Addressing Substance Use with Adolescents and Young Adults: Trends, Needs, Questions, and Strategies

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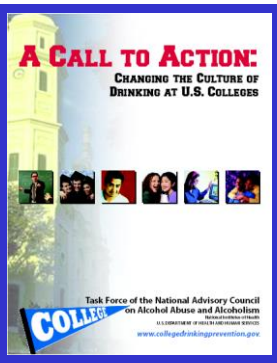
Division of Student Life

Overview of this presentation…

- Big thanks to Julia Havens
- (1) Identify emerging research questions related to substance use and young adults
- (2) Understand applications of classical conditioning to high-risk events related to alcohol and other drug use
- (3) Consider applications of brief intervention strategies to conversations with young adults

A quick word about college campuses



www.collegedrinkingprevention.gov

The 3-in-1 Framework

- Individuals, Including At-Risk or Alcohol-Dependent Drinkers
- Student Body as a Whole
- College and the Surrounding Community

From: "A Call to Action: Changing the Culture of Drinking at U.S. Colleges," NIAAA Task Force

Tier 1: Evidence of Effectiveness Among College Students

- Combining cognitive-behavioral skills with norms clarification and motivational enhancement interventions (ASTP only program mentioned by name as an example).
- Offering brief motivational enhancement interventions (BASICS only program mentioned by name as an example).
- Challenging alcohol expectancies.

From: "A Call to Action: Changing the Culture of Drinking at U.S. Colleges," NIAAA Task Force

Updates

- **Updates in:**
  - **2007**
  - **2011**
  - **2015**
- **College Alcohol Intervention Matrix (College AIM)**
  - **Thorough review of environmental approaches, policies, prevention programs, intervention programs, and other approaches**
  - **Arranged as a grid ("the matrix") so that things like cost, effectiveness, implementation needs, and other issues can be considered**

Contributors: **Mary Larimer, Traci Toomey, Jessica Cronce Jason Kilmer, Toben Nelson, Kathleen Lenk**

College Coalition for Substance Abuse Prevention
Annual Conference and Professional Development Meeting
The Evergreen State College, June 26, 2015

COLLEGE COALITION FOR SUBSTANCE ABUSE PREVENTION

Friday, June 26, 2015

9:30 a.m. -9:45 a.m. *Introduction/Welcome*
Jason Kilmer, Ph.D.
Chair, College Coalition
Assistant Professor, Psychiatry and Behavioral Sciences
Asst. Dir. of Health & Wellness for Alcohol & Other Drug Education, Div. of Student Life
University of Washington

Wendy Endress, Ph.D.
Vice President for Student Affairs
The Evergreen State College

9:45 a.m.-11:45 a.m. *Keynote #1*
Alcohol and Sexual Assault: Research Findings and Future Directions
Antonia Abbey, Ph.D.
Professor and CDS Area Chair
Department of Psychology
Wayne State University

11:45 a.m.-12:45 p.m. Lunch, Networking, and Discussion

12:45 p.m.-1:00 p.m. Announcements and updates from schools in attendance

1:00 p.m.-3:00 p.m. *Keynote #2*
Growing Up Hooking Up: Studying Emotional Reactions, Alcohol, Risky Sex, and Victimization among College Students
Melissa Lewis, Ph.D.
Associate Professor
University of Washington

(1) Identify emerging research questions related to substance use and young adults

What does marijuana use among 18-25 year olds look like here in Washington?

What did we do?

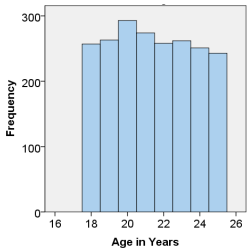
- UW Center for the Study of Health and Risk Behaviors (CSHRB) partnered with DBHR
- Internet based survey done May through early July 2014
- Got input from multiple experts, state offices, and tried to use questions with established reliability, validity, and/or normative reference groups
- Participants recruited using a combination of direct mail advertising to a random sample, as well as online advertising (Facebook, Craigslist, Amazon Mechanical Turk, study website, Facebook fan page)

Research Team: Jason Kilmer, Jessica Cronce, Mary Larimer, Theresa Walter, Tim Pace

What did we do?

- Assessed demographics on an ongoing basis and modified strategies to recruit under-represented groups
- Convenience sample, not a random sample
- To improve generalizability, used state census data to weight the sample to more accurately reflect the demographic and geographic diversity of Washington
- Weighted results closely mirror the unweighted results

n=2,101 young adults in Washington between 18-25 years of age



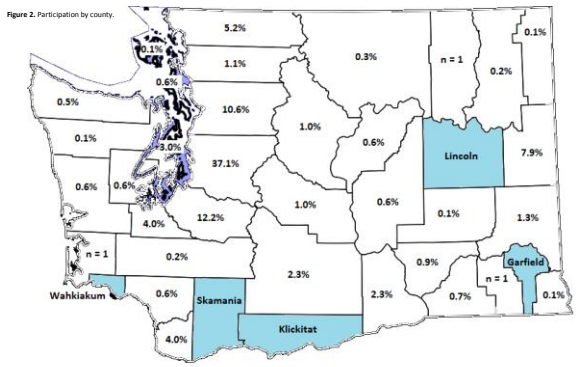
OBTAINED
Mean age: 21.44 years
(S.D. = 2.26 years)

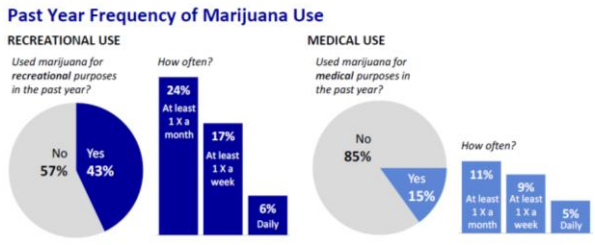
WEIGHTED
Mean age: 21.39 years
(S.D. = 2.25 years)

Other Demographic Information

- **OBSERVED**
- **Race**
  - 72.2% Caucasian/White
  - 11.9% Asian/Asian American
  - 2.1% Black/African American
  - 1.0% American Indian/Alaskan Native
  - 1.0% Native Hawaiian/Pacific Islander
  - 8.1% more than one race
  - 3.5% other
- **Gender identity**
  - 58.7% female
  - 40.7% male
  - 0.5% transgender

- **WEIGHTED**
- **Race**
  - 66.3% Caucasian/White
  - 7.7% Asian/Asian American
  - 3.89% Black/African American
  - 1.57% American Indian/Alaskan Native
  - 0.79% Native Hawaiian/Pacific Islander
  - 4.65% more than one race
  - 0.18% other
- **Gender identity**
  - 48.12% female
  - 51.39% male
  - 0.49% transgender

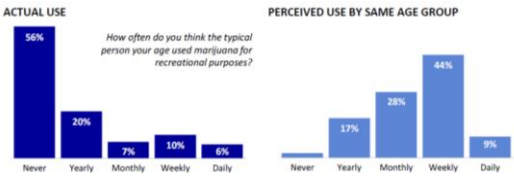




Marijuana Use

- **WEIGHTED**
- **Recreational use**
  - **43.51% at least once/past year**
    - **43.27% of 18-20 year olds**
    - **43.67% of 21-25 year olds**
- **WEIGHTED**
- **Medical use**
  - **14.74% at least once in the past year**
    - **14.02% of 18-20 year olds**
    - **15.20% of 21-25 year olds**

- **Although 56% do not use marijuana, only 2% get this correct. Over half (53%) estimate the typical person their age uses marijuana at least weekly**



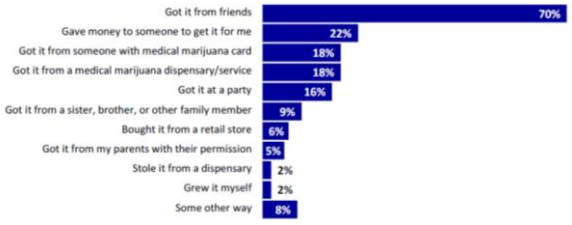
Perceived Risk: Regular Use

Perceived Risk and Relationship to Use

- **Cannabis use is strongly, negatively correlated with:**
  - Perceived physical risk from occasional use
    - **WEIGHTED: (r=-.3943, p<.001)**
  - Perceived physical risk from regular use
    - **WEIGHTED: (r=-.4265, p<.001)**
  - Perceived psychological risk from occasional use
    - **WEIGHTED: (r=-.3836, p<.001)**
  - Perceived psychological risk from regular use
    - **WEIGHTED: (r=-.3847, p<.001)**

Top Places Where People Get Marijuana

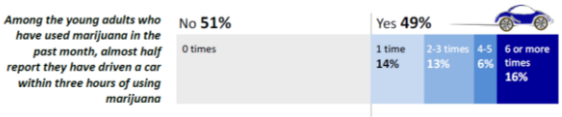
(among those who used at least once in the past 30 days)



Impaired driving and duration of effects

- **Effects on the brain**
  - **Reaction time is impacted**
    - **DUI implications – getting set at 5 ng THC/ml of blood**
    - **Why 5 ng? Same deficits behind wheel of car that we see at .08% for alcohol**
    - **How long does it take to drop below 5 ng?**
    - **Grotenhermen, et al., (2007) suggest it takes 3 hours for THC levels to drop to 4.9 ng THC/ml among 70 kg men**
    - **From a public health standpoint, Hall (2013) recommends waiting up to 5 hours after use before driving**

Driving (among those who reported using at least once in the past 30 days)



Next steps?

- **Follow-up with existing cohort and recruit new cohort**
- **Analyze additional data reflecting questions of interest:**
  - **Geographic/county differences**
  - **College vs. non-college**
  - **More under 21 vs. over 21 analyses**

Next steps?

- **Add questions on dabbing and simultaneous use**
  - In the past 30 days, how often have you used alcohol and cannabis (e.g. marijuana, hashish) at the same time so that the effects overlapped (i.e., cross fading)?
    - 0 times
    - 1 times
    - 2-3 times
    - 4-5 times
    - 6 or more times
  - In the past 30 days, how many times have you driven a car or other vehicle *within three hours* of using alcohol and cannabis (e.g. marijuana, hashish) at the same time so that the effects overlapped (i.e., cross fading)?
    - 0 times
    - 1 times
    - 2-3 times
    - 4-5 times
    - 6 or more times

What do we need to be mindful of related to health and mental health?

Cannabis Use Associated with Risk of Psychiatric Disorders (Hall & Degenhardt, 2009; Hall, 2009; Hall 2013))

- **Schizophrenia**
  - Those who had used cannabis 10+ times by age 18 were 2.3 times more likely to be diagnosed with schizophrenia
  - "13% of schizophrenia cases could be averted if cannabis use was prevented (Hall & Degenhardt, 2009, p. 1388)"

- **Depression and suicide**
  - "Requires attention in cannabis dependent" (Hall, 2013)
- **Screening suggestions**
  - Revised CUDIT-r
  - http://www.otago.ac.nz/nationaladdictioncentre/pdfs/cudit-r.pdf

Motivations for Use

- **Research team utilized qualitative open-ended responses for using marijuana among incoming first year college students to identify which motivations were most salient to this population.**

Lee, Neighbors, & Woods (2007)

Motivations for Use

Motive Category	Proportion of participants endorsing motive	Proportion of primary motives
Enjoyment/fun (e.g., be happy, get high, enjoy feeling)	52.14%	24.03%
Conformity (e.g., peer pressure, friends do it)	42.81%	16.40%
Experimentation (e.g., new experience, curiosity)	41.25%	29.36%
Social enhancement (e.g., bonding with friends, hang out)	25.71%	8.66%
Boredom (e.g., something to do, nothing better to do)	25.08%	4.15%
Relaxation (e.g., to relax, helps me sleep)	24.64%	6.97%
Coping (e.g., depressed, relieve stress)	18.14%	5.10%
Availability (e.g., easy to get, it was offered)	13.74%	2.23%
Relative low risk (e.g., low health risk, no hangover)	10.88%	0.95%
Altered perception or perspectives (e.g., to enhance experiences, makes things more fun)	10.58%	1.81%
Activity enhancement (e.g., music sounds better, every day activities more interesting)	5.68%	0.80%
Rebellion (e.g., rebelling against parents, thrill of something illegal)	5.21%	0.32%
Alcohol intoxication (e.g., I was drunk)	4.42%	0.47%
Food enhancement (e.g., enjoy good food, food tastes better)	3.79%	0.00%
Anxiety reduction (e.g., be less shy, feel less insecure)	3.31%	0.00%
Image enhancement (e.g., to be cool, to feel cool)	2.85%	0.32%
Celebration (e.g., special occasion, to celebrate)	1.26%	0.16%
Medical use (e.g., alleviate physical pain, have a headache)	1.26%	0.16%
Habit (e.g., feeling was addictive, became a habit)	0.95%	0.00%

Lee, Neighbors & Woods (2007)

Motivations for Use

Enjoyment/fun
Social enhancement
Boredom
Altered perception
Activity enhancement
Food enhancement
Image enhancement
Celebration

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Relaxation (to relax, helps me sleep)

Coping (depressed, relieve stress)

Anxiety reduction

Medical use (physical pain, have headache)

Habit

Lee, Neighbors & Woods (2007)

Withdrawal: Cannabis

Diagnostic Criteria **292.0 (F12.288)**

A. Cessation of cannabis use that has been heavy and prolonged (i.e., usually daily or almost daily use over a period of at least a few months).

B. Three (or more) of the following signs and symptoms develop within approximately 1 week after Criterion A:

1. Irritability, anger, or aggression.
2. Nervousness or anxiety.
3. Sleep difficulty (e.g., insomnia, disturbing dreams).
4. Decreased appetite or weight loss.
5. Restlessness.
6. Depressed mood.
7. At least one of the following physical symptoms causing significant discomfort: abdominal pain, shakiness/tremors, sweating, fever, chills, or headache.

C. The signs or symptoms in Criterion B cause clinically significant distress or impairment in social, occupational, or other important areas of functioning.

D. The signs or symptoms are not attributable to another medical condition and are not better explained by another mental disorder, including intoxication or withdrawal from another substance.

What's happening in the illicit market, what's happening with enforcement, and what is the impact on youth and young adults?

SPD BLOTTER

"Officers Shall Not Take Any Enforcement Action—Other Than to Issue a Verbal Warning—For a Violation of I-502."

Written by Jonah Spangenthal-Lee on December 5, 2012

seattlepi

Getting baked outside? Seattle police to look other way

Wednesday, December 5, 2012 by Vanessa Ho

KING 5, 12/6/12:
"At least for now, Seattle Police plan to look the other way on the latter part until people get used to the new law."

NEW JERSEY 101.5

Seattle Police Release Hilarious Statement About Legalized Marijuana

By Joe Votruba December 6, 2012 1:35 PM

CITYDESK

MARIJUANA Seattle Police to Pot Smokers: 'Responsibly Get Baked, Enjoy Lord of the Rings Marathon'

POSTED BY GEORGE PRENTICE ON FRI, DEC 7, 2012 AT 9:04 AM

Seattle police to hand out Doritos to Hempfest attendees instead of public consumption tickets

By William Breathes in News, Say what?
Thursday, August 15, 2013 at 11:20 am

3 Comments

Seattle Police won't be ticketing people for public consumption at this weekend's Hempfest. Instead, they'll be issuing munchies along with information on the newly-passed marijuana laws in Washington state.

THIS STICKER IS NOT A LAWYER AND CANNOT PROVIDE YOU WITH LEGAL ADVICE

HEMPFESTERS! **We thought you might be hungry.** We also thought now might be a good time for a refresher on the do's and don'ts of I-502.

DON'TS Don't drive while high. Don't give, sell, or shotgun weed to people under 21. Don't use pot in public. You could be cited but we'd rather give you a warning. **DO'S** Do listen to Dark Side of the Moon at a reasonable volume. Do enjoy Hempfest.

Remember: respect your fellow voters and familiarize yourself with the rules of I-502 at seattle.gov/police/marijwhatnow ♥, SPD

WARNING: THE CONTENTS OF THIS PACKAGE ARE AS DELICIOUS AS THEY APPEAR

Seattle tackles drug dealing, disorder in downtown core

Originally published April 21, 2015 at 7:06 pm | *Updated April 23, 2015 at 4:31 pm | Corrected*


'9 1/2 Block Strategy' to battle downtown Seattle crime

SOME OF THE CHANGES:

On 4/21/15 from Seattle Times:

"City officials and business leaders say they are embarking on an ambitious effort to shut down open-air drug dealing and associated crime in Seattle's downtown core with its new '9½ Block Strategy.'"

"Seattle residents and visitors should not be forced to navigate a dangerous open-air drug market between the downtown retail core and Pike Place Market," Murray said.

From Seattle Times, April 23, 2015

100 drug arrests kick off new push against downtown crime

Originally published April 23, 2015 at 11:15 am | *Updated April 24, 2015 at 8:27 am*

The arrests, dubbed "Operation Crosstown Traffic," involved undercover officers who made *177 purchases of heroin, meth, marijuana, crack cocaine and other drugs from 186 street dealers*."

How do we get relevant and salient research in people's hands?

Marijuana and cognitive abilities

- **Effects on the brain**
  - Hippocampus
    - Attention, concentration, and memory
  - Research with college students shows impact on these even 24 hours after last use (Pope & Yurgelun-Todd, 1996)
  - After daily use, takes 28 days for impact on attention, concentration, and memory to go away (Pope, et al., 2001)
  - Hanson et al. (2010):
    - Deficits in verbal learning (at 3 days, not 2 weeks or 3 weeks)
    - Deficits in verbal working memory (at 3 days, at 2 weeks, not 3 weeks)
    - Deficits in attention (still present at 3 weeks)

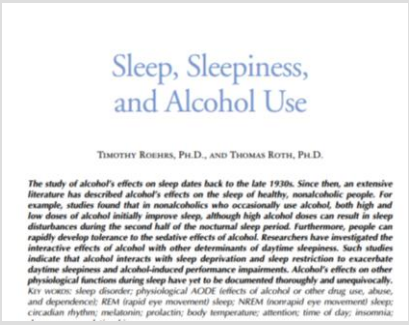
Some considerations around blood alcohol level

Absorption and Oxidation of Alcohol

- **Factors affecting absorption**
  - What one is drinking
  - Rate of consumption
  - Effervescence
  - Food in stomach
- **Factors affecting oxidation**
  - Time!
  - We oxidize .016% off of our blood alcohol content per hour

Time to get back to .000%

- .08%?
  - 5 hours
    (.080%....064%....048%....032%....016%....000%)
- .16%?
  - 10 hours
    (.160%....144%....128%....112%....096%....080%...
    .064%....048%....032%....016%....000%)
- .24%?
  - 15 hours
    (.240%....224%....208%....192%....176%....160%...
    .144%....128%....112%....096%....080%....064%...
    .048%....032%....016%....000%)



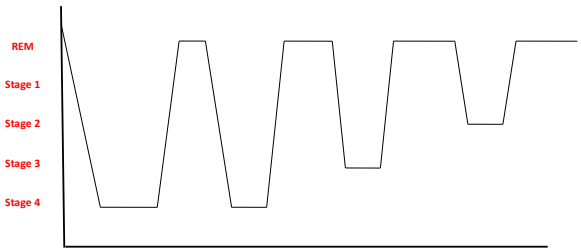
Sleep, Sleepiness, and Alcohol Use

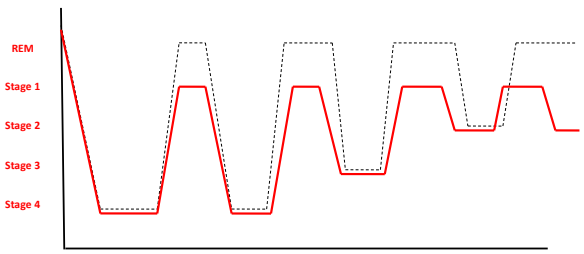
TIMOTHY ROEHRS, PH.D., AND THOMAS ROTH, PH.D.

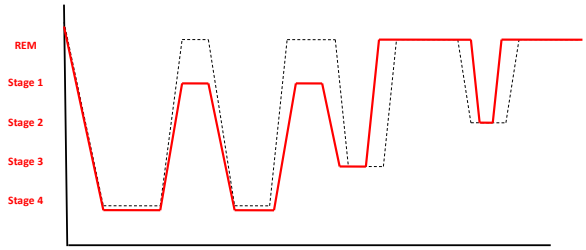
The study of alcohol's effects on sleep dates back to the late 1930s. Since then, an extensive literature has described alcohol's effects on the sleep of healthy, nonalcoholic people. For example, studies found that in nonalcoholics who occasionally use alcohol, both high and low doses of alcohol initially improve sleep, although high alcohol doses can result in sleep disturbances during the second half of the nocturnal sleep period. Furthermore, people can rapidly develop tolerance to the sedative effects of alcohol. Researchers have investigated the interactive effects of alcohol with other determinants of daytime sleepiness. Such studies indicate that alcohol interacts with sleep deprivation and sleep restriction to exacerbate daytime sleepiness and alcohol-induced performance impairments. Alcohol's effects on other physiological functions during sleep have yet to be documented thoroughly and unequivocally.

KEY WORDS: sleep disorder; physiological AODE (effects of alcohol or other drug use, abuse, and dependence); REM (rapid eye movement) sleep; NREM (nonrapid eye movement) sleep; circadian rhythm; melatonin; prolactin; body temperature; attention; time of day; insomnia;

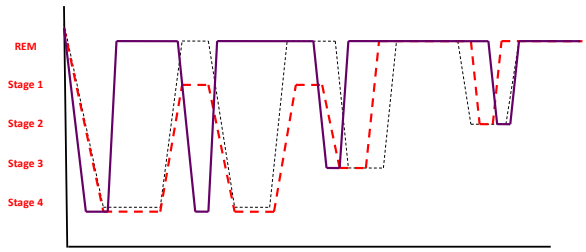
http://pubs.niaaa.nih.gov/publications/arh25-2/101-109.pdf







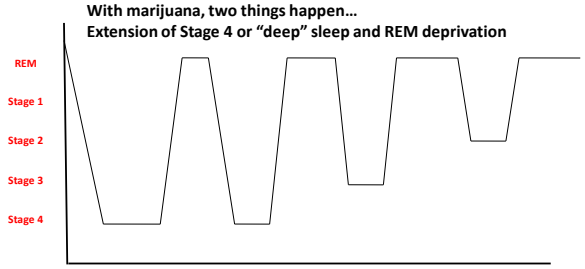
Next day, increase in:
- Daytime sleepiness
- Anxiety
- Irritability
- Jumpiness



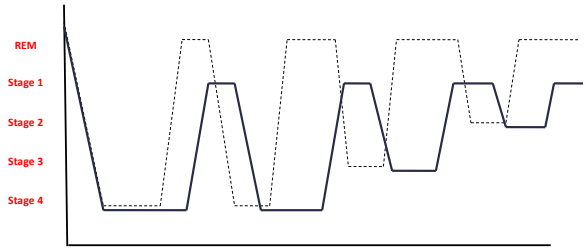
Next day, increase in:
- Daytime sleepiness
- Anxiety
- Irritability
- Jumpiness

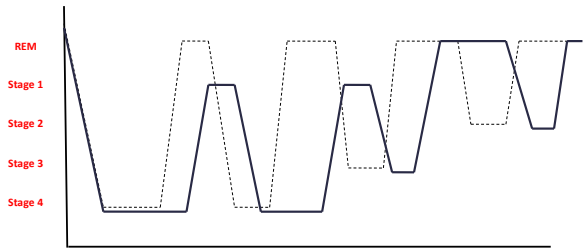
Next day, feel:
- Fatigue

With marijuana, two things happen…
Extension of Stage 4 or "deep" sleep and REM deprivation



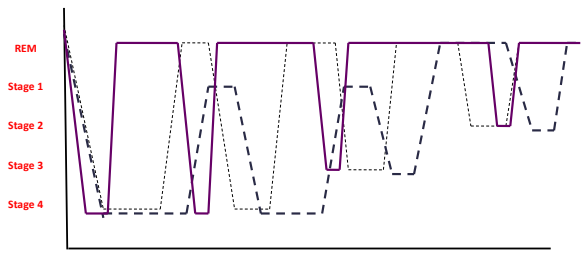
Sleep impairment documented as persistent effect of marijuana use
NIDA (2012)





Next day, just like with alcohol, increase in:

- Daytime sleepiness
- Anxiety (note that there is a Cannabis Induced Anxiety Disorder)
- Irritability
- Jumpiness



Next day, just like with alcohol, increase in:

- Daytime sleepiness
- Anxiety (note that there is a Cannabis Induced Anxiety Disorder)
- Irritability
- Jumpiness

Next day, feel:

- Fatigue

A quick word about screening

An example…

- **How many drinks did you have the last time you drank alcohol?**

Discussing marijuana…word choice matters

- **"Do you smoke marijuana?"**
  - **A person who uses edibles daily can honestly say "no"**
- **"Do you use marijuana?" or "have you used marijuana?" followed by, "What does your marijuana use look like?"**

(2) Understand applications of classical conditioning to high-risk events related to alcohol and other drug use

Tolerance


Applying Laboratory Research: Drug Anticipation and the Treatment of Drug Addiction

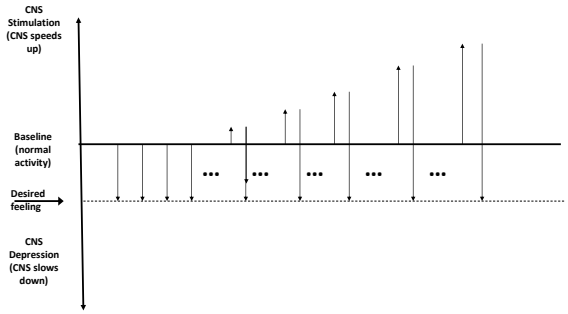
Shepard Siegel and Barbara M. C. Ramos

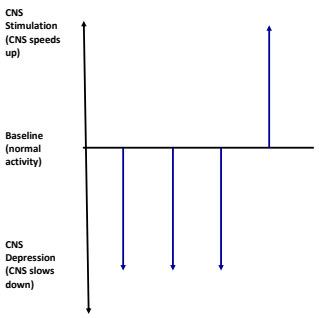
McMaster University

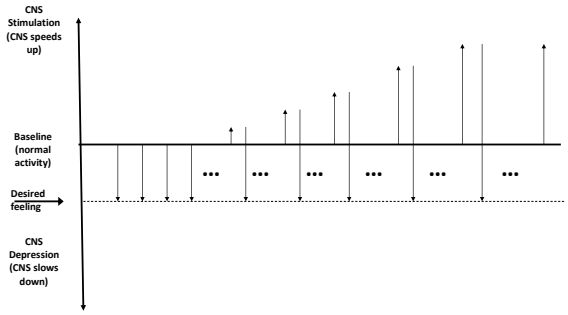
Siegel, S. & Ramos, B.M.C. (2002) Applying laboratory research: Drug anticipation and the treatment of drug addiction. *Experimental and Clinical Psychopharmacology, 10,* 162-183.

Types of learning

- **Classical Conditioning**
  - Pavlov
    - Association of two events such that one event acquires the ability to elicit responses formerly associated with the other event


CNS Stimulation (CNS speeds up)
Baseline (normal activity)
Desired feeling
CNS Depression (CNS slows down)


CNS Stimulation (CNS speeds up)
Baseline (normal activity)
CNS Depression (CNS slows down)


CNS Stimulation (CNS speeds up)
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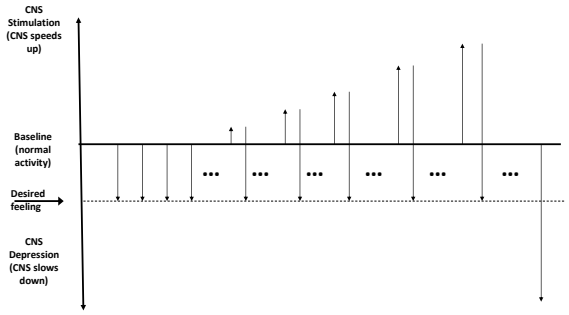


Considering cues

- **Even taste can be a cue**
  - Siegel (2011) noted that college students who consume alcohol in the presence of usual taste cues (e.g., a beer flavored beverage) display greater tolerance to intoxicating effects than when consumed in a novel blue, peppermint-flavored beverage of the same strength.

Conclusion

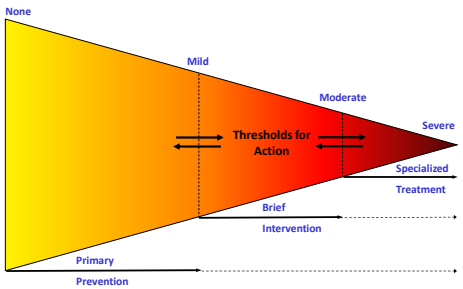
- **"The situational specificity of tolerance"**
  - If alcohol is presented "in a manner divorced from the usual alcohol-associated stimuli, the effects of the alcohol are enhanced (Siegel, 2011, p. 358)."

Implications for the college setting

- Consider high-risk events that can be associated with changes in cues:
  - Spring Break
  - 21st birthdays
  - Halloween
- Students studying abroad
- As a field, we still need to research ways to incorporate this information into prevention/intervention efforts, both for those who make the choice to drink and for those who may be bystanders intervening on someone's behalf

Consider applications of brief intervention strategies to conversations with young adults

Spectrum of Intervention Response



Trans-Theoretical Model (The Stages of Change)

(Prochaska & DiClemente, 1982, 1984, 1985, 1986)

- Precontemplation
- Contemplation
- Preparation/Determination
- Action
- Maintenance
- Relapse

Essentials of a Motivational Enhancement Approach

- Non-judgmental and non-confrontational ("the spirit" of MI)
- Emphasizes meeting people where they are in terms of their level of readiness to change
- Utilize MI strategies to elicit personally relevant reasons to change
- Often can find the "hook" that prompts contemplation of or commitment to change
- When person is ambivalent, considers ways to explore and resolve ambivalence

Miller and Rollnick (1991, 2002, 2012)

What is resistance?

- Resistance is verbal behaviors
- It is expected and normal
- It is a function of interpersonal communication
- Continued resistance is predictive of (non) change
- Resistance is highly responsive to our style

Goals of a Brief Intervention

- Prompt consideration of change
- Prompt commitment to change
- Reduce resistance/defensiveness
- Plant seeds
- Explore behavior change strategies

Brief Interventions and Motivational Interviewing

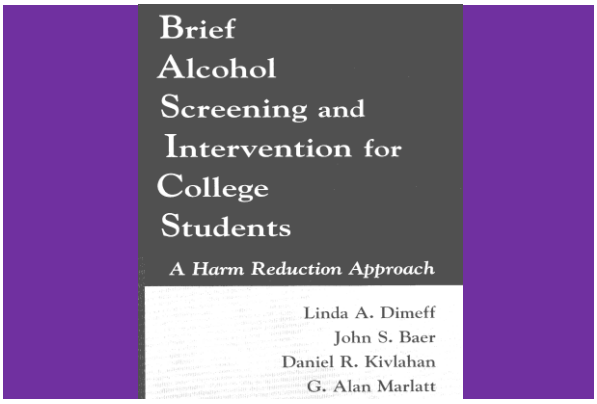
Non-judgmental	Non-confrontational	Meet people where they are
Elicit personally relevant reasons to change	Find the "hook"	Explore and resolve ambivalence

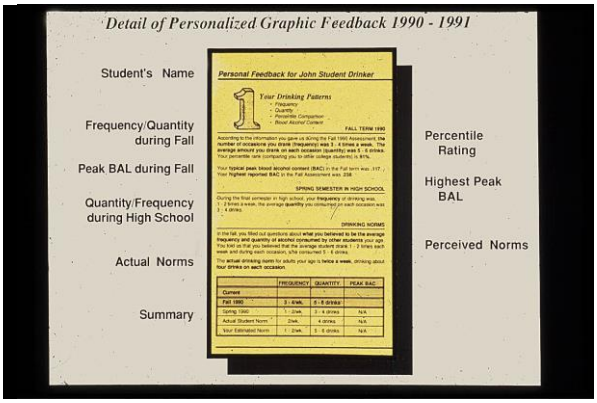
Delivering a brief intervention

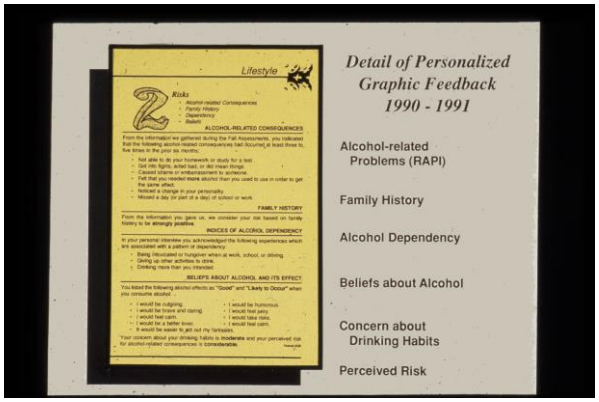
- Web-based personalized feedback intervention
- In-person review of PFI with provider trained in MI
- In-person discussion or conversation (no graphic feedback) with provider trained in MI

In-person BMI (*most with PFI/PNF*) 1999-2010

	Larimer & Cronce (2002)	Larimer & Cronce (2007)	Cronce & Larimer (2011)	Total
# of studies/interventions evidencing reductions in, or a protective effect against, drinking, consequences, and/or alcohol-psychopathology outcomes/ **Total # of studies/interventions**	8/8	10/14	17/19	35/41







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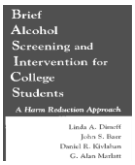
Issues for consideration related to BASICS

Brief Alcohol Screening and Intervention For College Students

- **Adjustments in feedback length/content without evaluation**
- **Best practices in training for BASICS delivery**
- **Staffing/practical needs leading to adjusting the intervention**
- **Bringing intervention to scale**
- **MI adherence & issues of fidelity**



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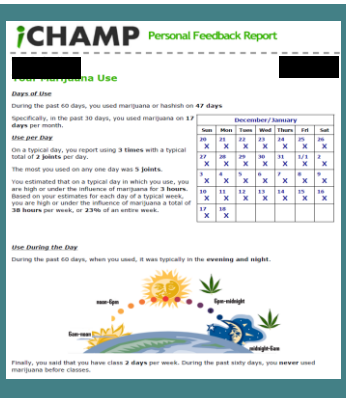
individualized College Health for Alcohol and Marijuana Project (R21DA025833)

iCHAMP

Lee, C.M., Kilmer, J.R., Neighbors, C., Atkins, D.C., Zheng, C., Walker, D.D., & Larimer, M.E. (2013). Indicated prevention for college student marijuana use: A randomized controlled trial. *Journal of Consulting and Clinical Psychology, 81,* 702-709.



iCHAMP Personal Feedback Report

[redacted] [redacted]

Your Marijuana Use

Days of Use

During the past 60 days, you used marijuana or hashish on **47 days**

Specifically, in the past 30 days, you used marijuana on **17 days** per month.

Use per Day

On a typical day, you report using **3 times** with a typical total of **2 joints** per day.

The most you used on any one day was **5 joints**.

You estimated that on a typical day in which you use, you are high or under the influence of marijuana for **3 hours**. Based on your estimates for each day of a typical week, you are high or under the influence of marijuana a total of **38 hours** per week, or **23%** of an entire week.

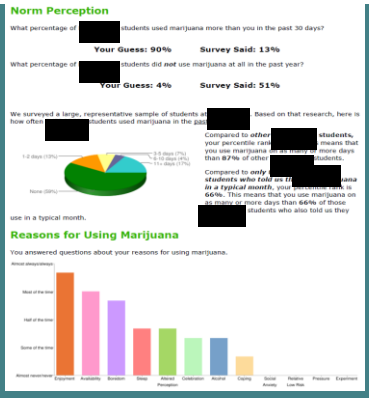
December/January

Sun	Mon	Tues	Wed	Thurs	Fri	Sat
20 X	21 X	22 X	23 X	24 X	25 X	26 X
27 X	28 X	29 X	30 X	31 X	1/1 X	2 X
3 X	4 X	5 X	6 X	7 X	8 X	9 X
10 X	11 X	12 X	13 X	14 X	15 X	16 X
17 X	18 X					

Use During the Day

During the past 60 days, when you used, it was typically in the **evening and night**.

Finally, you said that you have class **2 days** per week. During the past sixty days, you **never** used marijuana before classes.



Norm Perception

What percentage of [redacted] students used marijuana more than you in the past 30 days?

Your Guess: 90% **Survey Said: 13%**

What percentage of [redacted] students did ***not*** use marijuana at all in the past year?

Your Guess: 4% **Survey Said: 51%**

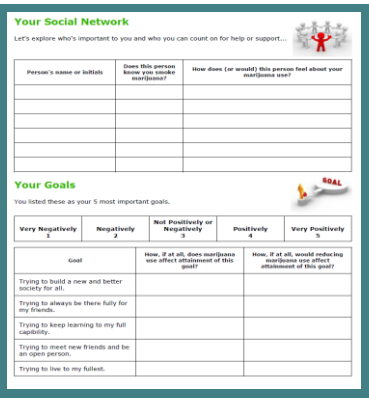
We surveyed a large, representative sample of students at [redacted]. Based on that research, here is how often [redacted] students used marijuana in the past

Compared to ***other*** [redacted] **students**, your percentile rate[redacted] means that you use marijuana [redacted] more days than **87%** of other [redacted] students.

Compared to ***only*** [redacted] ***students who told us th*** [redacted] ***ana in a typical month***, your [redacted] is **66%**. This means that you use marijuana on as many or more days than **66%** of those [redacted] students who also told us they use in a typical month.

Reasons for Using Marijuana

You answered questions about your reasons for using marijuana.



Your Social Network

Let's explore who's important to you and who you can count on for help or support...

Person's name or initials	Does this person know you smoke marijuana?	How does (or would) this person feel about your marijuana use?

Your Goals

You listed these as your 5 most important goals.

Very Negatively 1	Negatively 2	Not Positively or Negatively 3	Positively 4	Very Positively 5

Goal	How, if at all, does marijuana use affect attainment of this goal?	How, if at all, would reducing marijuana use affect attainment of this goal?
Trying to build a new and better society for all.		
Trying to always be there fully for my friends.		
Trying to keep learning to my full capability.		
Trying to meet new friends and be an open person.		
Trying to live to my fullest.		

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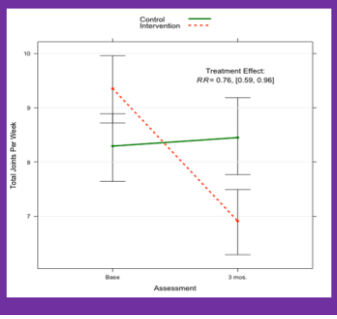
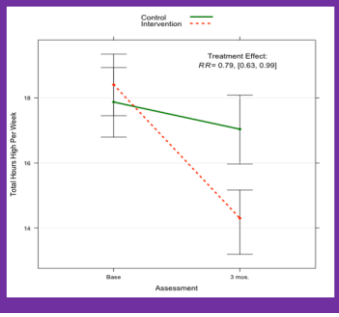
Our Findings

3 Month Outcomes	6 Month Outcomes
# Days in last 30	# Days in last 30
* # Joints per week	# Joints per week
* Hours high per week	Hours high per week
* Consequences	Consequences

At 3 months, intervention group reported 24% fewer joints smoked per week relative to control group.



At 3 months, intervention participants reported 21% fewer hours high per week relative to control group.



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- Brief interventions piece of an overall prevention puzzle
- Whether using feedback or not, fidelity to MI is key
- As professionals, can incorporate brief intervention strategies into conversations
- Be a part of adding to "what works" for marijuana & prescription misuse

Four Principles of Motivational Interviewing

- Express Empathy
  - Research indicating importance of empathy
- Develop Discrepancy
  - Values and goals for future as potent contrast to status quo
  - Person we are talking to must present arguments for change: professional declines expert role

Four Principles of Motivational Interviewing

- Roll with Resistance
  - Avoid argumentation
  - Confrontation increases resistance to change
  - Labeling is unnecessary
  - Professional's role is to reduce resistance, since this is correlated with poorer outcomes
  - If resistance increases, shift to different strategies
  - Objections or minimization do not demand a response

Four Principles of Motivational Interviewing

- Support Self-Efficacy
  - The person we're working with is responsible for choosing and implementing change
  - Confidence and optimism are predictors of good outcome in both the professional and the individual he or she is working with

Building Blocks for a Foundation

Strategic goal:

- Elicit Self-Motivational Statements
  - "Change talk"
  - Self motivational statements indicate an individual's concern or recognition of need for change
  - Types of self-motivational statements are:
    - Problem recognition
    - Concern
    - Intent to Change
    - Optimism
  - Arrange the conversation so that *the individual we're working with* makes arguments for change

OARS: Building Blocks for a Foundation

- Ask Open-Ended Questions
  - Cannot be answered with yes or no
  - We, as the ones asking the question, do not know where answer will lead
    - "What do you make of this?"
    - "Where do you want to go with this now?"
    - "What ideas do you have about things that might work for you?"
    - "How are you feeling about everything?"
    - "How's the school year going for you?"
    - "Tell me more about that."
      - This is different than the closed-ended "Can you tell me more about that?" or "Could you tell me more about that?"

What open-ended questions could you ask that might prompt…

…consideration of "consequences"?

…change talk?

…consideration of strategies for making changes?

Finding potential hooks, change talk, and behavior change strategies: An Example

- "What are the good things about _____ use for you?"
- "What are the 'not-so-good' things about _____ use?"
- "What would it be like if some of those not-so-good things happened less often?"
- "What might make some of those not-so-good things happen less often?"

OARS: Building Blocks for a Foundation

- **A**ffirm
  - Takes skill to find positives
  - Should be offered only when sincere
  - Has to do with characteristics/strengths
    - "It is important for you to be a good student"
    - "You're the kind of person that sticks to your word"

OARS:
Building Blocks for a Foundation

- **Listen Reflectively**
  - Effortful process: Involves Hypothesis Testing
    - A reflection is our "hypothesis" of what the other person means or is feeling
  - Reflections are statements
    - Person: "I've got so much to do and I don't know where to start."
    - One of us: "You've got a lot on your plate and feel really overwhelmed."
    - Person: "Yes, I really wish things weren't this way" **or…**
      "No, I'm just not really motivated to get things started."
  - "Either way, you get more information, and either way you're receiving feedback about the accuracy of your reflection."
    (p. 179, Rollnick, Miller, & Butler, 2008)

OARS:
Building Blocks for a Foundation

- **Summarize**
  - Periodically to…
    - Demonstrate you are listening
    - Provide opportunity for shifting

Wrapping Up

Lessons Learned

- Any one thing we do is a part of an overall puzzle.
  - Consider where your particular piece fits
  - Identify the other pieces on your campus or community when considering a strategic plan or approach
    - Policies/Enforcement Efforts (including unintended repercussions)
    - Environmental approaches
    - Partnerships/Coalitions
    - Prevention/Intervention Efforts
    - Screening
    - Outreach
    - Bystander approaches
  - Find the missing pieces when examining "next steps"

Lessons Learned

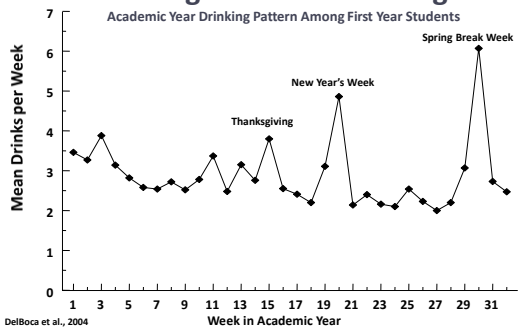
- There are different "hooks" that could prompt thinking about or committing to change, and these hooks matter.
- Consider "hooks" as you consider your plan.

Lessons Learned

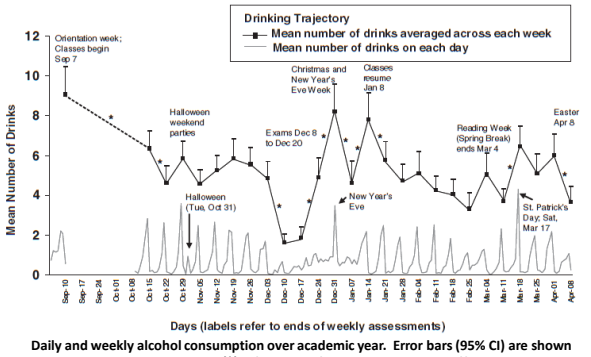
- It's o.k. for things to be a work in progress.

Understand high-risk times of year, and both increase enforcement and offer event-specific prevention

College Student Drinking



DelBoca et al., 2004



Daily and weekly alcohol consumption over academic year. Error bars (95% CI) are shown above the mean only. Asterisks (*) refer to significant adjacent week differences (Bonferroni adjusted level of p<.002) (Tremblay, et al., 2010)

Individually-focused approached must be packaged with environmentally-focused approaches, and vice-versa

Consider evidence-based strategies with clear implementation

What do we mean by "evidence-based?"

"Evidence-based practice is the integration of best research evidence with clinical expertise and patient values"

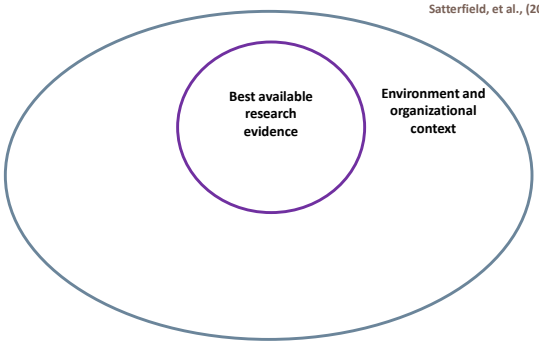
Institute of Medicine, 2001

Different states of evidence for a range of college health issues and behaviors

- Alcohol
- Marijuana
- Other Drugs
- Sexual Assault
- Relationship Violence
- Stalking
- Harassment
- Depression
- Suicide Intervention

Domains that influence evidence-based decision making

Satterfield, et al., (2009)



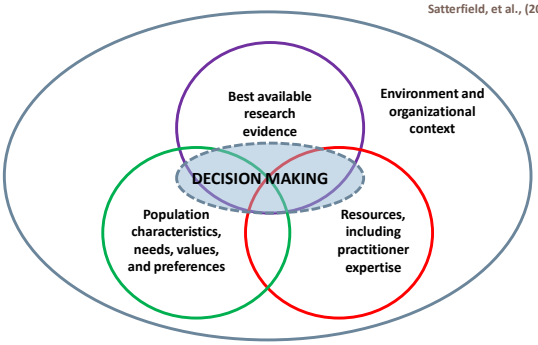
How do we assess quality of research?

- Reliability of measures
- Validity of measures
- Intervention fidelity
- Missing data and attrition
- Potential confounding variables
- Appropriateness of analysis

Source: SAMHSA's NREPP

Domains that influence evidence-based decision making

Satterfield, et al., (2009)



How do we build an evidence-based program?

www.nrepp.samhsa.gov/courses/Implementations/resources/imp_course.pdf

NREPP SAMHSA's National Registry of Evidence-based Programs and Practices

A Road Map to Implementing Evidence-Based Programs

http://www.nrepp.samhsa.gov/courses/Implementations/resources/imp_course.pdf

Five main stages of successful implementation

(Fixen, et al., 2005; NREPP/SAMHSA, 2012)

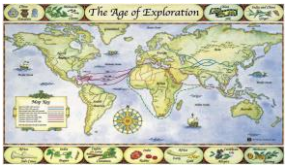
"The use of effective interventions without implementation strategies is like serum without a syringe; the cure is available, but the delivery system is not."

Fixen, Blase, Duda, Naoom, & Van Dyke (2010)

Five main stages of successful implementation

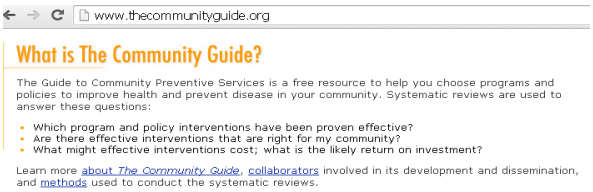
(Fixen, et al., 2005; NREPP/SAMHSA, 2012)

- **Exploration**
  - Identify community's needs
  - Assess organizational capacity
  - Search program registries
  - Understand program fidelity and program adaptation



Guide to Community Preventive Services

http://www.thecommunityguide.org

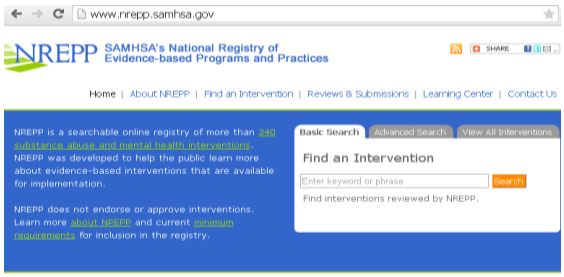


Suicide Prevention Resource Center Best Practices Registry

http://www.sprc.org/bpr

SAMHSA's National Registry of Evidence-Based Programs and Practices

http://www.nrepp.samhsa.gov



Five main stages of successful implementation

(Fixen, et al., 2005; NREPP/SAMHSA, 2012)

- **Installation: Launching your program**
  - Establish an implementation team
  - Identify and engage an individual or group of individuals to "champion" or promote your chosen program
  - Budget for startup costs
  - Recognize and address issues regarding readiness

Five main stages of successful implementation

(Fixen, et al., 2005; NREPP/SAMHSA, 2012)

- **Initial Implementation: Expect the Unexpected**
  - Manage the change process
  - Accept abundant coaching
- **Full Implementation: The program is in place**
  - Maintain and improve service
  - Maintain core program components
  - Monitor and evaluate fidelity

Five main stages of successful implementation

(Fixen, et al., 2005; NREPP/SAMHSA, 2012)

- **Program sustainability**
  - Ensure continued funding
  - Ensure fidelity to core components
  - Develop and implement plans for quality improvement
  - Evaluate data systems that support decision making
  - Develop new community partnerships
  - Share positive results to maintain buy-in

"Giving Psychology Away…"

☐"I can imagine nothing we could do that would be more relevant to human welfare, and nothing that could pose a greater challenge to the next generation of psychologists, than to discover how to best give psychology away…"

-- George A. Miller

(from the Presidential Address to the American Psychological Association in Washington, DC, September 1969)

Have a great summer!

Jason Kilmer

jkilmer@uw.edu

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Julia Havens
Amelia Arria
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