



Northwest (HHS Region 10)

PTTC

Prevention Technology Transfer Center Network

Funded by Substance Abuse and Mental Health Services Administration

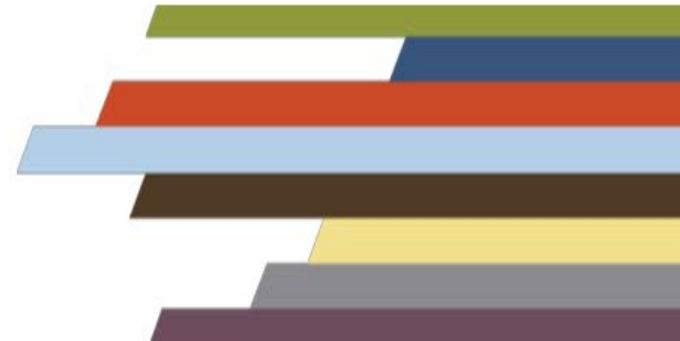


Prevention Foundations

Protective Factors

Kevin Haggerty, PhD., Director, NWPTTC

John S. Briney, MS, Data Manager, SDRG





Northwest (HHS Region 10)

PTTC

Prevention Technology Transfer Center Network
Funded by Substance Abuse and Mental Health Services Administration



The Northwest PTTC is a partnership led by the Social Development Research Group (SDRG) at University of Washington (UW) School of Social Work in collaboration with the Prevention Science Graduate Program at Washington State University (WSU), and the Center for the Application of Substance Abuse Technologies (CASAT) at the University of Nevada, Reno (UNR).

Northwest partnering institutes share a vision to expand the impact of community-activated prevention by equipping the prevention workforce with the power of prevention science.



Prevention Science
Graduate Program
WASHINGTON STATE UNIVERSITY



Disclaimer

The views expressed in this webinar do not necessarily represent the views, policies, and positions of the Substance Abuse and Mental Health Services Administration or the U.S. Department of Health and Human Services.

This webinar is being recorded and archived, and will be available for viewing after the webinar. Please contact the webinar facilitator if you have any concerns or questions.

Developed under SAMHSA Cooperative Agreement # H79SP080995

Upcoming Services

Webinars

- Measurement
 - May 20 (12:00 pm – 01:30 pm PT)
- Preventing Inhalant Use Among Youth
 - June 10, (11:00 am -12:30 pm PT)

On the Spot Consultation

- Benefits and Costs of Prevention
 - May 27, 2021 (11:00 am-12:30 pm PT)

Enhanced Prevention Learning Series

- The Ripple Effect
 - July 6, 13, 20, 27 (2:00-3:30 pm PT)



I acknowledge that we are all on the traditional lands of different peoples. Where I sit, I am situated on the ancestral lands of the Snoqualmie (Costal Salish) People. We have a responsibility to acknowledge our Indigenous connections and the histories of Indigenous land dispossession.

To identify the stewards of your land, type your location into <https://native-land.ca/>

Feel free to acknowledge in the chat if you desire

Check out Real Rent Duwamish
<https://www.realrentduwamish.org/>

Three Key Take Aways from Today

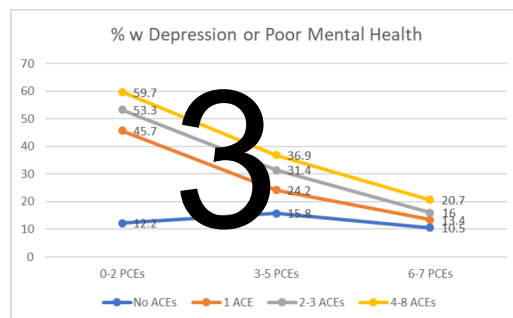


Lead with PROTECTION!



Organize Protection into a strategy that has evidence

Positive Childhood Experiences Mitigate ACEs Effects



Bethell C, Jones J, Gombojav N, Linkenbach J, Sege R. Positive Childhood Experiences and Adult Mental and Relational Health in a Statewide Sample: Associations Across Adverse Childhood Experiences Levels. JAMA Pediatr. 2019;e193007.

Objectives

Participants will be able to:

1. Explain the 'what': what are 'shared protective factors'?
2. Describe the 'how': how do we know these are protective factors?
3. Discuss the evidence of protective factors in the community, school, family and individual.
4. Explore the 'so what': what does understanding about protective factors mean for your community's work in prevention?

Some Questions from Last Session

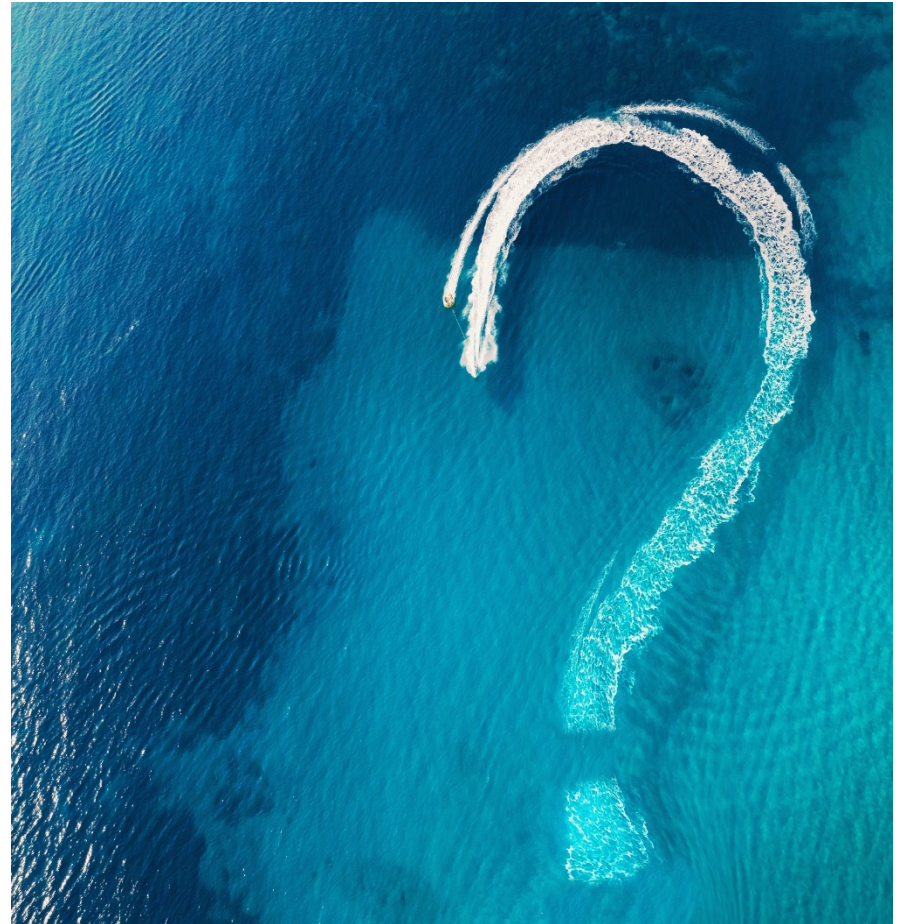
How do risk and Protective factors fit into a prevention science framework?

Are risks accumulated, or can they happen all at one?

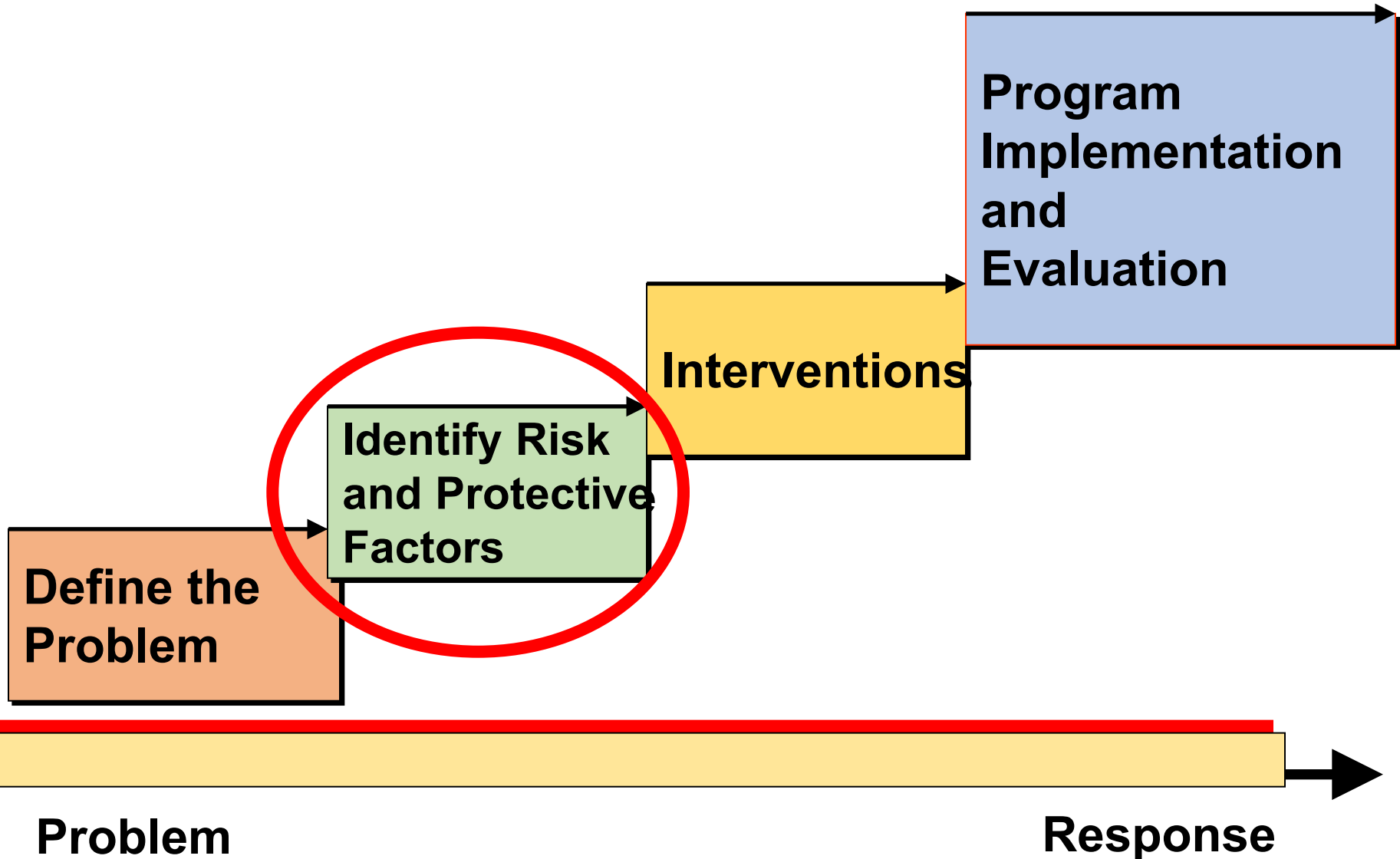
What are the most common prioritized risk factors in communities?

Talk more about specific risks for opioid use

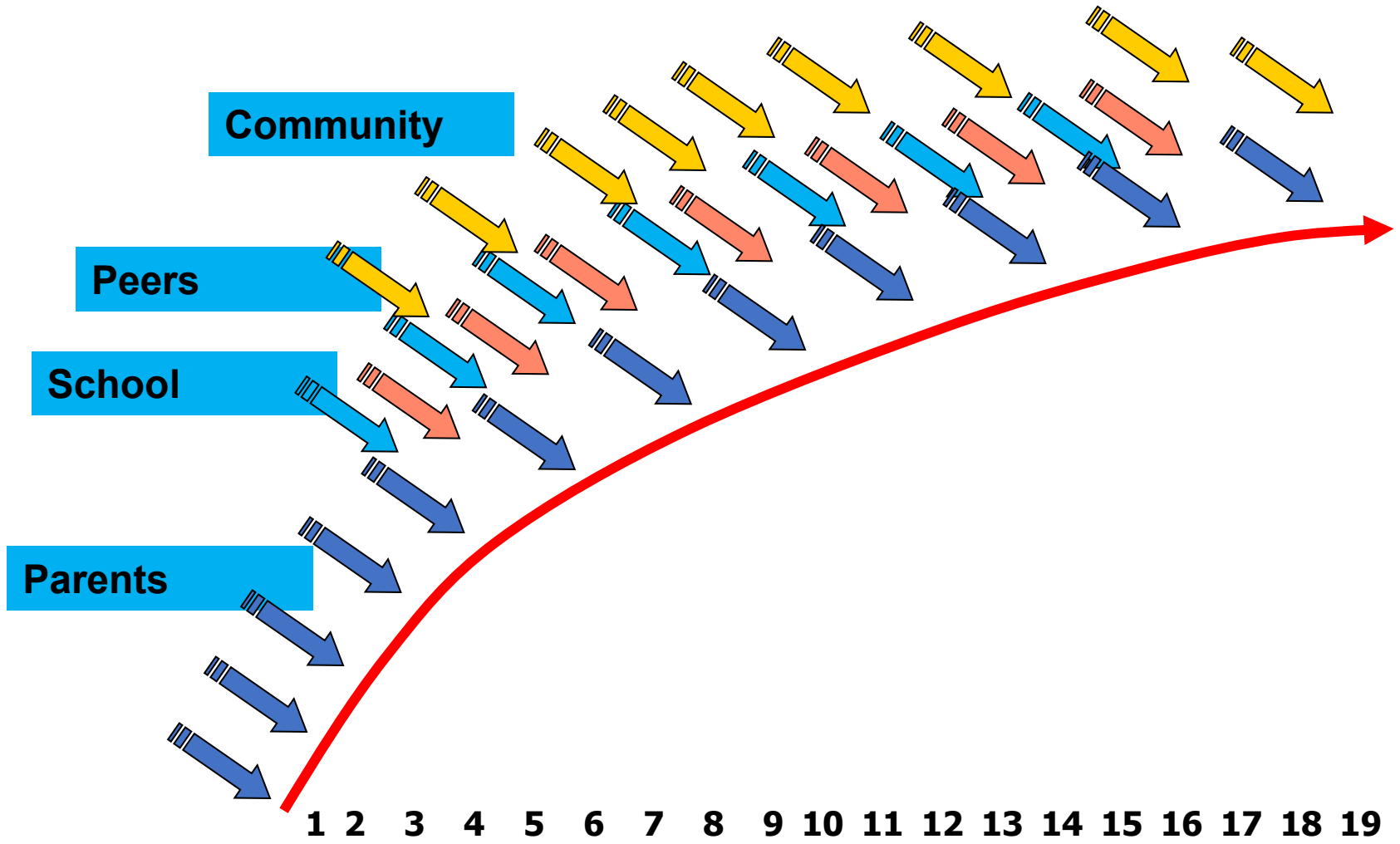
How can you have clear norms and a harm reduction focus at the same time?



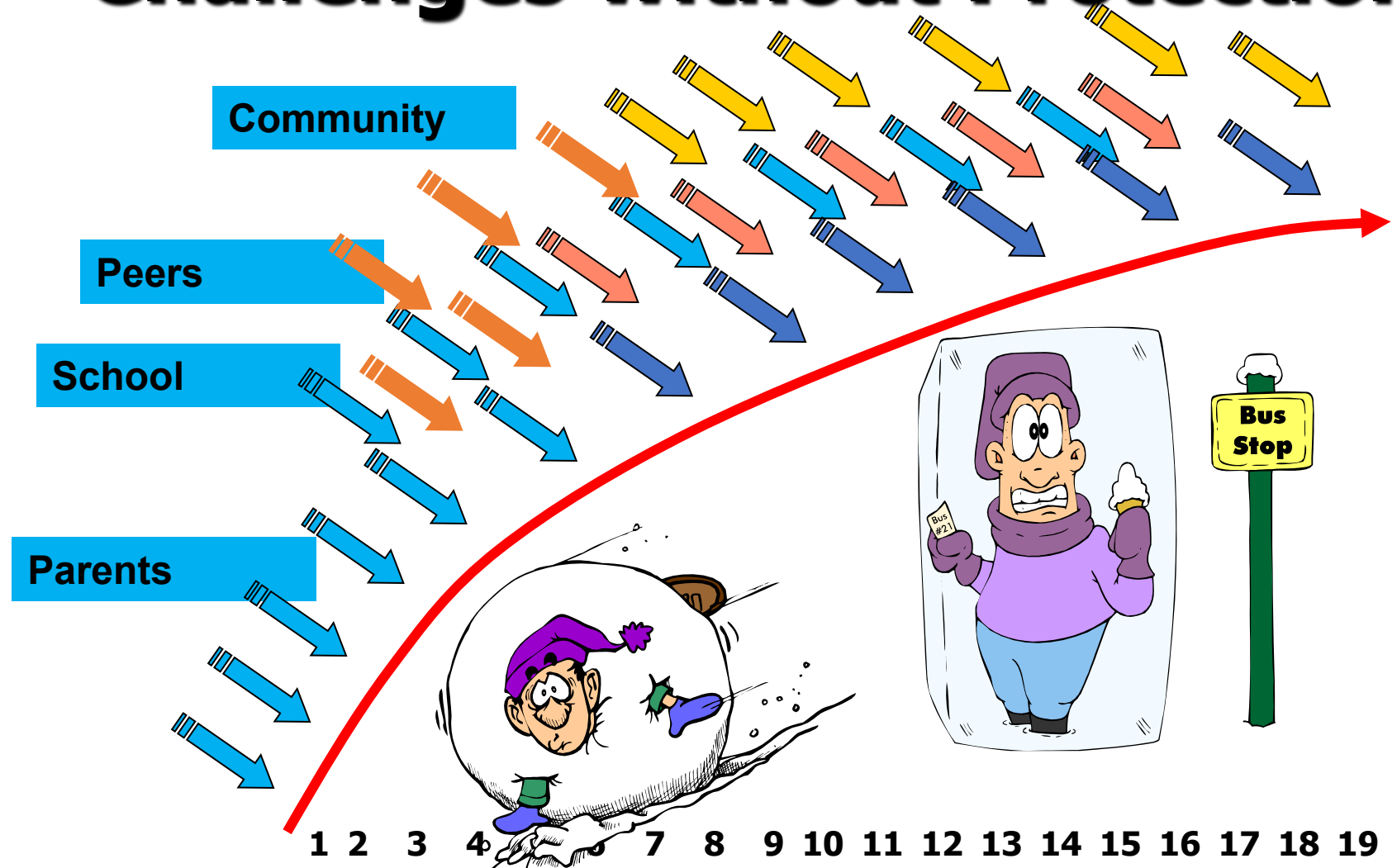
Prevention Science Framework



Factors Shaping Child and Adolescent Development



Structural Equation Models and Models of Problem Development through Early Developmental Challenges without Protection



Common Prioritized Risk Factors Communities

- Parental attitudes favorable to problem behavior
- Low commitment to school
- Favorable attitudes toward problem behavior
- Family management problems
- Friends who engage in problem behavior
- Academic failure
- Rebelliousness
- Laws and norms favorable toward drug and alcohol use
- Family conflict

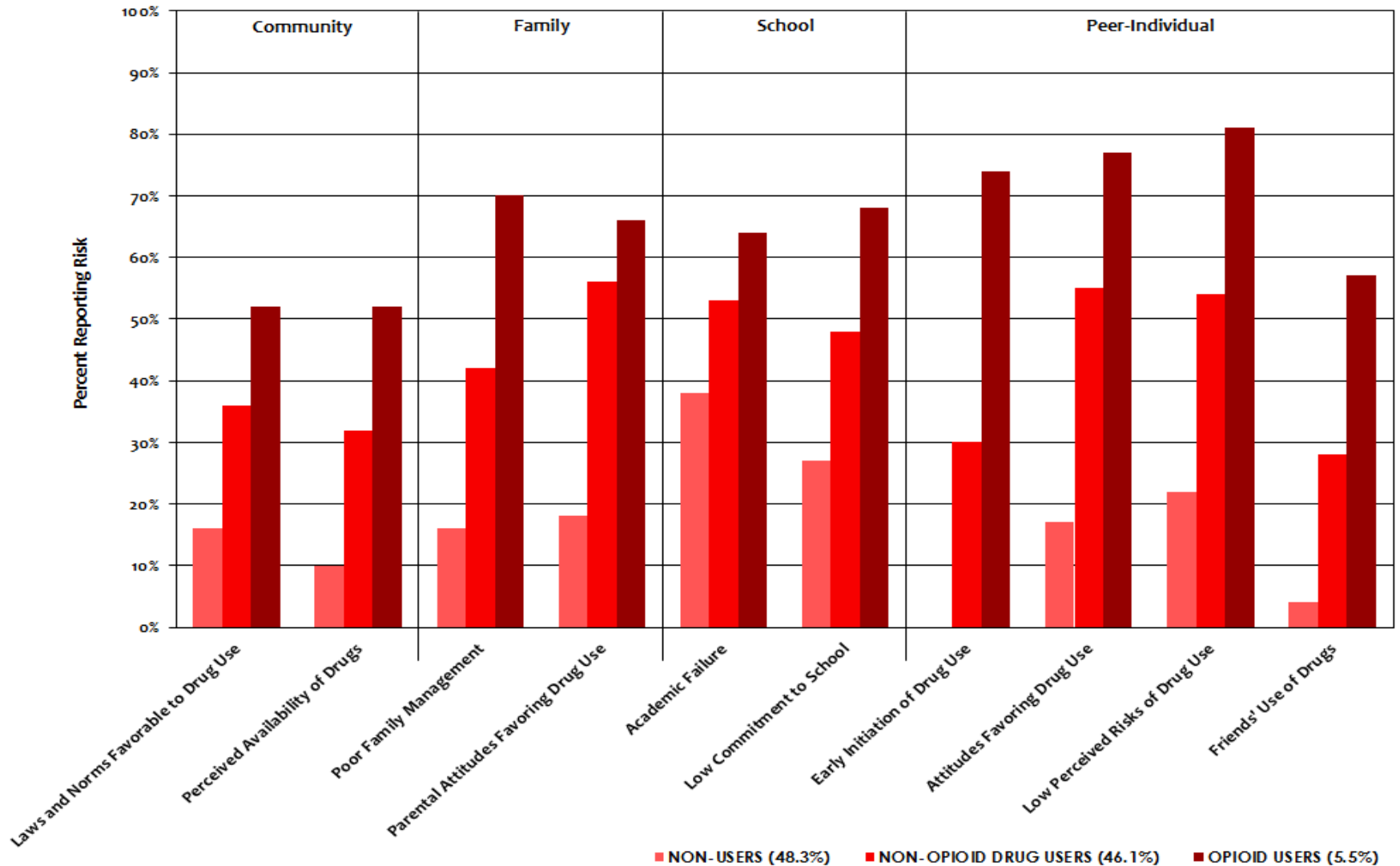
Nonmedical Prescription Opioid Users Are Multiple Drug Users

*20 year old suburban sample

	None	<10/yr	>10/yr
Alcohol	82.6	98.9	100.0
Tobacco	42.2	88.6	91.7
Marijuana	45.1	92.6	96.4
Cocaine	4.6	38.3	72.6
Psychedelics	6.1	45.1	64.3
Ecstasy	6.5	41.1	64.3
Amphetamines	3.4	26.9	63.1
Sedatives	0.8	20.6	45.2
Heroin	0.2	4.6	17.9
Any Illicit drug	45.7	94.9	96.4
Any illicit drug exc. mj	11.7	68.6	85.7
Mean number of illicit drugs inc. mj	0.67	2.69	4.23

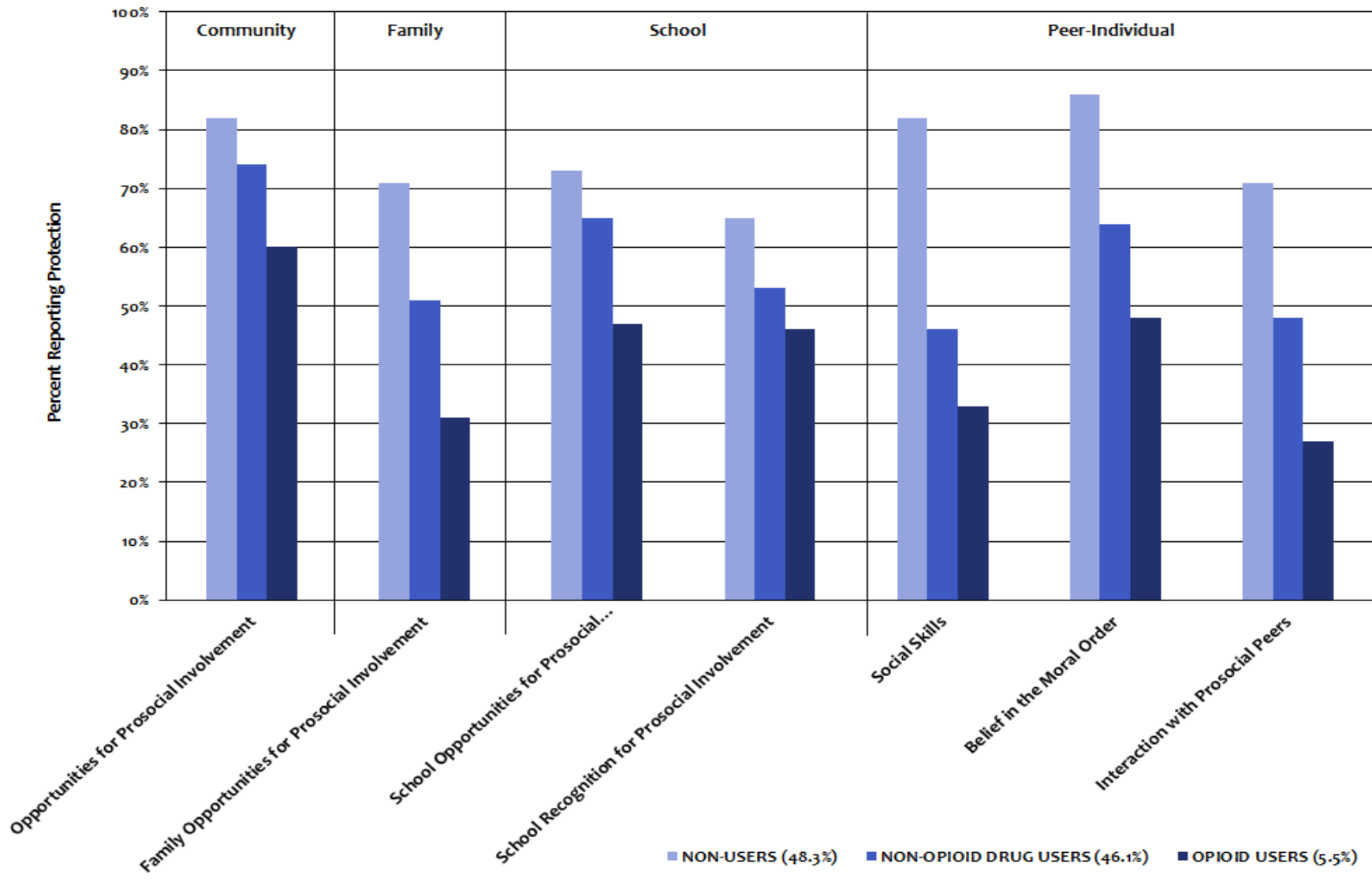
Opioid Users At Risk

Washington State Healthy Youth Survey Statewide Sample
Grade 10 Risk by Type of Drug Used

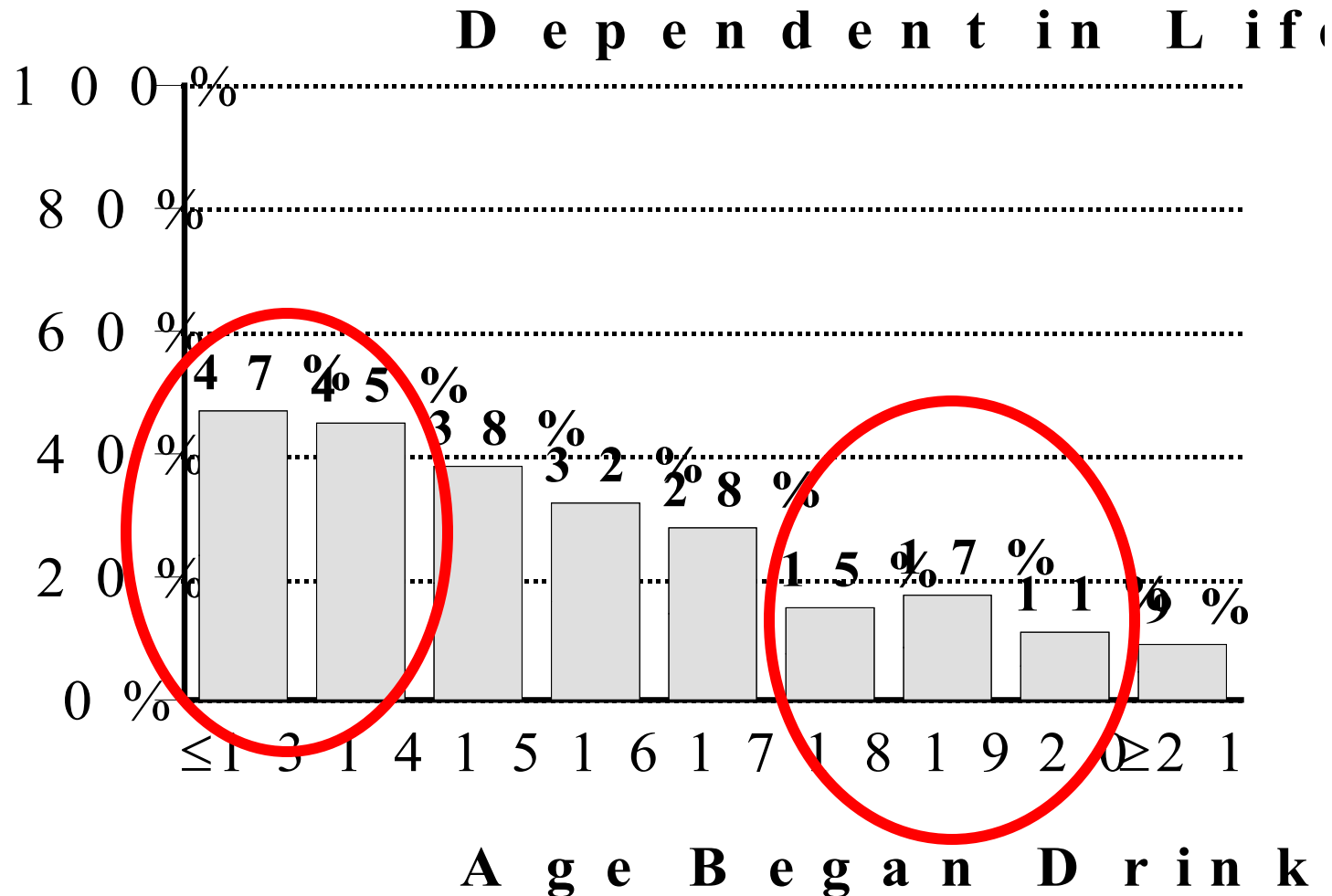


Opioid Users Not Protected

Washington State Healthy Youth Survey Statewide Sample
Grade 10 Protection by Type of Drug Used



Alcohol dependence, by age of drinking onset, among adults (aged 18+)



Hingson, R.W., Heeren, T., and Winter, M.R. "Age at Drinking Onset and Alcohol Dependence," *Archives of Pediatrics and Adolescent Medicine* 160(7):739-746, 2006.

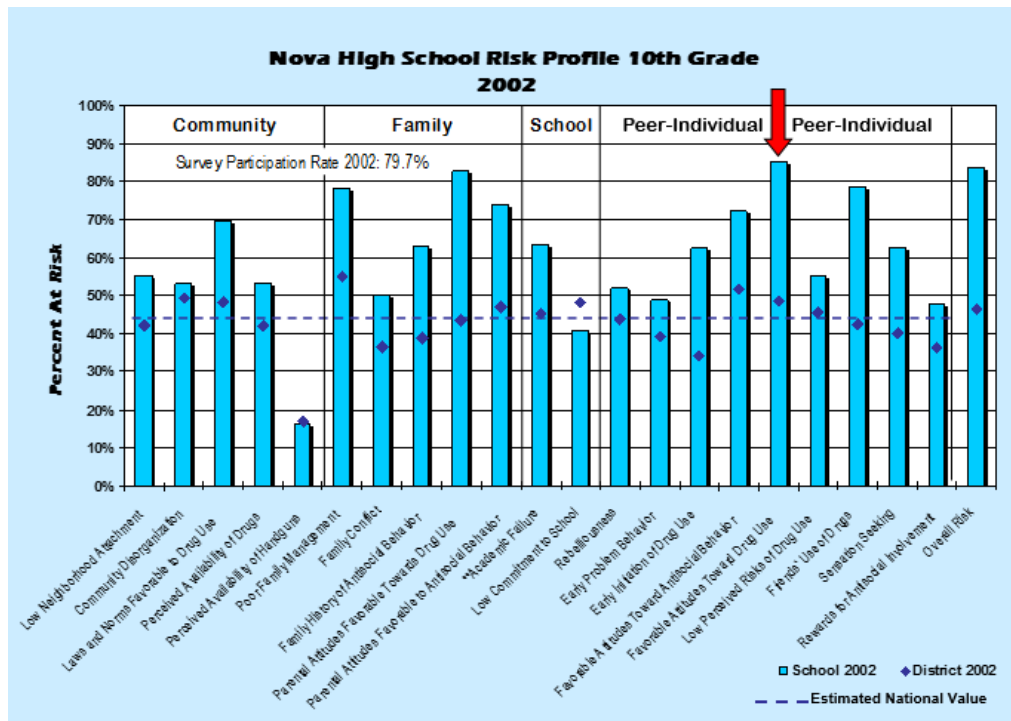
Why Is This Foundational to Prevention?

- Address problems **before they start**
- Helps find the **most appropriate prevention responses** to the unique situation for the children and youth in your community
- More bang for your buck: Working at level of risk and protection can **impact multiple outcomes**

“A shared risk and protective factor approach refers to prioritizing risk and protective factors linked to multiple [youth outcomes] **in prevention planning, partnership, and programmatic efforts** (vs focusing on different outcomes separately)*.”

**J Public Health Manag Pract. 2018 Jan-Feb; 24(Suppl 1 INJURY AND VIOLENCE PREVENTION): S32–S41.*

Example: Priority RP Factors Lead to Appropriate Program Selection



Blueprints

PROGRAM SEARCH

CHOOSE FROM 3 WAYS TO SEARCH:

29 PROGRAMS MATCHED YOUR SEARCH.

YOU SEARCHED ON THE FOLLOWING CRITERIA:

Risk and Protective Factors: Risk Factors: Favorable attitudes towards drug use

COMPARE Select the checkboxes on the left below for programs you wish to compare, then click the "Compare" button.

To sort the list, click on the underlined Program or Rating column headings.

PROGRAM	RATING	BENEFITS AND COSTS	IMPACT
LIFESKILLS TRAINING (LST) PROGRAM INFORMATION TARGET POPULATION FUNDING STRATEGIES	Model Plus	BENEFITS BENEFITS COSTS	Alcohol, Delinquency and Criminal Behavior, Illicit Drug Use, Sexual Risk Behaviors, STIs, Tobacco, Violence
FUNCTIONAL FAMILY THERAPY (FFT) PROGRAM INFORMATION TARGET POPULATION FUNDING STRATEGIES	Model	BENEFITS BENEFITS COSTS	Delinquency and Criminal Behavior, Illicit Drug Use
MULTISYSTEMIC THERAPY - PROBLEM SEXUAL BEHAVIOR (MST-PSB) PROGRAM INFORMATION TARGET POPULATION FUNDING STRATEGIES	Model	BENEFITS BENEFITS COSTS	Academic Performance, Adult Crime, Delinquency and Criminal Behavior, Illicit Drug Use, Mental Health - Other, Prosocial with Peers, Sexual Risk Behaviors, Sexual Violence
POSITIVE ACTION PROGRAM INFORMATION TARGET POPULATION FUNDING STRATEGIES	Model	BENEFITS BENEFITS COSTS	Academic Performance, Alcohol, Anxiety, Bullying, Delinquency and Criminal Behavior, Depression, Emotional Regulation, Illicit Drug Use, Positive Social/Prosocial Behavior, Sexual Risk Behaviors, Tobacco, Truancy - School Attendance, Violence

The Science Behind These Protective Factors

- Broad range of longitudinal studies helped to discover/identify these factors
- Broad range of demographic groups are represented in these studies
 - See the 2016 Surgeon General’s Report for references
 - See also the 2020 paper by Catalano, Hawkins, Kosterman et. al, on Social Development Model

Table 3.2: Protective Factors for Adolescent and Young Adult Substance Use

Protective Factors	Definition	Adolescent Substance Use	Young Adult Substance Use
Individual			
Social, emotional, behavioral, cognitive, and moral competence ^{87,88}	Interpersonal skills that help youth integrate feelings, thinking, and actions to achieve specific social and interpersonal goals.	✓	✓
Self-efficacy ^{89,90}	An individual’s belief that they can modify, control, or abstain from substance use.	✓	✓
Spirituality ^{91,92}	Belief in a higher being, or involvement in spiritual practices or religious activities.	✓	✓
Resiliency ⁸⁸	An individual’s capacity for adapting to change and stressful events in healthy and flexible ways.	✓	✓
Family, School, and Community			
Opportunities for positive social involvement ^{93,94}	Developmentally appropriate opportunities to be meaningfully involved with the family, school, or community.	✓	✓
Recognition for positive behavior ⁵¹	Parents, teachers, peers and community members providing recognition for effort and accomplishments to motivate individuals to engage in positive behaviors in the future.	✓	✓
Bonding ⁹⁵⁻⁹⁷	Attachment and commitment to, and positive communication with, family, schools, and communities.	✓	✓
Marriage or committed relationship ⁹⁸	Married or living with a partner in a committed relationship who does not misuse alcohol or drugs.		✓
Healthy beliefs and standards for behavior ^{51,99}	Family, school, and community norms that communicate clear and consistent expectations about not misusing alcohol and drugs.	✓	✓

Note: These tables present some of the key risk and protective factors related to adolescent and young adult substance initiation and misuse.

Different Approaches to Identifying Risk/Protective Factors

Point-in-time (cross sectional studies)

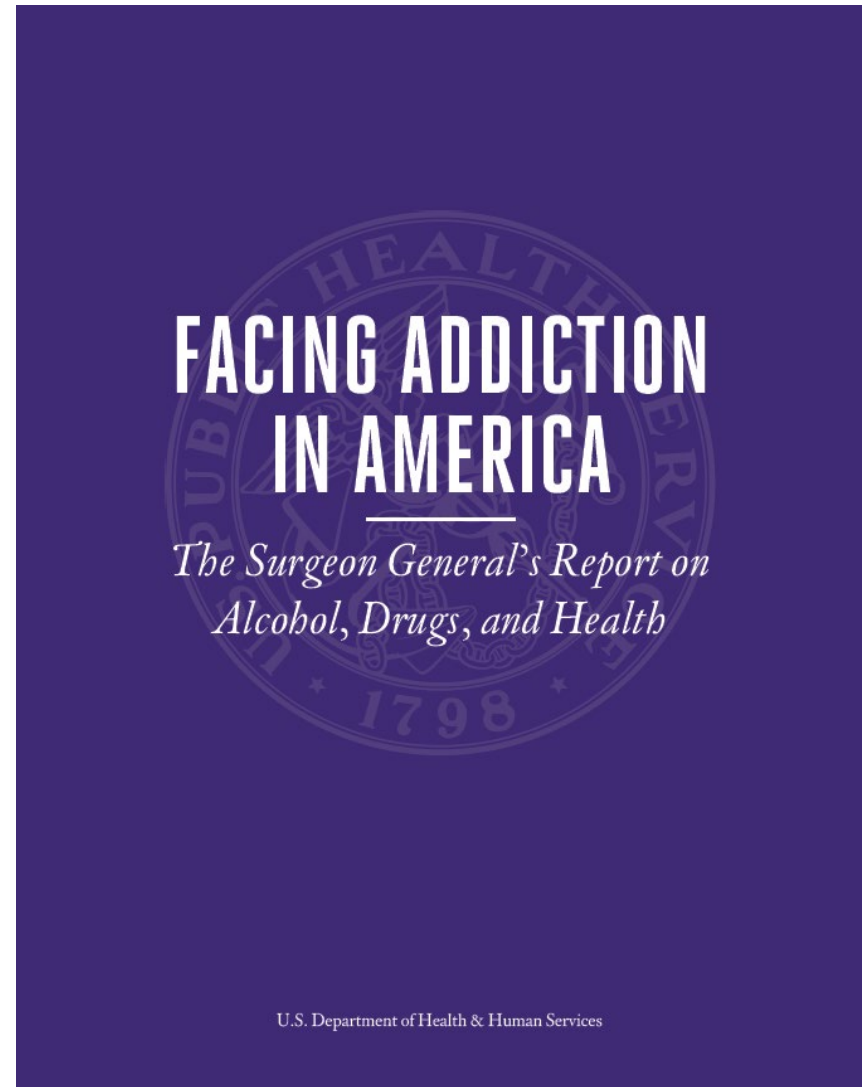
Retrospective (asking adults to recall their experiences as children)

Developmental (longitudinal studies)

Surgeon General's Report, 2016



Vivek H. Murthy, M.D., M.B.A.
Vice Admiral, U.S. Public Health Service
Surgeon General



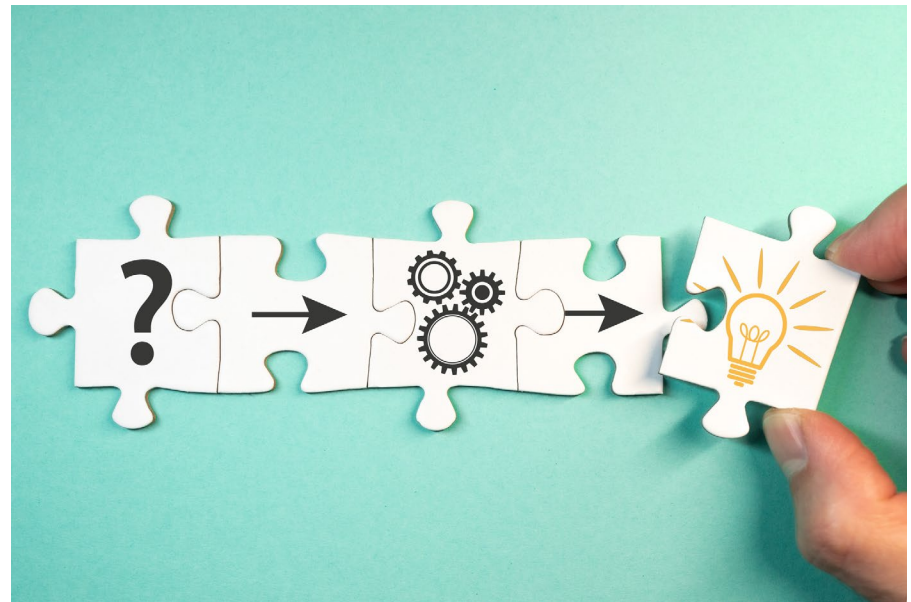
Types of Studies

- When? Range from late 1980's to 2015
- 47 studies cited in Surgeon General's Report (many are comprehensive reviews of yet many more studies)
- Study samples vary from national longitudinal samples like National Child Development Study to smaller longitudinal studies across the country (and internationally)



Key Findings

- Strong evidence for robust predictors (RPF)
- Show consistency across gender, race/ethnicity, income
- Strong evidence of effective prevention programs and policies that address these risk and protective factors
- Programs/policies effective at different stages of lifespan



See Handout

Key Findings (continued)

- Communities have different levels of RPF
- Communities are important prevention force
- Evidence of policies that are effective in reducing substance misuse and harms
- Evidence that laws targeting impaired driving have dramatically reduced alcohol-related traffic deaths since the 1980s
- Still working on evidence related to opioid pain medications

A Note about Labels

- Labels on risk factor chart are academic and descriptive
- Please listen carefully for the MEANING of each risk factor
- Communities can develop different names for each factor if the academic labels don't resonate



**Pseudotsuga menziesii----Douglas Fir----
Pine tree**

Protective Factors for Adolescents and Young Adult Substance Misuse

Table 3.2: Protective Factors for Adolescent and Young Adult Substance Use

Protective Factors	Definition	Adolescent Substance Use	Young Adult Substance Use
Individual			
Social, emotional, behavioral, cognitive, and moral competence ^{87,88}	Interpersonal skills that help youth integrate feelings, thinking, and actions to achieve specific social and interpersonal goals.	✓	✓
Self-efficacy ^{89,90}	An individual's belief that they can modify, control, or abstain from substance use.	✓	✓
Spirituality ^{91,92}	Belief in a higher being, or involvement in spiritual practices or religious activities.	✓	✓
Resiliency ⁸⁸	An individual's capacity for adapting to change and stressful events in healthy and flexible ways.	✓	✓
Family, School, and Community			
Opportunities for positive social involvement ^{93,94}	Developmentally appropriate opportunities to be meaningfully involved with the family, school, or community.	✓	✓
Recognition for positive behavior ⁵¹	Parents, teachers, peers and community members providing recognition for effort and accomplishments to motivate individuals to engage in positive behaviors in the future.	✓	✓
Bonding ⁹⁵⁻⁹⁷	Attachment and commitment to, and positive communication with, family, schools, and communities.	✓	✓
Marriage or committed relationship ⁹⁸	Married or living with a partner in a committed relationship who does not misuse alcohol or drugs.		✓
Healthy beliefs and standards for behavior ^{51,99}	Family, school, and community norms that communicate clear and consistent expectations about not misusing alcohol and drugs.	✓	✓

Note: These tables present some of the key risk and protective factors related to adolescent and young adult substance initiation and misuse.

Thought Moment

1. Take a moment to look at your own handout on protective factors and read the definitions.
2. How does this fit with your SPF assessment?
3. What questions do you have? Drop them in the chat.

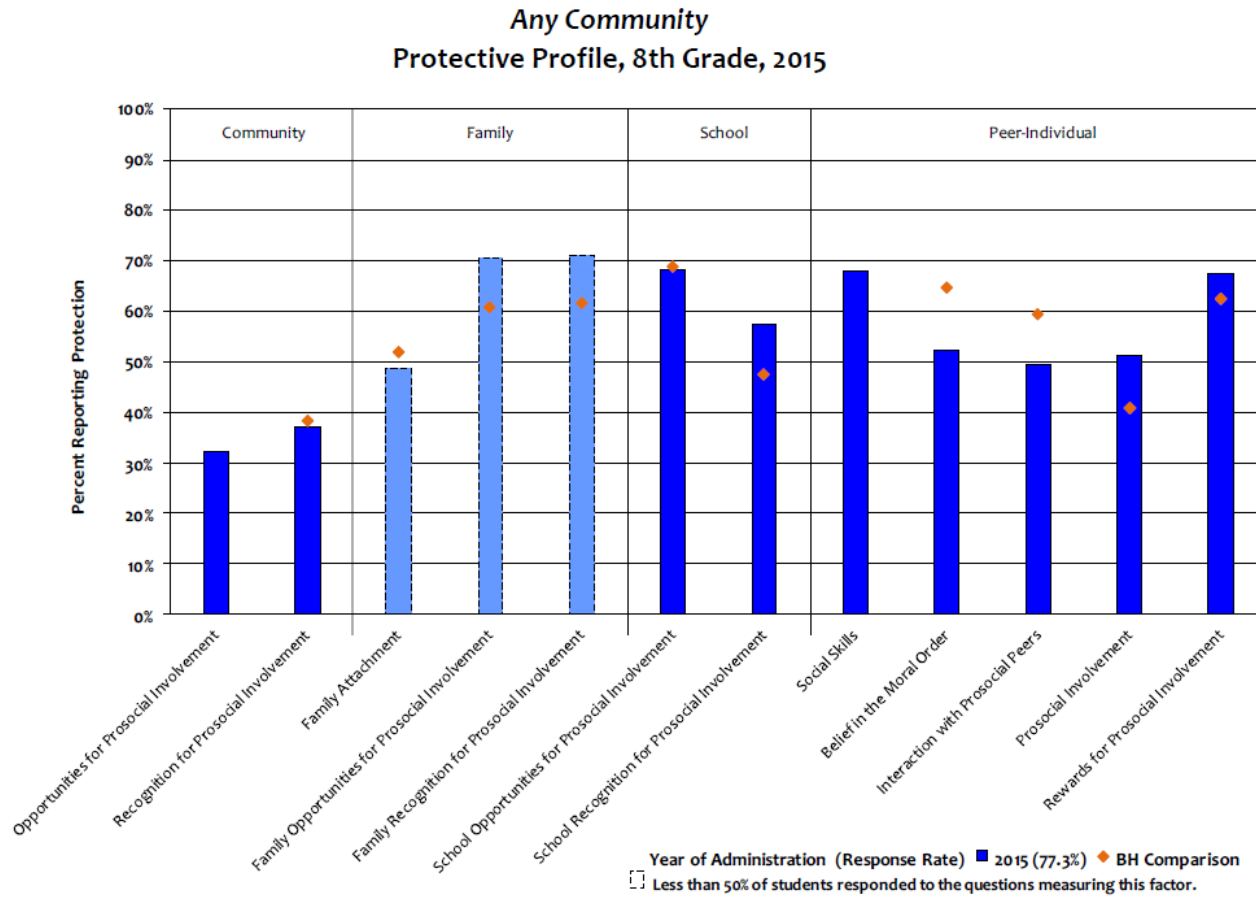


Additional Outcomes Influenced by These Protective Factors

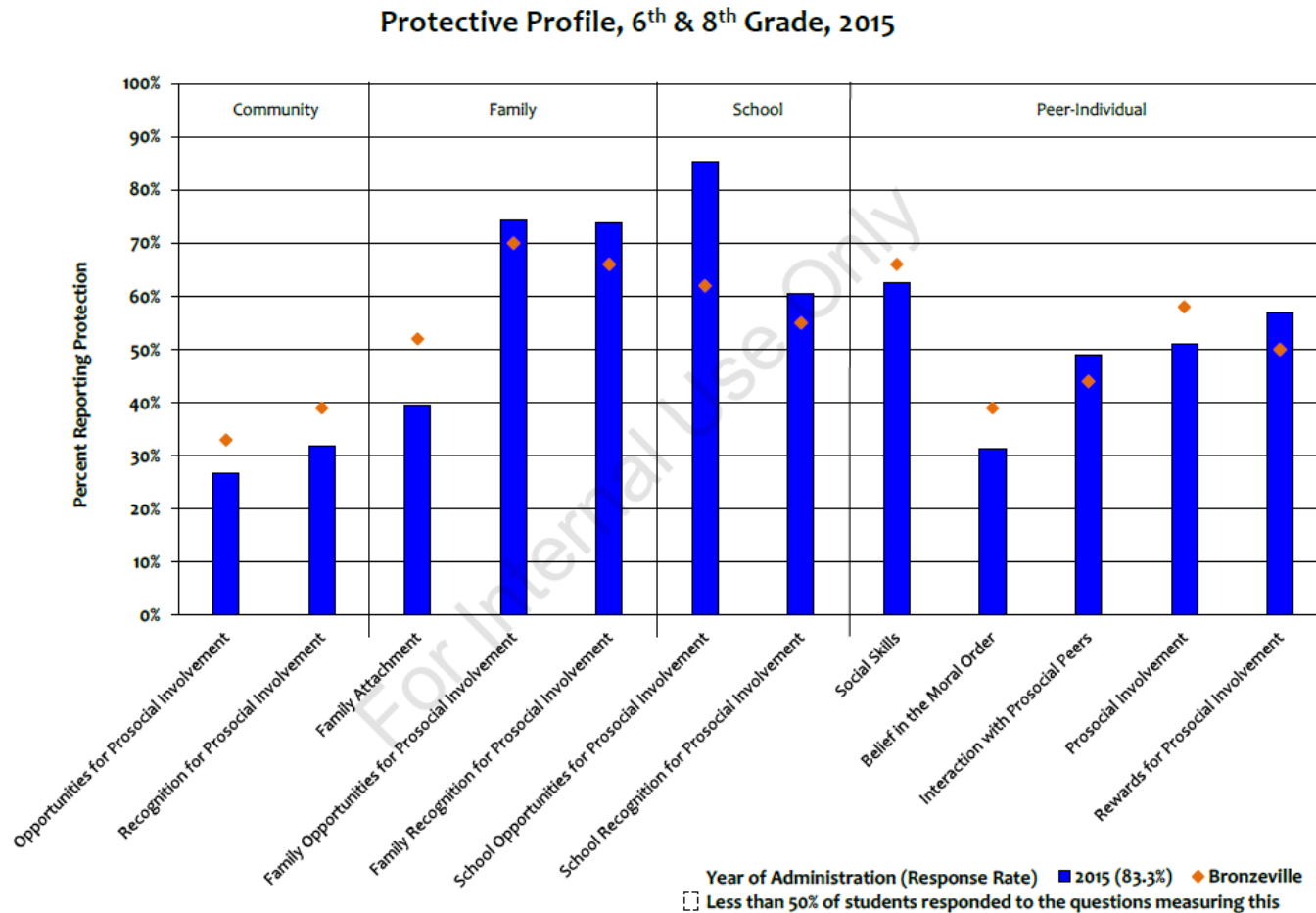
Table 3.2: Protective Factors for

Protective Factors	Substance misuse	Delinquency	Risky Sex	School Dropout	Violence	Depression/ Anxiety
Social, emotional, behavioral, cognitive, and moral competence ^{87,88}	👍	👍	👍	👍	👍	👍
Self-efficacy ^{89,90}			👍			
Spirituality ^{91,92}	👍	👍	👍			
Resiliency ⁹³	👍	👍	👍	👍	👍	👍
Opportunities for positive social involvement ^{93,94}	👍	👍				
Recognition for positive behavior ⁹⁵	👍	👍			👍	👍
Bonding ^{96,97}	👍	👍	👍	👍	👍	👍

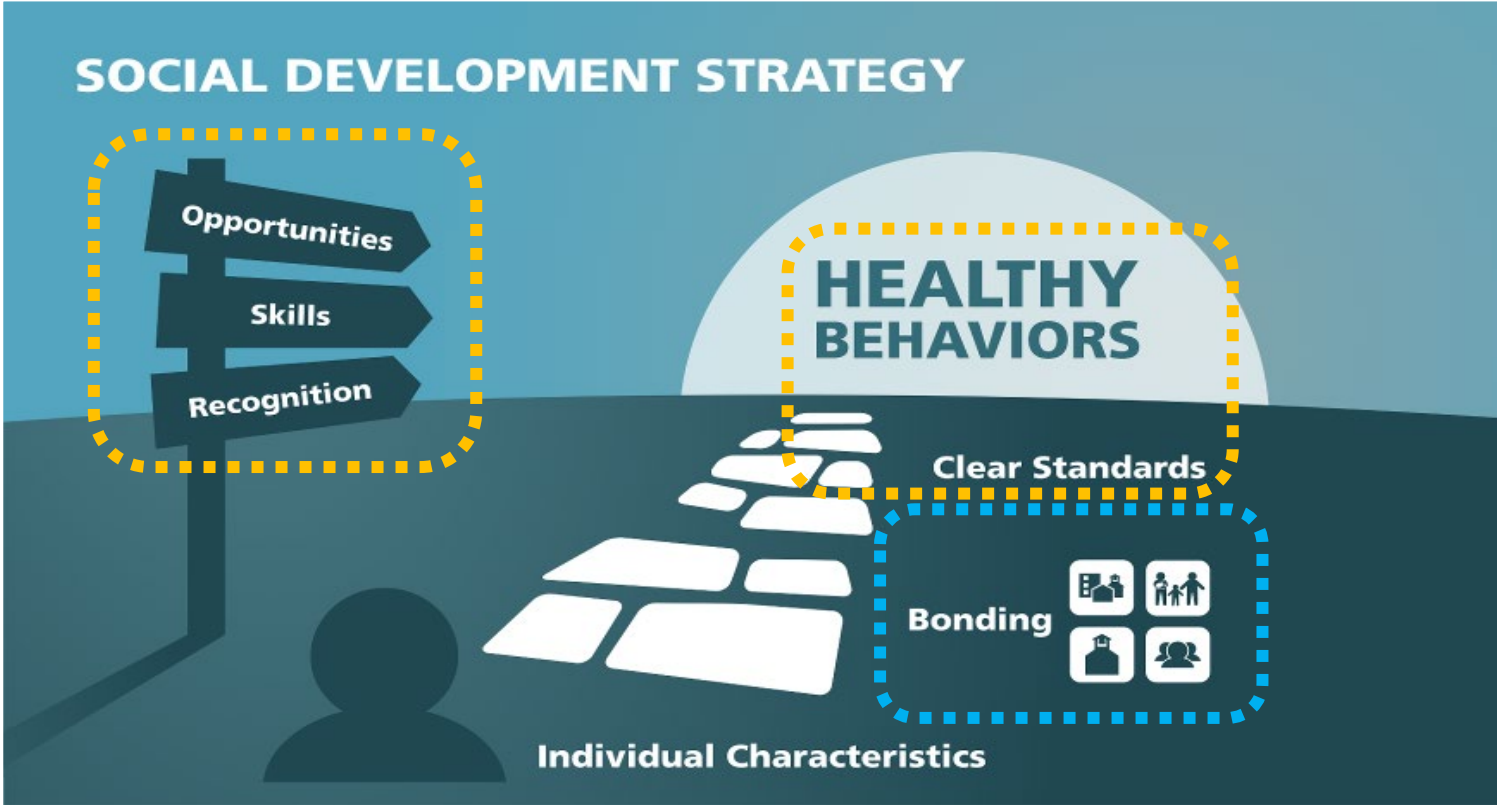
Levels of Risk/Protection Will Vary



Levels of Risk/Protection Will Vary

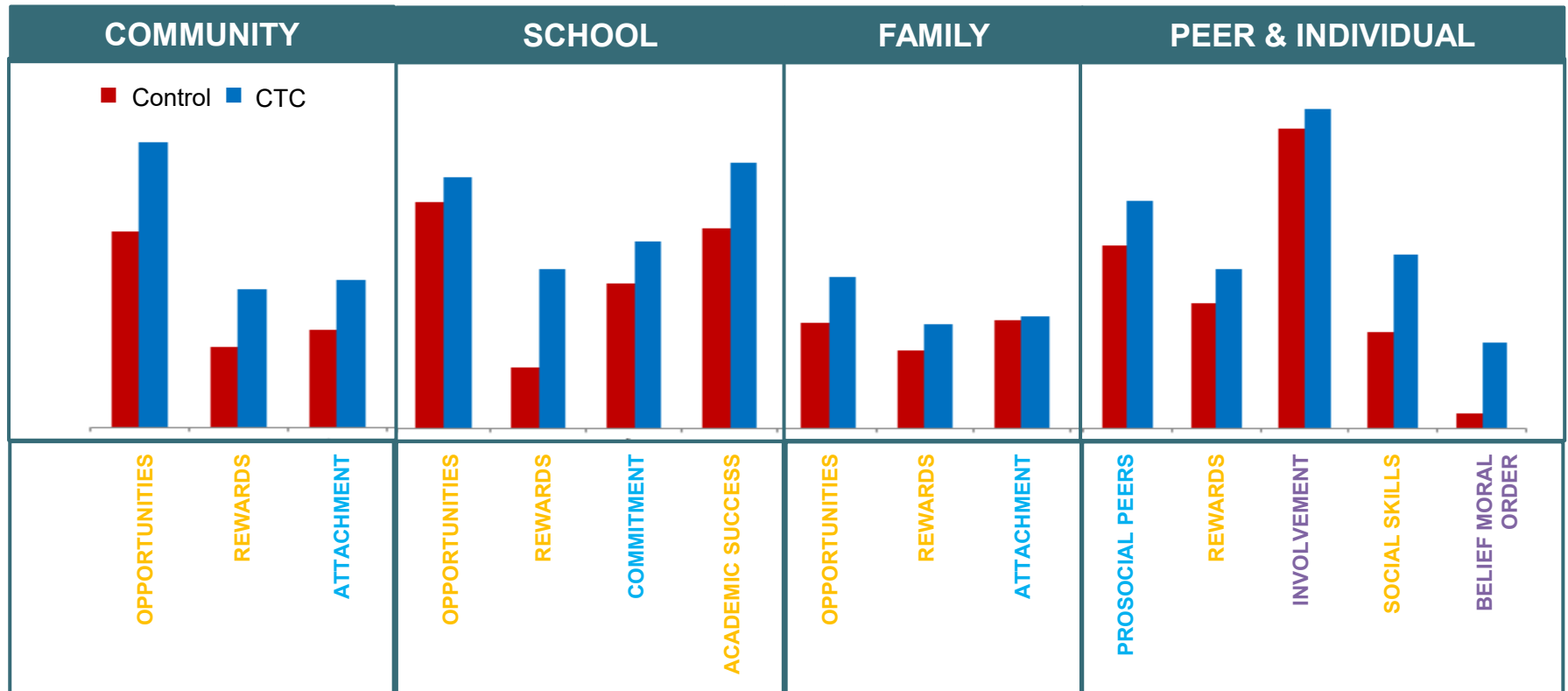


Protection & Social Development Strategy



CTC Enhanced Protection

Grade 8: $p = 0.021$



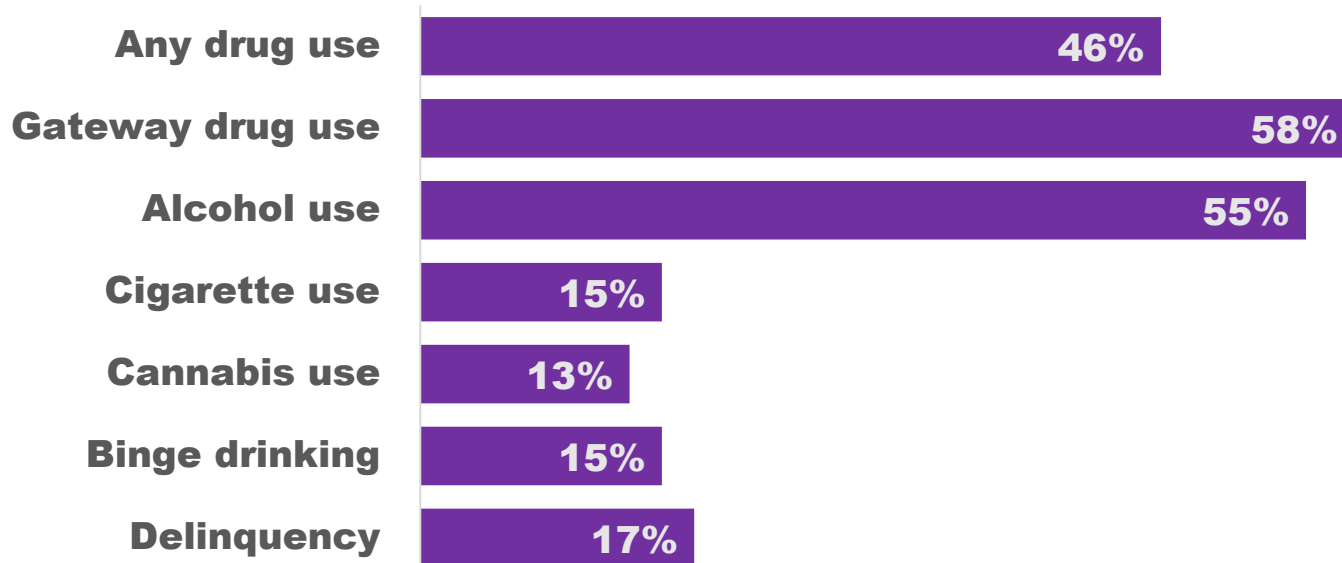
Elizabeth, Gloppen, K. A., Rhew, I. C., Oesterle, S., and Hawkins, J. D. (2015). Effects of the Communities That Care prevention system on youth reports of protective factors. *Prevention Science*, 16(5), 652-662.



- <https://www.washington.edu/boundless/communities-that-care/>

CTC Increased Lifetime Abstinence from Substance Use and Delinquency Through Age 23

At age 23, CTC participants were more likely to have abstained from:



They were less likely to have ever been involved in violence:

Violence 10%

There were also more likely to have completed college:

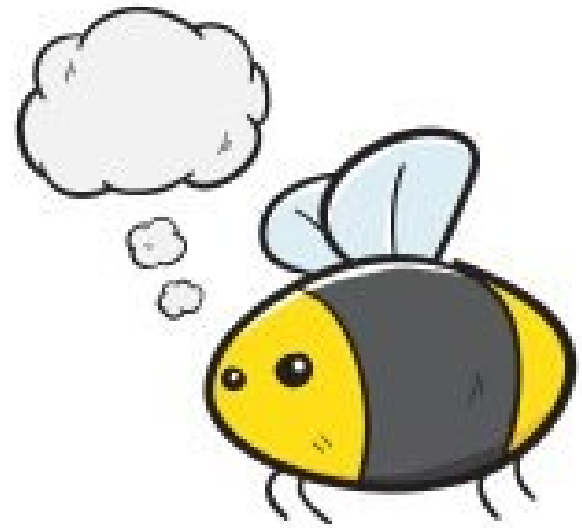
Completed college 20%

* Values reported are relative risk reductions.

Kuklinski et al., in press, *Prevention Science*.

Thought Moment

- How can you increase protective factors in your COMMUNITY?
- Jot down a few ideas, if you are willing, jot some in the chat.



Three core components during grades 1-6

Seattle Social Development Project

Intervention: *Raising Healthy Children*



Teacher Training

Proactive Classroom Management
Social Emotional Learning
Motivation
Creating Active Learning
Environments
Cooperative Learning



Parent Workshops

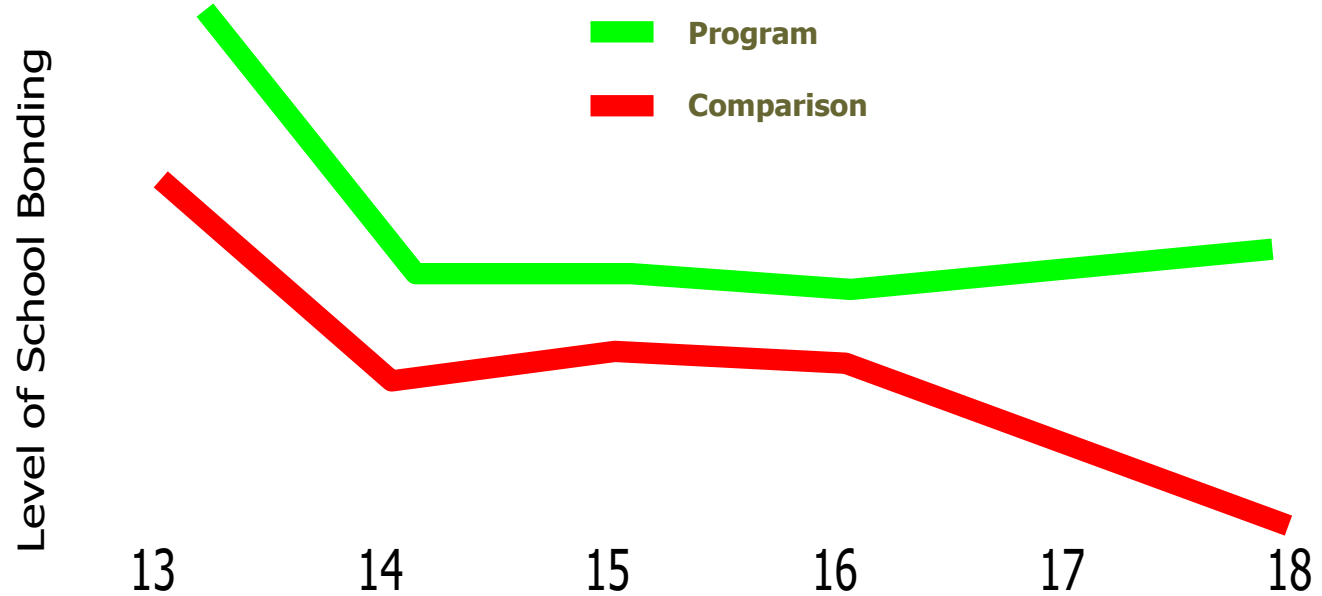
Raising Healthy Children K-2
Supporting School Success 3-6
Guiding Good Choices 4-6



Child Skills Training

I Can Problem Solve
The Get Alongs Series

Evidence of Intervention Effects on School Bonding from Age 13 to 18



Hawkins, Guo, Hill, Battin-Pearson & Abbott (2001)

Effects of applying social development strategy

AT THE END OF THE 2ND GRADE, FULL INTERVENTION GROUP

- girls were less self-destructive
 - boys were less aggressive
- (Hawkins et al., 1991)*

BY THE START OF 5TH GRADE

- less initiation of alcohol
 - less initiation of delinquency
 - better family management
 - better family communication
 - better family involvement
 - higher attachment to family
 - higher school rewards
 - higher school bonding
- (Hawkins et al., 1992)*



BY AGE 18

- less heavy alcohol use
 - less lifetime violence
 - less lifetime sexual activity
 - fewer lifetime sex partners
 - higher school bonding
 - higher school achievement
 - less school misbehavior
- (Hawkins et al., 1999)*

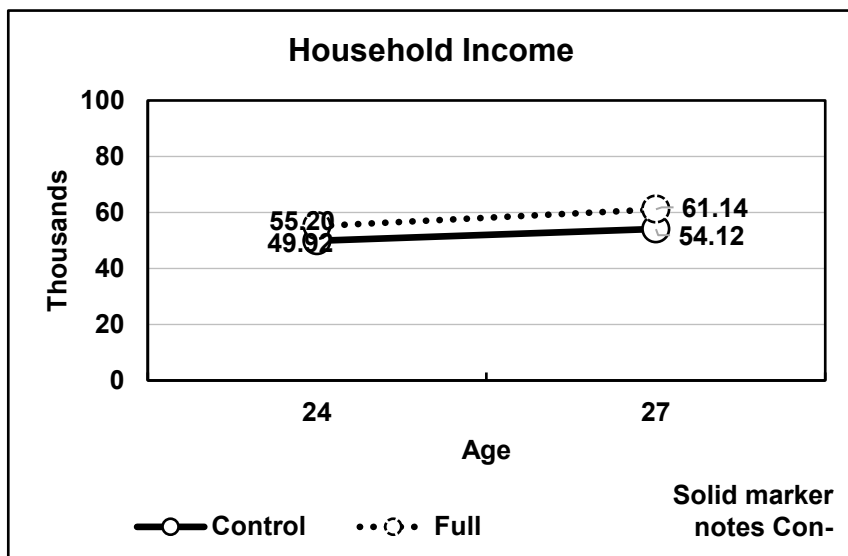
BY AGE 21

- better emotional and mental health
 - better functioning at school or work
 - more likely to be high school graduate
 - more likely to be attending college
 - less likely to have criminal record
- (Hawkins et al., 2005)*

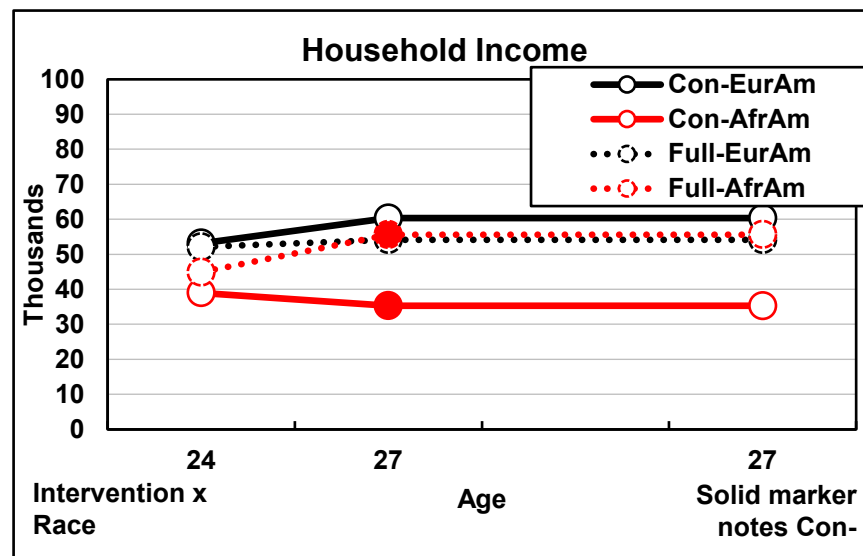
BY AGE 27

- more educational attainment
 - more economic attainment
 - more civic engagement
 - better mental health
- (Hawkins et al., 2008)*

SSDP Reduces Racial Disparity in Household Income



No overall effect on Household income



Age 27
 AA F \$55,594
 AA C \$35,288

Summary of Impacts Through Age 39

More than 18 years later...

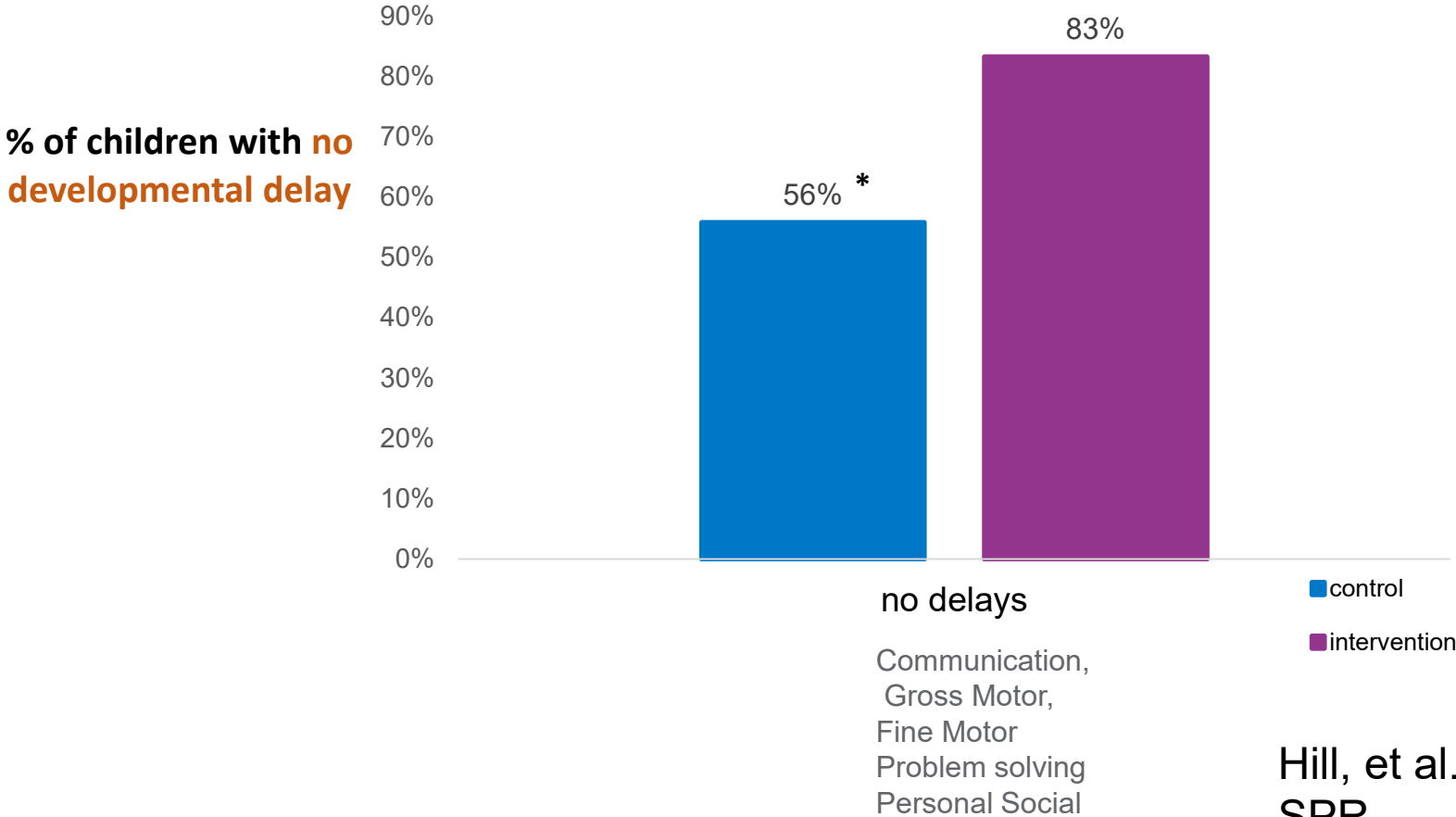
- Significant effects of intervention on...
 - Health maintenance
 - Mental health
 - Overall adult health & success



Kosterman, R., Hawkins, J. D., Hill, K. G., Bailey, J. A., Catalano, R. F., & Abbott, R. D. (2019). Effects of social development intervention in childhood on adult life at ages 30 to 39. *Prevention Science*, 20(7), 986-995.

Effects into the Next Generation: Parents who were in the SSDP intervention in childhood grow up to have children with....

...fewer **developmental delays** in the first
five years of life.



Hill, et al., 2017,
SPR

Effects into the next generation

Parents who were in the SSDP intervention in childhood grow up to have children with....




1. Fewer **developmental delays** in the first five years of life.
2. Fewer teacher-rated **child behavior problems** ages 6-18 years.
3. Higher teacher-rated **academic skills and performance** ages 6-18 years.
4. Lower youth self-reported **alcohol and drug onset** ages 6-18 years.


Building Protection with Middle School Students

EVIDENCE-BASED PRACTICES TO
PROMOTE AGENCY IN MIDDLE SCHOOL
STUDENTS

Simple practices to activate the Social Development Strategy in a school setting



Kevin Haggerty, MSW, PhD, Social Development Research Group, University of Washington
Clayton Cook, PhD, University of Washington, College of Education
Stephen Ottinger, MA, University of Washington, College of Education

 Northwest (HHS Region 10)
PTTC Prevention Technology Transfer Center Network
Funded by Substance Abuse and Mental Health Services Administration

Evidence-based Practices To Promote Agency In Middle School Students

- Summarizes and aligns sixteen evidence-based practices to the components of the Social Development Strategy

<https://pttcnetwork.org/sites/default/files/2020-09/EvidenceBasedPracticesforMiddleSchool%20%282%29.pdf>

Thought Moment

- How can you increase protective factors in your SCHOOL?
- Jot down a few ideas, if you are willing, jot some in the chat.



Family Meal Time



Study selection

1783 articles reviewed.

Synthesis

Results show frequent family meals are inversely associated with disordered eating, alcohol and substance use, violent behavior, and feelings of depression or thoughts of suicide in adolescents.

Harrison ME, Norris ML, Obeid N, Fu M, Weinstangel H, Sampson M. Systematic review of the effects of family meal frequency on psychosocial outcomes in youth. *Can Fam Physician*. 2015;61(2):e96-e106.

Thought Moment

- How can you increase protective factors in your FAMILY?
- Jot down a few ideas, if you are willing, jot some in the chat.



Positive Childhood Experiences mitigate Adverse Childhood Experiences

ACEs

- 1998 study of employed people in the Pacific Northwest
- Patients answered questions about their childhood
- Correlated with mental and physical health

PCEs

NEW

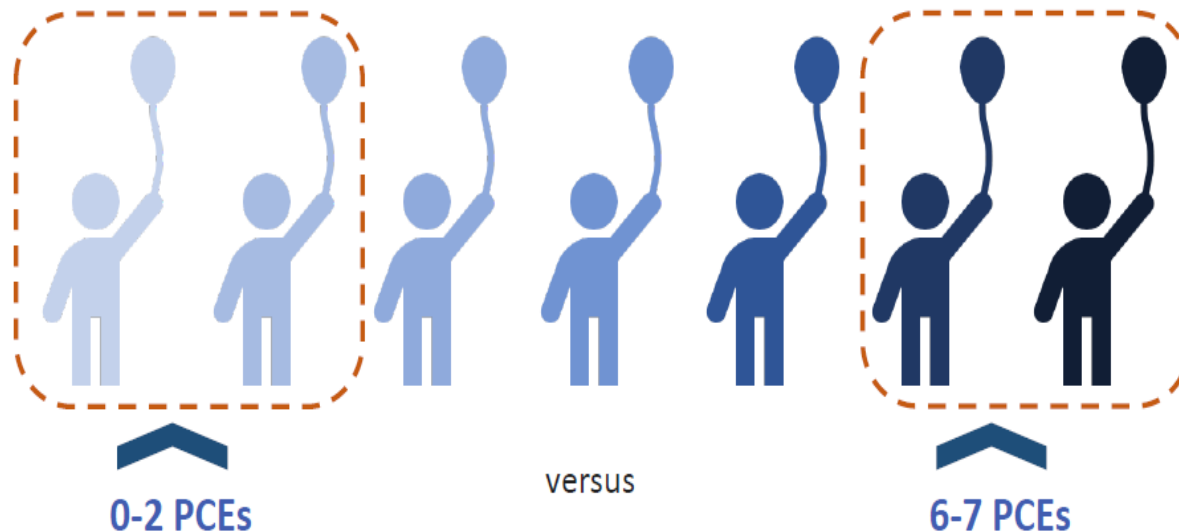
- 2015 population study in Wisconsin
- Part of the BRFSS
- Asked about ACEs
- Asked about Positive Childhood experiences
- Correlated with mental health

Positive Childhood Experiences (PCEs) Protect Adult Mental Health



6-7 vs. 0-2 PCEs: Adults reporting 6-7 PCEs have **72% lower odds** of having depression or poor mental health compared to those reporting 0-2 PCEs.

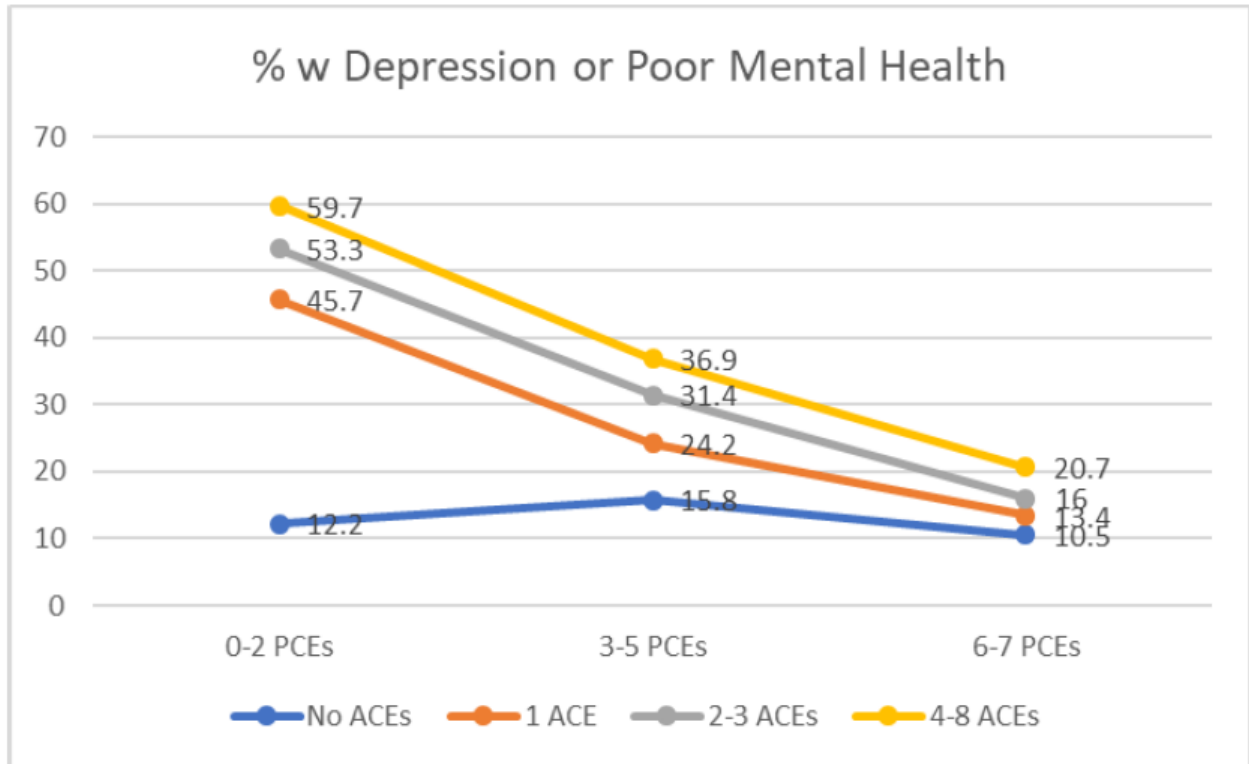
48% v. 12.6%, OR 0.28; 95% CI 0.21-0.39. 3.8x higher rate for 0-2 vs. 6-7 PCEs.



Bethell C, Jones J, Gombojav N, Linkenbach J, Sege R. Positive Childhood Experiences and Adult Mental and Relational Health in a Statewide Sample: Associations Across Adverse Childhood Experiences Levels. *JAMA Pediatr.* 2019:e193007.

HEALTHY OUTCOMES
from
POSITIVE EXPERIENCES

Positive Childhood Experiences Mitigate ACEs Effects



Bethell C, Jones J, Gombojav N, Linkenbach J, Sege R. Positive Childhood Experiences and Adult Mental and Relational Health in a Statewide Sample: Associations Across Adverse Childhood Experiences Levels. *JAMA Pediatr.* 2019:e193007.

What are 'Positive Childhood Experiences?'



Positive Childhood Experiences (PCEs) questions asked how often respondent:

1. Felt able to talk to their family about feelings
2. Felt their family stood by them during difficult times
3. Enjoyed participating in community traditions
4. Felt a sense of belonging in high school
5. Felt supported by friends
6. Had at least two non-parent adults who took genuine interest in them
7. Felt safe and protected by an adult in their home



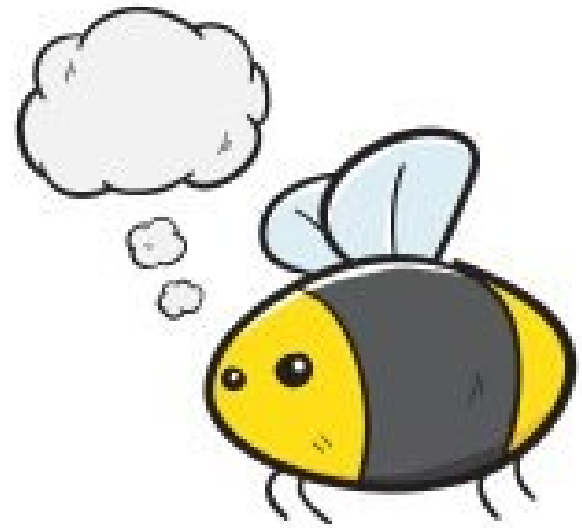
- Internal consistency reliability: 0.77
- Principal components factor analysis: single factor with an Eigenvalue > 1 (2.95).
- Factor loadings ranged from 0.57 ("felt safe/home") to 0.72 ("family stood by/difficult times")

HOPE

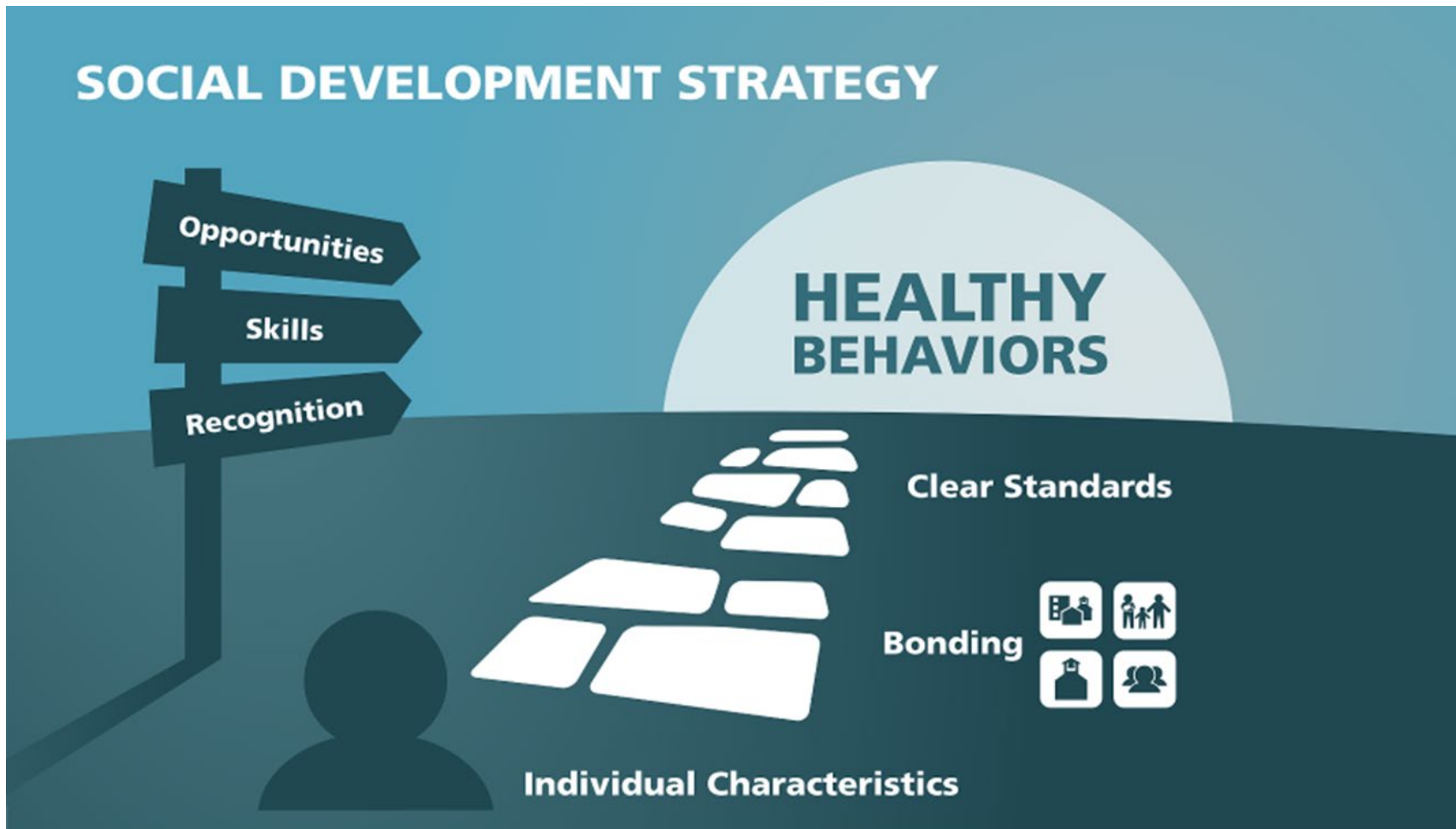
Reference: Jeff Linkenbach, PhD, Montana Institute

Thought Moment

- How can you increase protective factors in your **INDIVIDUAL**?
- Jot down a few ideas, if you are willing, jot some in the chat.



Where Do You See Positive Childhood Experiences in the SDS?



So What?

What does understanding shared protective factors mean for your community's work in prevention?

1. Think and jot down ideas
2. Add to the chat box, if you are willing.



How well can you answer these questions?

Participants will be able to:

1. What are 'shared protective factors'?
2. How do we know these are protective factors?
3. What is the evidence of protective factors in the community, school, family and individual.
4. What does understanding about protective factors mean for your community's work in prevention?

Next?

- How can we measure all these shared risk and protective factors at the community level?



Wrap Up!

Make sure to fill out a feedback form!

