What’s the risk?
The role of perception of harm in youth marijuana prevention

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Perception of Harm (PoH)

PART 1: Research

Part 2: Practice
PART 1: Research
Part 1: Learning Objectives

1. Examine gaps in the published literature on the role of perception of harm (PoH) in youth marijuana prevention.

2. Identify “what works” in impacting PoH and producing marijuana use outcomes for youth.

3. Think about how to improve the evaluation of youth marijuana prevention efforts by incorporating more nuanced measures of PoH.
First, let’s define Perception of Harm (PoH)

An assessment of the likelihood that substance use or misuse could cause harmful personal consequences, including:

- Physical harm
- Social/Vocational harm
- Emotional/Psychological harm
- Legal harm
Why should we focus our attention on perception of harm?

• Because of the role it plays in many health behavior change theories.

• Because research evidence supports links between PoH and marijuana use.

• Because PoH is widely seen as a leading predictor of future use trends.
What factors impact perception of harm for youth marijuana use?

- Prior Use experience
- Severity, immediacy, number, & type of anticipated consequences
- Type of product (e.g., oils vs. raw) and mode of ingestion (e.g., smoke vs. eat)
- Frequency and amount of use
Why is PoH for marijuana becoming increasingly important?

• Attitudes are softening...

(It’s really a two-way street.)

www.edbatista.com/2010/04/attitude.html
Monitoring the Future Trends in Perceived Harmfulness of Trying Marijuana Once or Twice

8th Grade
10th Grade
12th Grade

Percent


8th Grade
10th Grade
12th Grade
Monitoring the Future Trends in Perceived Harmfulness of Smoking Marijuana Regularly

- **8th Grade**
- **10th Grade**
- **12th Grade**

### Percent

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<td>58.00</td>
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Why is PoH for marijuana becoming increasingly important?

- Policies are changing
- It’s becoming easier to use – with more discreet methods and (in some cases) fewer consequences for getting caught.
- Others?
The current project has two main goals:

1. What works to change youth perception of harm for marijuana use?

2. How can we best measure that change?
Methods: How do we find out “what works” for changing youth PoH for marijuana?

Reviewed Evidence-Based Registries

Reviewed the outcomes listed on the registry

Conducted a systematic literature review

Reviewed the developer’s website
Step 1: Reviewed Evidence-Based Registries

- National Registry of Evidenced-Based Programs and Practices (NREPP)
- Athena Forum’s Excellence in Prevention Strategy List
- Blueprints for Healthy Youth Development
- RAND Corporation’s Promising Practices Network on Children, Families and Communities (archived)
- Coalition for Evidence-based Policy (archived)
- U.S. Department of Education: What Works Clearinghouse

N = 36
Step 2: Conducted a systematic literature search

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<td>Peer-reviewed</td>
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<td>“Marijuana OR cannabis”</td>
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<tr>
<td>• SocINDEX</td>
<td>“Harm OR risk”</td>
<td>English</td>
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<tr>
<td>• PsycARTICLES</td>
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<td>Published last 10 yrs</td>
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<td>• Academic Search</td>
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Step 2: Conducted a systematic literature search

Exclusion Criteria:

• Measured PoH for alcohol ONLY
• Measured positive use expectancies but not PoH
• Measured actual consequences or anticipated consequences of cutting down or stopping, but not anticipatory PoH
• Treatment and not prevention
• Composite prevention programs that encompassed multiple registry-identified programs
Step 3: Reviewed the developer’s website

http://lifetasktraining.com/
http://lifeskillstraining.com/
http://www.keepaclearmind.com/keep_a_clear_mind.php
https://www.lions-quest.org/
http://tnd.usc.edu/
http://www.narconon.org/drug-education/curriculum.html
http://www.sascorp.org/success.html
http://www.projectalert.com/
Findings

Only 10 programs that successfully impact youth marijuana use measured PoH as an outcome.

- Botvin Life Skills Training
- Hip-Hop 2 Prevent Substance Abuse and HIV
- MidWestern Prevention Project/Project STAR
- Keep a Clear Mind
- Narconon® Truth About Drugs Video Program
- Lions Quest Skills for Adolescence
- Project Towards No Drug Abuse
- Storytelling for Empowerment
- Project ALERT
- PROJECT SUCCESS (Schools Using Coordinated Community Efforts to Strengthen Students)
Demonstrated as effective in changing PoH?

- Botvin Life Skills Training
- Hip-Hop 2 Prevent Substance Abuse and HIV
  - MidWestern Prevention Project/Project STAR
- Keep a Clear Mind
- Narconon® Truth About Drugs Video Program
- Lions Quest Skills for Adolescence
- Project Towards No Drug Abuse
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- Project ALERT
- PROJECT SUCCESS (Schools Using Coordinated Community Efforts to Strengthen Students)
Let’s highlight a few of these programs...

**Hip-Hop 2 Prevent Substance Abuse & HIV**
- Incorporates the language, arts, and history of hip-hop culture
- Consists of 10 modules delivered in 2 hour sessions
- Youth ages 12-16

**Keep a Clear Mind**
- Helps kids develop skills to refuse and avoid use of “gateway” drugs
- Consists of 4 booklets and 5 parent letters
- Youth & parents

**Project SUCCESS**
- Helps students resist social pressures to use substances, and understand the consequences of substance use
- Consists of school-wide activities, promotional materials, and parent education
- Youth & parents
Quick Review of Basic Evaluation Design

**Experimental Design with Pre-test and Post-test**

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<th>Assessment T1</th>
<th>Intervention</th>
<th>Assessment T2</th>
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<td>Comparison</td>
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</tbody>
</table>

**Quasi-experimental design with pre-test and post-test**

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<th>Condition</th>
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<th>Intervention</th>
<th>Assessment T2</th>
</tr>
</thead>
<tbody>
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<td>Intervention</td>
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<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Not random</td>
<td>Comparison</td>
<td>Yes</td>
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<td>Yes</td>
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</tbody>
</table>

**Non-experimental design with pre-test and post-test**

<table>
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<th>Assignment</th>
<th>Condition</th>
<th>Assessment T1</th>
<th>Intervention</th>
<th>Assessment T2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not random</td>
<td>Intervention</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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</tbody>
</table>
How rigorous was the evaluation?

- Non-Experimental
- Quasi-Experimental
- Experimental

1 7 0
How was PoH usually measured?

PoH was operationally defined through:

- Questions about general harm: (e.g., “How much do you think people risk harming themselves... if they smoke marijuana once or twice?”)

  OR

- One or two more specific questions about specific types of harm: (e.g., “Does marijuana help or harm...your health?”

• Botvin Life Skills Training
• Hip-Hop 2 Prevent Substance Abuse and HIV
• Keep a Clear Mind
• Narconon® Truth About Drugs Video Program
• PROJECT SUCCESS
• Storytelling for Empowerment
• Project Alert
• Project Toward No Drug Abuse
Let’s Reflect….

What’s wrong with existing measures?

- When PoH is measured by asking youth how much they think “people risk harming themselves (physically or in other ways) if they try marijuana ‘once or twice’, ‘occasionally’, or ‘regularly’”, confusion can happen.

  - How often is “regular” or “occasional” use?
  - By “people”, do you mean youth or adults?
  - What type of marijuana? How much marijuana?
Let’s Reflect….

How is PoH defined?

An assessment of the likelihood that substance use or misuse could cause harmful personal consequences, including:

- Physical harm
- Social/Vocational harm
- Emotional/Psychological harm
- Legal harm

What are we missing in our measurement?
Why does proper measurement matter?

- When PoH is critical to the program but is not well-measured, programs cannot describe exactly how or why they were successful.

Did changes in marijuana-or drug-related PoH help reduce youth marijuana use?

What type of PoH is most salient to participants (e.g., physical? legal?)?

What happens to marijuana use outcomes if more (or less) program content is focused on increasing PoH?
Part 2: Practice
Part 2: Learning Objectives

1. Reflect on prevention science and best practice

2. Integrate what is known about PoH evidence-based programming into practice

3. Discuss future directions
Some General Prevention Principles

Prevention strategies should:

- Address the drug problem in the local community, target modifiable risk factors, and strengthen identified protective factors
- Be tailored to address risks specific to population or audience characteristics
- Address all forms of drug abuse, alone or in combination
- Intervene across the developmental life span with focus on transition periods

Some General Prevention Principles

Prevention strategies should:

• Combine 2 or more programs synergistically
• Try to reach people in multiple settings
• Employ interactive techniques for active involvement

Prevention Best Practice

Problems and Related Behaviors

Risk and Protective Factors

Interventions/Strategies

Evidence-based Programs

Increased marijuana consumption

Low perception of harm
Let’s reflect on what works for changing PoH?

- Botvin Life Skills Training
- Hip-Hop 2 Prevent Substance Abuse and HIV
- Narconon® Truth About Drugs Video Program
- Project ALERT
- PROJECT SUCCESS
- Project Towards No Drug Abuse
- Storytelling for Empowerment
- Keep a Clear Mind

Middle or High School

6-17 years

Older Elementary School
Let’s reflect on what works for changing PoH?

Programs that changed POH did the following...

- Used multiple components and learning strategies
- Increased other drug-related knowledge
- Incorporated social influence theory
Considerations in Selecting Strategies

**Effectiveness** - Is the intervention effective?

**Conceptual Fit** - Will the intervention impact the selected risk factor?
Considerations in Selecting Strategies

Fidelity  Adaptability  Feasibility  Sustainability

Photo source: http://commons.wikimedia.org/wiki/File:Front_doors_-__geograph.org.uk_-__561574.jpg
Closing thoughts...

- Programs may impact PoH but it’s not measured
- Pay attention to how PoH is measured
- Advocate for rigorous evaluation
- Remember to follow best prevention practice
For questions, contact:

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Mvalenti@edc.org