long-term, actionable goals that move toward overall wellness. | | |

Needs Assessment

Goal

- To conduct a statewide survey of school stakeholders to:
 - Understand school staff experiences with various strategies to address substance use
 - Compare the effectiveness of diversion programs with other approaches
 - Identify barriers and facilitators to implementing substance use diversion programs

Methods

- 156 stakeholders from MA K-12 schools completed a web survey in March 2020
- Examples of survey topics included:
 - School/district characteristics
 - Frequency and type of school substance use infractions
 - Perceptions of current school response to substance use infractions
 - Equity of response to substance use infractions
 - Barriers and facilitators to offering diversion programs

Results

- Of the school personnel in our analytic sample:
 - 25.6% were part of the mental health team and 24.4% were part of the nursing team
 - 74.8% (excluding district-level administrators) worked with high school students
 - 68.7% worked with schools with enrollments of more than 500 students
 - 57.7% worked in suburban districts and 23.1% worked in urban districts
 - 38.5% reported that >25% of their enrollment were racial/ethnic minoritized students
- 58.4% reported >10 substance use infractions in the 2019-2020 academic year
 - Vaped tobacco and cannabis (all forms) were implicated in 83.7% of these instances
- Punishment was rated as the most appropriate response for substance use, particularly when the first infraction involved a substance other than tobacco ($p < 0.02$)
- Yet, diversion programs were rated as more effective ($M = 66.3$ [0 (very ineffective) to 100 (very effective)], $SD = 19.4$) than:
 - Staff monitoring bathrooms ($M = 58.8$, $SD = 21.7$, $p = 0.03$)
 - Detentions/citations ($M = 41.2$, $SD = 21.7$, $p < 0.001$)
 - In-school suspension ($M = 47.2$, $SD = 21.0$, $p < 0.001$)
 - Expulsions ($M = 52.4$, $SD = 28.5$, $p = 0.009$)
- The most commonly endorsed “needs” to launch a diversion program were:
 - Parent education ($M = 90.1$ [0 (not important) to 100 (very important)], $SD = 13.8$)
 - Financial support for current school/district staff ($M = 85.7$, $SD = 20.0$)
 - Training for facilitators on how to run diversion programs ($M = 85.3$, $SD = 21.2$)
 - Training for school administrators ($M = 85.1$, $SD = 17.9$)

Summary and Next Steps

- There is a clear need for alternatives to punishment for school-based substance use infractions that seek to educate adolescents from a **mental health promotion** and **youth empowerment** framework.
- Preliminary data support the efficacy of iDECIDE in **increasing knowledge of drug effects, perceptions of harm, and motivations to quit** – constructs known to mitigate risk for substance use progression.
- **Multiple state-funded data collection activities are underway** to further evaluate the utility, acceptability, and scalability of iDECIDE (PI: Schuster), including:
 - A randomized lab-based efficacy trial among adolescents with recent substance use at school
 - A pragmatic clinical effectiveness study with a stepped wedge design in **95 schools** in MA
 - School stakeholder qualitative interviews pre- and post-iDECIDE implementation to evaluate barriers and facilitators to sustainability