

Promoting Community Resiliency Through a Statewide Community Coalition Initiative for Substance Use Prevention

Presented by:

Gitanjali Shrestha, PhD, Brittany Cooper, PhD, & Jordan Newburg
Washington State University

September 28, 2022



Acknowledgements

- Washington State Health Care Authority Division of Behavioral Health and Recovery
- Washington State Department of Health

Presentation Outline

- Brief Overview of Community Prevention and Wellness Initiative
- Developmental Trend Evaluation
- Sneak Peak of Health Equity Evaluation

Overview of CPWI

Community Prevention and Wellness Initiative (CPWI)



CPWI Timeline: 96 Communities

2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022

Cohort 1, 19 communities

Cohort 2, 13 communities

Cohort 3, 17 communities

Cohort 4, 6 communities

Cohort 5, 6 communities

Cohort 6, 17 comms.

Cohort 7, 18 communities →



Developmental Trend Evaluation

Evaluation Questions & Approach



#1. Did developmentally expected change in substance use and related risk factors differ significantly in CPWI communities compared to non-CPWI communities?

Propensity score
weighted
regression
modeling



#2. What is the probability that the positive outcomes for CPWI are due to chance?

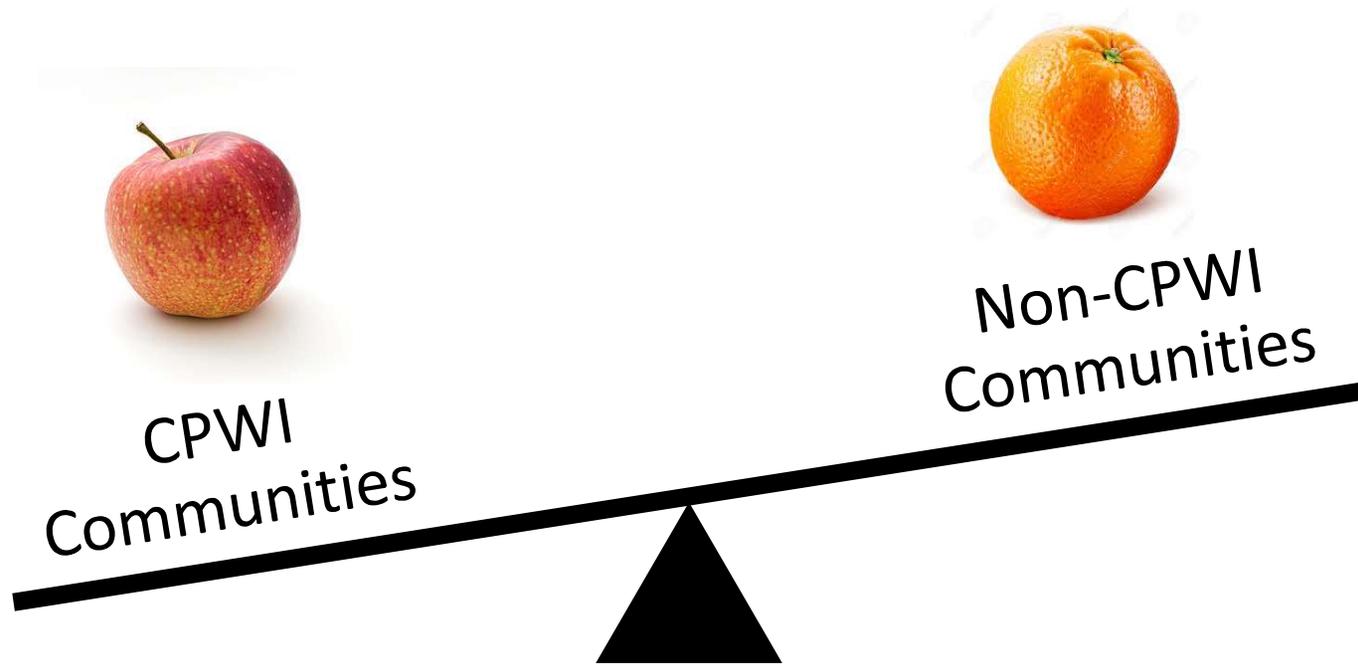
Binomial
probability
calculation

Analytic Step 1. Propensity Score Analysis

- CPWI communities were not randomly assigned.
- CPWI and non-CPWI communities differ in important ways.
- If we don't account for these differences in the evaluation, results will be biased.
- Propensity score = probability of a community being selected for the CPWI initiative



What does the propensity score analysis do?



What does the propensity score analysis do?

CPWI & Non-CPWI communities are balanced on 21 variables.

Substance use

- Any alcohol use in past 30 days
- Frequency of alcohol use in past 30 days
- Any cigarette smoking in past 30 days
- Frequency of cigarette smoking in past 30 days
- Any marijuana use in past 30 days
- Frequency of marijuana use in past 30 days

School performance

- Self reported truancy

Youth delinquency

- Self-reported fighting
- Carrying a weapon in school
- Gang membership
- Driving under influence

Mental health

- Depression
- Considering suicide
- Suicide attempts

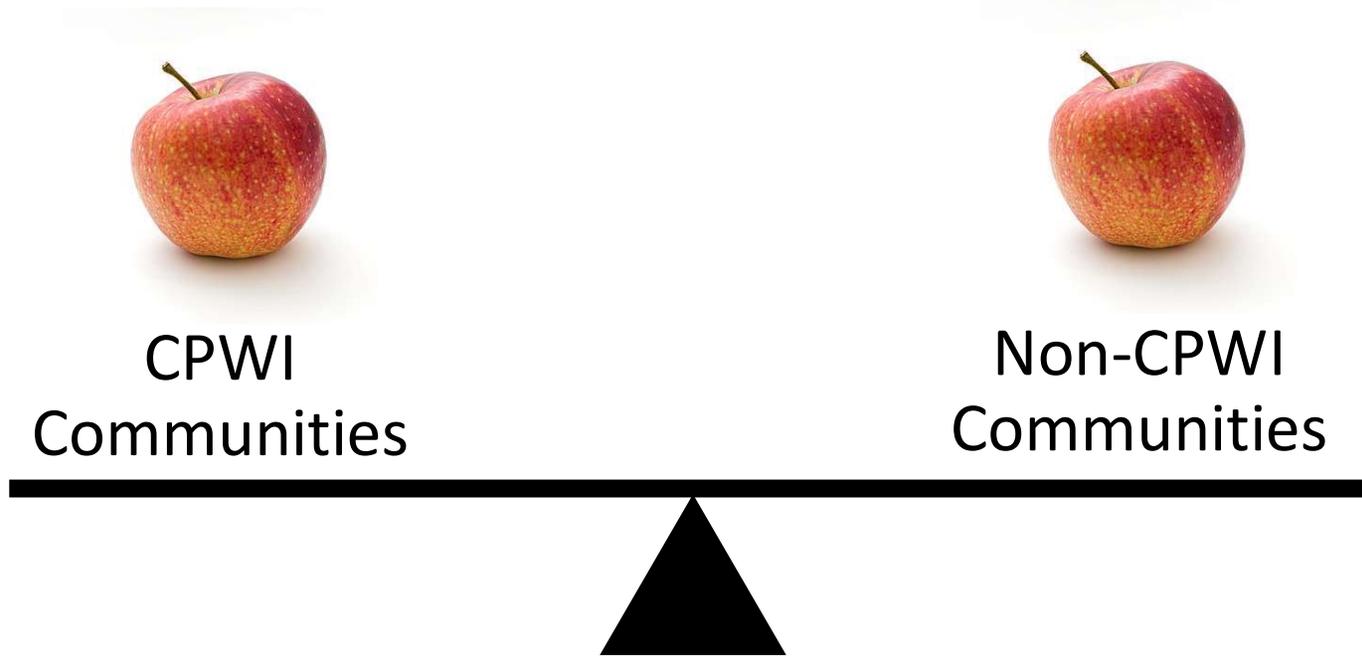
Economic indicator

- Median household income
- TANF, child recipients
- Food stamps recipients
- Levies due to school district

Demographics

- Total population
- Population density
- Eastern vs. Western WA

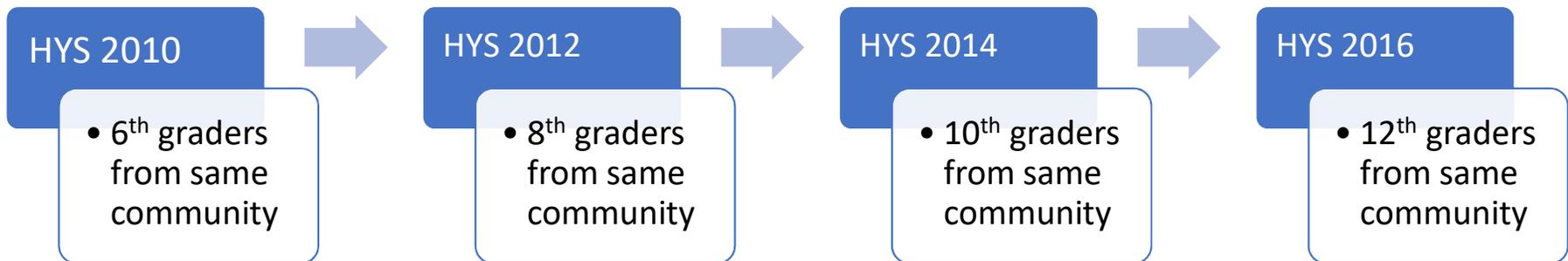
What does the propensity score analysis do?



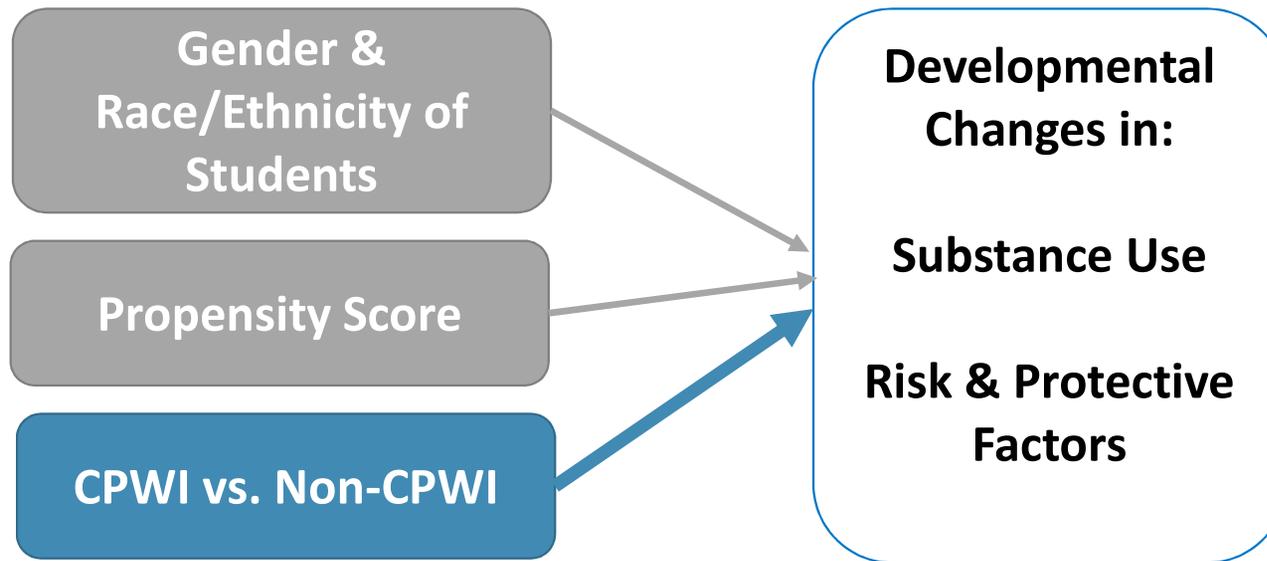
Analytic Step 2: Calculate CPWI Impact

Who is included in the analysis?

Linked grade cohorts of students who filled out the Healthy Youth Survey from 2010 to 2018.



Analytic Step 2: Calculate CPWI Impact



When school district catchment area corresponded to only one CPWI community, we used school district-level data. For communities defined by their High School Attendance Area (HSAA), we use school-level outcome data.

Evaluation Question #1: Substance Use



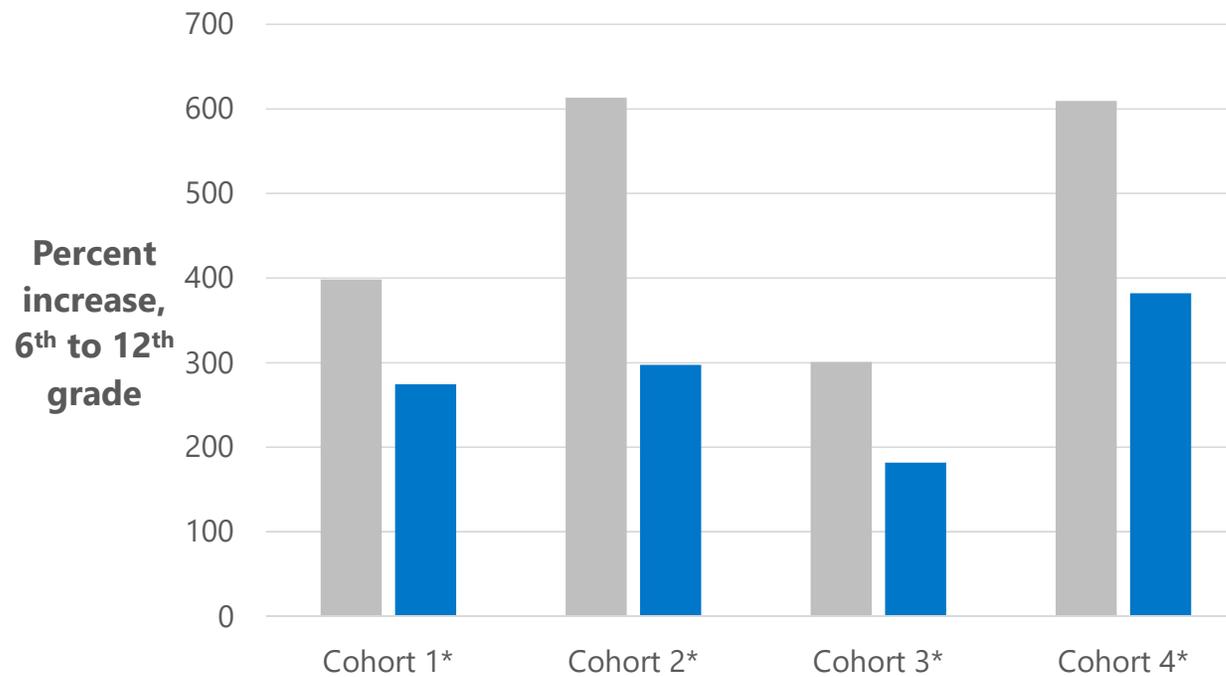
#1. Did expected changes over time in substance use and related risk factors differ significantly in CPWI communities compared to non-CPWI communities?

Propensity score
weighted
regression
modeling

Substance use increased in both CPWI and non-CPWI communities.

BUT, the increase in most substance use outcomes was significantly less steep in CPWI communities compared to non-CPWI communities.

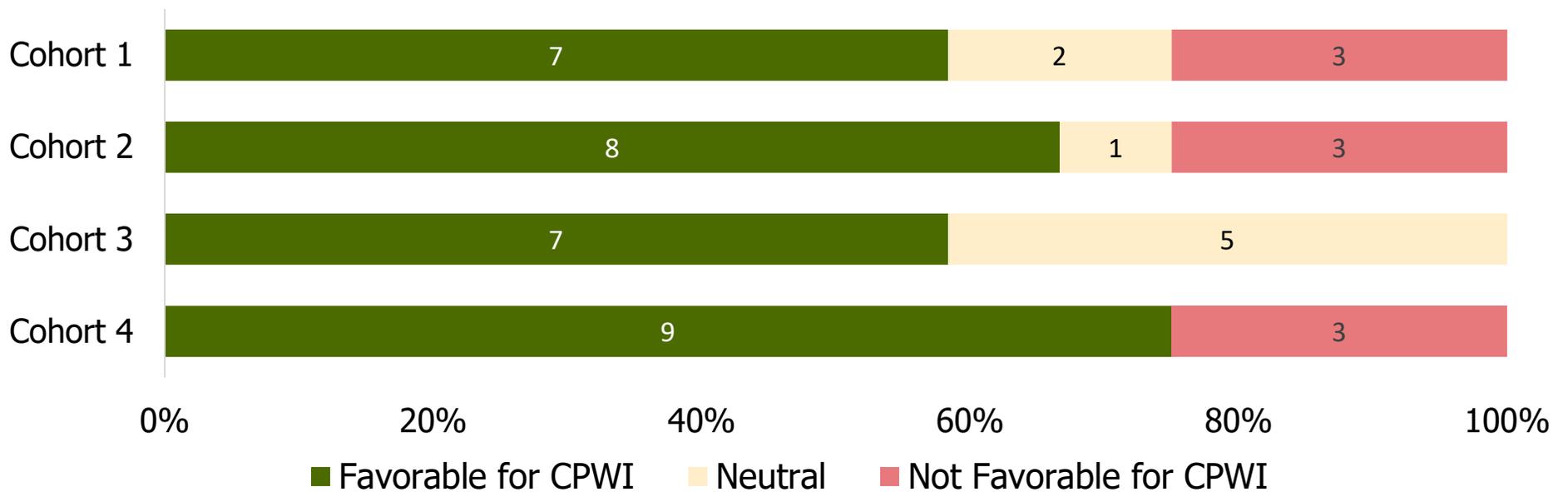
Increases in Binge Drinking: non-CPWI vs. CPWI



* $p < .05$

Evaluation Question #1: Substance Use

A majority of results for substance use outcomes were favorable for CPWI.



Evaluation Question #2



#2. What is the probability that the positive outcomes for CPWI are due to chance?

Binomial probability calculation

The probability that the pattern of positive results is due to chance is extremely low.

- Cohorts 1 and 4 = 0.2%
- Cohorts 2 and 3 = 0.1%



LOW

HIGH

Take Home Messages

- CPWI is slowing the trajectory of increase in adolescent substance use and related risk factors.
- The high-need CPWI communities are “catching up” with lower-need communities.
- It is likely that additional (non-CPWI) programs in CPWI communities/schools have also contributed to the positive results.



Sneak Peak Health Equity Evaluation



CPWI Coordinator Interviews

- 16 CPWI coalition coordinators interviews in June and July of 2022.
- Open ended-questions focused on health equity efforts in the community
- Rapid Thematic Analysis of Qualitative Data using an iterative, consensus process

Preliminary Results: Coordinator Interviews

Facilitators

- Relationships & Networks
- Community buy-in
- Framing of conversations to improve engagement

“You gotta start slow and you've got to build trust and you gotta build relationships. Because if you don't do that then—the information you're bringing in could be rejected and ...they close the door. You want to be able to have opportunity to access different groups and different leaders and just different influential people so that you can continue to grow those conversations. So we're starting off slow. I think next year we'll do a lot more messaging and have more conversations like directly geared towards equity and how we can improve different systems.”

Preliminary Results: Coordinator Interviews

Barriers

- Resource constraints
- Less community capacity (resources/organizations)
- Language/culture barriers

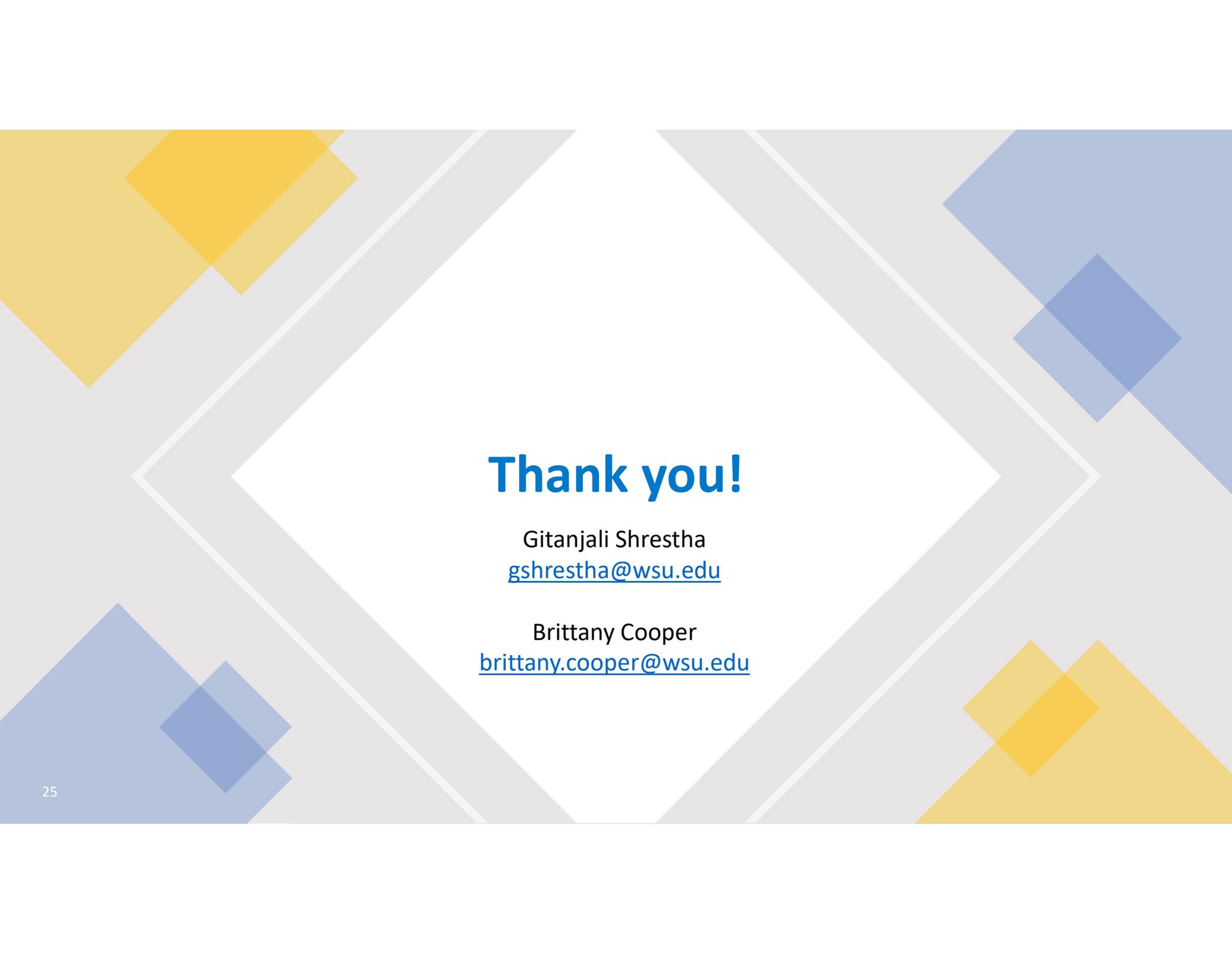
“[Families] may be harder to reach because [they] don't always have access to internet or computers at home or maybe aren't following what's going on in the community due to having to work multiple jobs and [being] in survival mode and taking care of work and family and homes and all that kind of stuff. So I think there are people that are literally in survival mode out there that maybe aren't as in tune with what's going on in the community or with like coalition work than others just due to the nature of their life.”

Preliminary Results: Coordinator Interviews

Coalition Needs

- Flexible use of funding
- Accessible education
- Flexibility in meeting requirements

“I know that there's the food, there's spending stipulations when it comes to food and the coalition funding. I think that food is sometimes just such a, it brings people together. It makes them feel safe. Something like that would be more helpful if there could be more funding for that...I just think more understandably, it's very stressed that this is a very large portion of the job is networking and connecting with community members, but it doesn't feel like there's oftentimes a lot of support to make that happen.”



Thank you!

Gitanjali Shrestha
gshrestha@wsu.edu

Brittany Cooper
brittany.cooper@wsu.edu

Supplemental Slides

Evaluation Question #1: Risk Factors



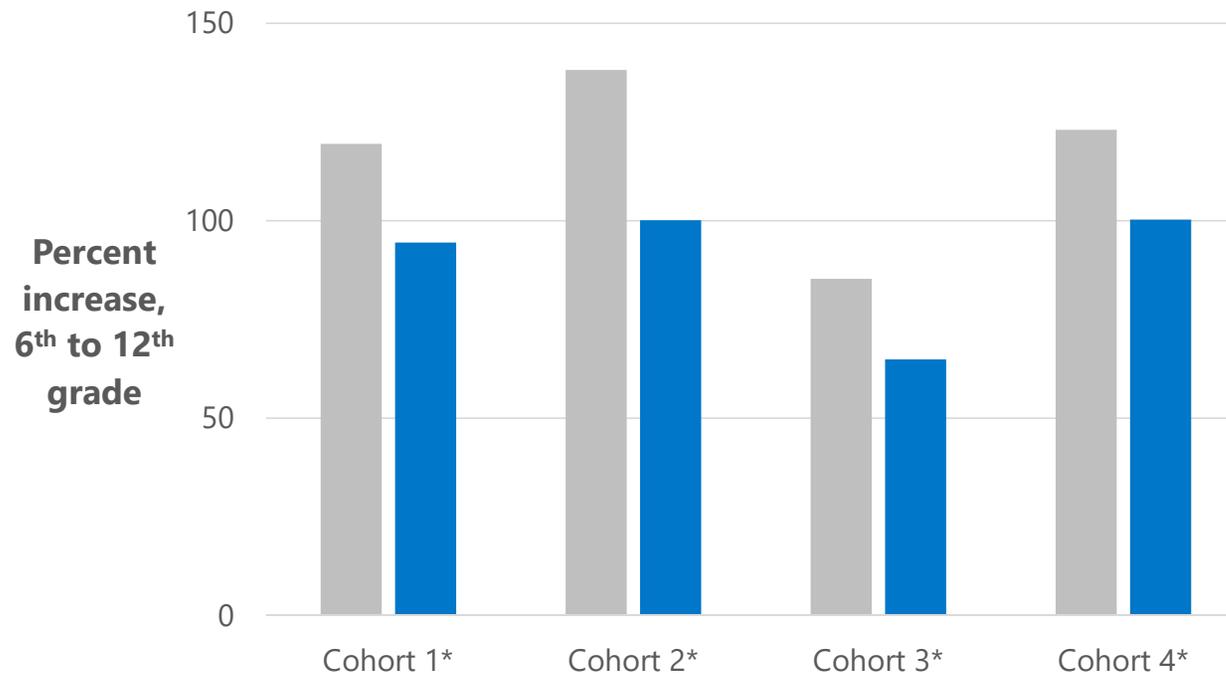
#1. Did expected changes over time in substance use and related risk factors differ significantly in CPWI communities compared to non-CPWI communities?

Propensity score
weighted
regression
modeling

Risk factors mostly increased in both CPWI and non-CPWI communities.

The increase in most risk factors was **significantly less steep in CPWI communities** compared to non-CPWI communities.

Increases in Favorable Attitudes Towards Drug Use: non-CPWI vs. CPWI



* $p < .05$

Evaluation Question #1: Risk Factors

A majority of results for risk factors were favorable for CPWI.

