

Iowa's Center of Excellence for Behavioral Health

# Webinar 2: Foundations of Prevention Theory

**FOUNDATIONS IN BEHAVIORAL HEALTH PREVENTION WEBINAR SERIES**July 18, 2025

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#### **Disclaimer**

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## **Learning Objectives**

#### **OBJECTIVES:**

- 1. To be able to distinguish between the different levels of the Institute of Medicine Model (universal, selective, and indicated).
- 2. Identify key prevention theories and how they inform practice.
- 3. Apply evidence-based frameworks to prevention planning and implementation.



#### **Icebreaker Question**

True or False: Prevention theories and models *support* the practice of prevention?



#### **Icebreaker Question**

Have you previously come across the use of prevention theories or models in your work?

Link



#### **Icebreaker Question**

If so, which prevention theory or model has been the most helpful to you?

Link





## The Importance and Role of Theories and Models

## What are Prevention Theories and Models and Why are They Important?



 Prevention theories and models <u>support</u> the practice of prevention which includes a range of activities that are aimed at reducing the risk or threat to health.



#### The Role of Theories & Models

 Prevention theories and models are used for program planning to help us understand and to explain health related behaviors while working with individuals, groups and communities.





## Most Commonly Used Prevention Theories & Models

### **Commonly Used Prevention Theories & Models**

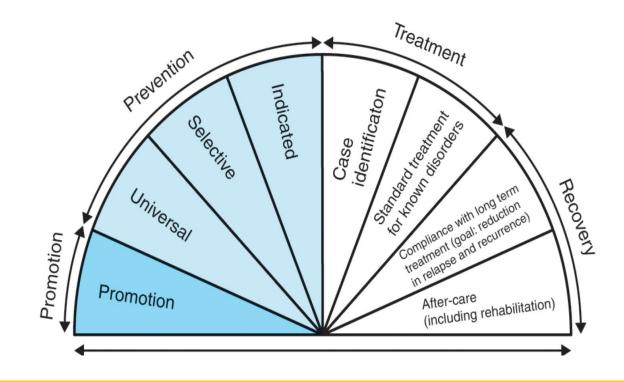
- Institute of Medicine (IOM)/Continuum of Care Model
- Public Health Model
- Social-Ecological Model
- Stages of Change Theory
- Theory of Reasoned Action





## Institute of Medicine (IOM) Model

- Institute of Medicine (IOM) classification which includes:
  - Universal
  - Selective
  - Indicated





#### **IOM Classification – Universal**



 Universal – Strategies offered to the full population such as schools, neighborhoods, communities, state and nation in effort to benefit all.



#### **IOM Classification – Selective**

• **Selective** – Strategies focused to subpopulations who are identified as being at elevated risk.





#### **IOM Classification – Indicated**

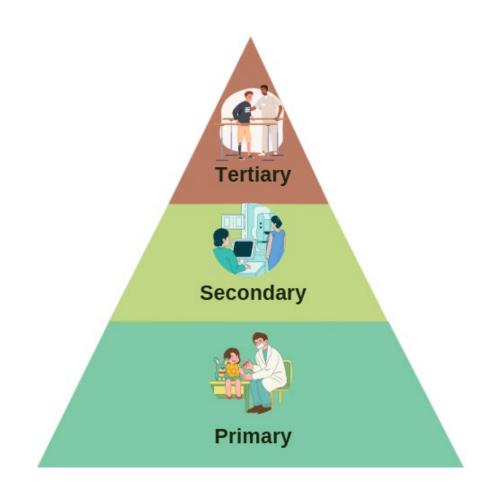


 Indicated – Strategies provided to individuals who have increased vulnerability for a disorder.



#### The Public Health Model

• The public health model is aimed at preventing the onset of a health condition.





## Public Health Model - Primary Level

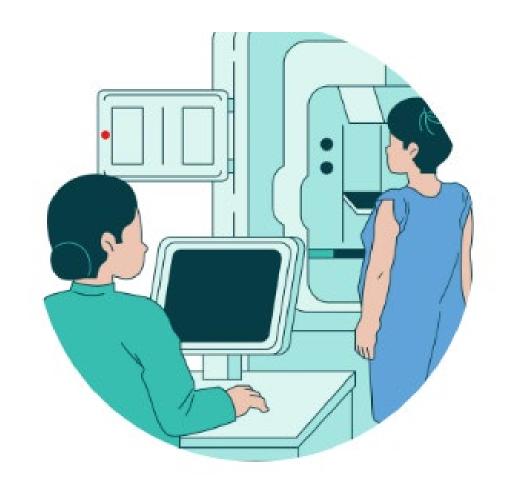


 Primary prevention – Consists of measures aimed at a susceptible population or individual.



## Public Health Model - Secondary Level

Secondary prevention –
 Emphasizes early disease detection with individuals who have no overt symptoms.





## Public Health Model – Tertiary Level

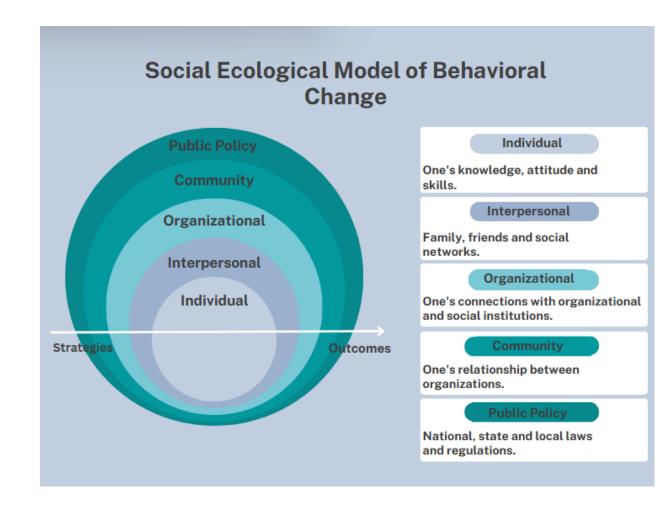


 Tertiary prevention – Aims to reduce the effects of the disease once established in an individual.



## Social-Ecological Model

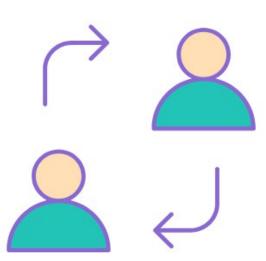
 The Social-Ecological Model identifies multiple influences at different levels of a person's life.





## **Stages of Change Theory**

- The stages of change theory is a subset of the Transtheoretical Model (TTM) and includes five stages which are aimed at altering personal behavior patterns that lead individuals to longterm change. These stages include:
  - 1. Precontemplation
  - 2. Contemplation
  - 3. Preparation
  - 4. Action
  - 5. Maintenance





### Stages of Change Theory – Precontemplation



#### Precontemplation

 This first stage consists of unmotivated and resistant individuals who do not believe in the need to find a solution to their problems because they do not believe they have one.



## Stages of Change Theory – Contemplation

#### Contemplation

 In this stage, individuals are both aware and acknowledge their problem.
 They start to consider the need for a change and are weighing the costs and benefits in doing so.





### Stages of Change Theory – Preparation



#### Preparation

 In this stage, individuals are able to both acknowledge and make commitments to correcting their behavior.



## Stages of Change Theory – Action

#### Action

 In this stage, individuals have taken action and are abstaining from the behavior with a period of about 6 months. There is evidence of an ability to continue in the path of change.

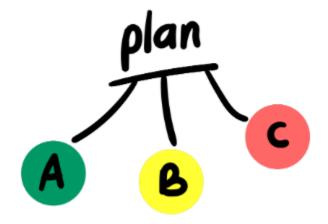




## **Stages of Change Theory – Maintenance**

#### Maintenance

 Here the individual is continuing the new behavior and has been in complete abstinence from it for the past 6 months.





## **Theory of Reasoned Action**

- The Theory of Reasoned Action suggest that an individual's health behavior is driven by their intention to perform a behavior. This behavior intention is then predicted ultimately by a person's:
  - Attitude
  - And perceived norms regarding the behavior.







## BREAK

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## **Application of Prevention Theories & Models**

## **Real World Applications**

- Institute of Medicine (IOM) Model
- Public Health Model
- Social-Ecological Model
- Stages of Change Theory
- Theory of Reasoned Action





## Applications – When to use IOM



- When is it appropriate to use the IOM Model?
  - When you are determining the full impact and effectiveness of a strategy. It can be used for any program being implemented:
    - Mental Health
    - Tobacco
    - Substance misuse
    - Problem gambling
    - Suicide prevention



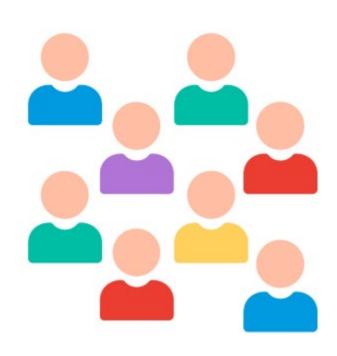
## **Applications – IOM Part A**

There has been an increase of consequences related to problem gambling on an identified lowa college campus. College Administration have been well informed of the impacts it has been having on college aged students. A new policy has gone into effect to implement changes in the availability of these gambling activities on and nearby those college campuses. These policies will have an impact on all students regardless of risk.

What IOM category does this statewide strategy fit in?



### **Applications – IOM Part A Category**



 This strategy falls in the <u>Universal</u> category of the IOM Model.



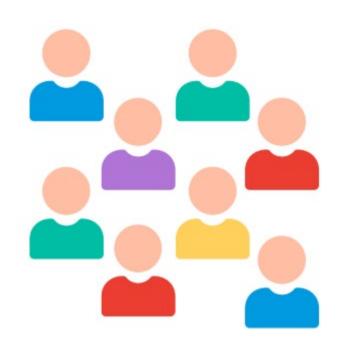
## **Applications – IOM Part B**

Through their assessment of gambling related activities on campus, College Administration became aware of a number of young adults participating in unsanctioned gambling groups on campus. The school administration decided to ban gambling groups on campus and require participants to participate in a 4-week gambling program to help address this issue.

What IOM category does this statewide strategy fit in?



### **Applications – IOM Part B Category**



 This strategy falls in the Indicated category of the IOM Model.



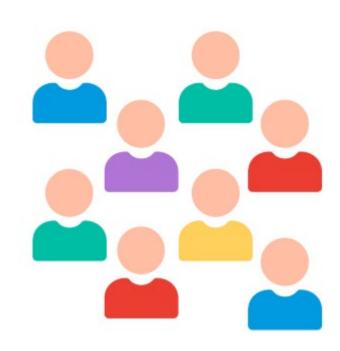
## **Applications – IOM Part C**

Upon review of the gambling activities found on campus, College Administration made additional efforts to identify and offer those who were recruited into these gambling groups but had not yet decided to join, a problem gambling mentorship program with benefits toward school credit to help address this issue further.

What IOM category does this statewide strategy fit in?



#### **Applications – IOM Part C Category**



 This strategy falls in the <u>Selective</u> category of the IOM Model.



#### Applications – When to use Public Health Model

- When is it appropriate to use the Public Health Model?
  - When the aim is to *prevent the onset of disease/condition* through risk reduction but also downstream complications of a manifested disease/condition.
    - 1. Mental Health
    - 2. Tobacco
    - 3. Substance misuse
    - 4. Problem gambling
    - 5. Suicide prevention





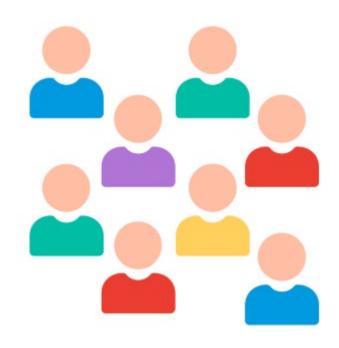
#### **Applications – Public Health Part A**

The administration of Monterrey high school sought to address mental health concerns among the students in their school and implement some programs for the new school year. The goal of programming is to reduce the onset of mental health conditions such as anxiety, depression and self-harm for incoming students. They decided to train their faculty to identify signs and symptoms for these behaviors and offer several mental wellness workshops, first during school orientation and then throughout the school year.

What category does this fit in under the Public Health Model?



#### **Applications – Public Health Part A Category**



 This strategy falls under the <u>Primary</u> category of the Public Health Model.



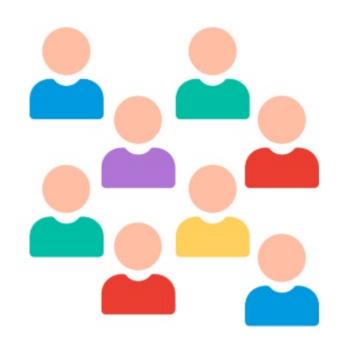
#### **Applications – Public Health Part B**

The administration of Monterrey High School is committed to enhancing efforts to address mental health concerns such as anxiety, depression, and self-harm, which have been reported by staff among upper-grade students in previous years. Although no programs were implemented in prior years, the school has now decided to introduce an early screening initiative to identify atrisk students and prevent the escalation of these conditions in the upcoming academic year.

What category does this fit in under the Public Health Model?



# **Applications – Public Health Part B Category**



 This strategy falls under the <u>Secondary</u> category of the Public Health Model.



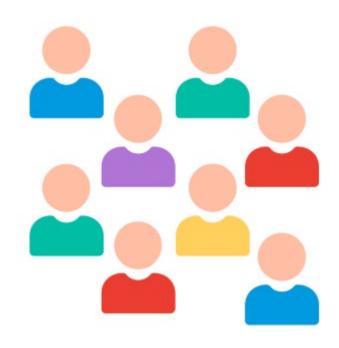
#### **Applications – Public Health Part C**

The administration of Monterrey High School is committed to additional efforts to address ongoing mental health concerns, including anxiety, depression, and self-harm, observed among students in the previous academic year. To ensure comprehensive support and mitigate potential challenges this year, they have decided to establish a crisis intervention team dedicated to providing prompt and effective responses to any emerging issues during the school year.

What category does this fit in under the Public Health Model?



# **Applications – Public Health Part C Category**



 This strategy falls under the <u>Tertiary</u> category of the Public Health Model.



#### Applications – When to use Social-Ecologicial Model

- When is it appropriate to use the Social Ecological Model?
  - When there are complex health issues that require interventions at multiple levels. It can be used for any program being implemented:
    - 1. Mental Health
    - 2. Tobacco
    - 3. Substance misuse
    - 4. Problem gambling
    - 5. Suicide prevention





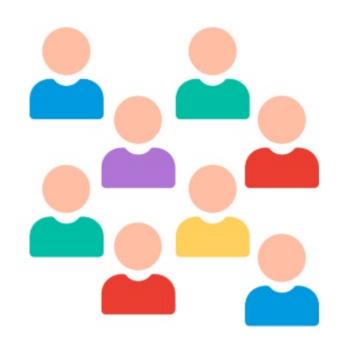
#### **Applications – Social-Ecological Part A**

A small rural town in Iowa has experienced a significant increase in youth tobacco use over the past decade. Due to limited resources within the county, a neighboring county's health organization has initiated efforts to address this issue by planning the implementation of several programs within the community over the next five years. To facilitate this initiative, a local coalition composed of residents with firsthand knowledge of the situation and a commitment to positive change has been established. The coalition's initial effort involved organizing an event for youth, featuring interactive educational sessions and engaging activities designed to raise awareness about the health impacts of tobacco use.

What category does this fit in under the Social-Ecological Model?



# Applications - Social-Ecological Part A Level



 This strategy falls under the Individual Level of the Social-Ecological Model.



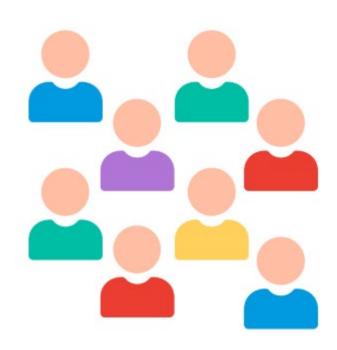
#### Applications – Social-Ecological Part B

Assessment data indicated that youth who engaged in tobacco use were more likely to have family members who also smoked. In response, the organization planned to host family-centered activities and workshops for residents. These events aimed to facilitate parent-child bonding while providing education on the impact of family influence on tobacco use and strategies parents can employ to support healthier choices for their children.

What category does this fit in under the Social Ecological Model?



## Applications - Social-Ecological Part B Level



 This strategy falls under the <u>Interpersonal Level</u> of the Social-Ecological Model.



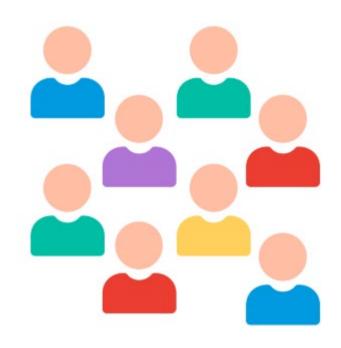
#### Applications – Social-Ecological Part C

The county health organization expanded its efforts by engaging with local schools to develop partnerships supporting school-based tobacco prevention programs focused on cessation and education. They provided training for school staff on evidence-based programs such as Guiding Good Choices, Reconnecting Youth, and youth mentoring, equipping the schools to implement these initiatives in the upcoming academic year.

What category does this fit in under the Social Ecological Model?



## **Applications – Social-Ecological Part C Level**



 This strategy falls under the <u>Organizational Level</u> of the Social-Ecological Model.



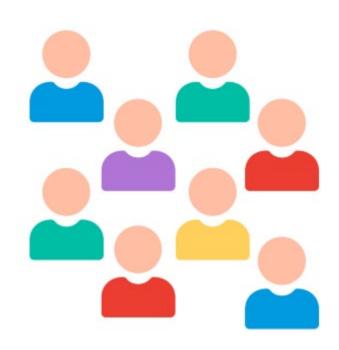
#### Applications – Social-Ecological Part D

The county health organization expanded its tobacco prevention efforts to include a youth-focused campaign aimed at increasing community awareness. They evaluated effective outreach strategies and distributed educational materials in locations commonly frequented by young people. Additionally, they displayed advertisements at bus stops, on billboards, and across social media platforms targeting the youth demographic. Public service announcements were broadcasted on radio stations popular among youth, and television advertisements featured testimonials from young individuals who have successfully quit tobacco use.

What category does this fit in under the Social Ecological Model?



# Applications - Social-Ecological Part D Level



 This strategy falls under the <u>Community Level</u> of the Social-Ecological Model.



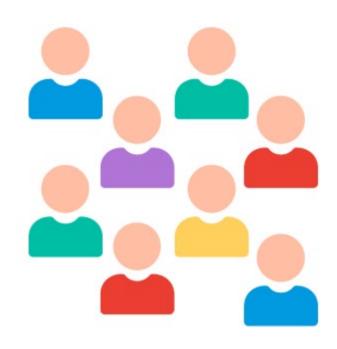
#### **Applications – Social-Ecological Part E**

Finally, the county health organization has reiterated its intention to promote policy changes within the community to support youth tobacco cessation. In pursuit of this goal, they engaged with local government officials and policymakers to advocate for the implementation of new policies aimed at reducing youth tobacco use and fostering a healthier environment over the coming years.

What category does this fit in under the Social Ecological Model?



## **Applications – Social-Ecological Part E Level**



 This strategy falls under the <u>Policy Level</u> of the Social-Ecological Model.



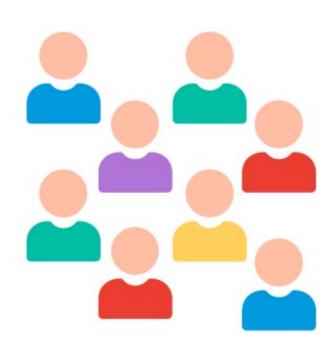
# **Applications – When to use Stages of Change**

- When is it appropriate to use the Stages of Change Theory?
  - For strategies specifically aimed at behavior change over time. For example:
    - Mental Health
    - Tobacco cessation
    - Substance misuse prevention
    - Problem gambling
    - Alcohol reduction





#### Real World Applications Cont'd



#### Stages of Change Theory

 When considering how to use this theory, consider what stage an individual might be in, in their use and tailor strategies to that specific stage they are in.



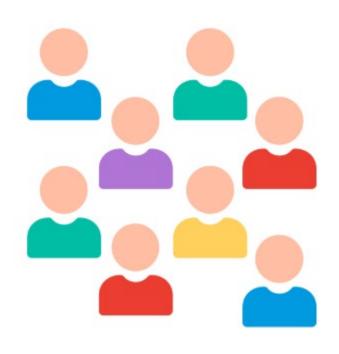
#### Applications – Stages of Change Example 1

Lisa is currently managing a substance use disorder (SUD) related to the misuse of prescribed medication. This condition has resulted in several health concerns, including persistent nausea, constipation, and cognitive difficulties that have affected her performance at work. While she recognizes the effects of these challenges, she has not yet expressed a desire to pursue changes at this time.

What stage of change is Lisa in?
As a prevention specialist, how would you assist Lisa?



#### Applications – Stages of Change Example 1 stage



- Lisa is in the <u>Pre-Contemplation</u> stage.
  - How can we help her? Individuals in the precontemplation stage could benefit from educational opportunities because they are unmotivated and don't believe in the need to find a solution to their problems because they do not believe they have one. Their unawareness could be benefited by being well informed.



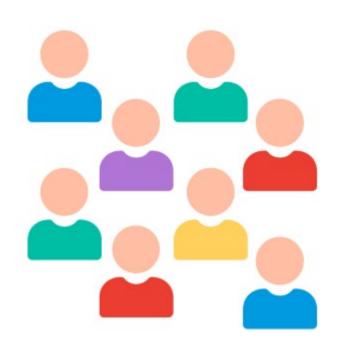
#### **Applications – Stages of Change Example 2**

Alex is managing a diagnosis of alcohol use disorder (AUD) and occasionally engages in binge drinking during social gatherings with friends. His awareness of his alcohol consumption increased after experiencing a blackout at a party, which resulted in a sustained back injury. He has been undergoing physical therapy for ongoing back pain and is now considering participating in a program to substantially reduce his alcohol intake.

What stage of change is Alex in?
As a prevention specialist, how would you assist Alex?



#### Applications – Stages of Change Example 2 stage



- Alex is in the <u>Contemplation</u> stage.
  - How can we help him? Those in the contemplation stage could benefit from motivational interviewing because they are aware and have acknowledge a problem but are uncertain and have taken no actionable steps in changing their behavior. Motivating them in the way of change can be an effective strategy.

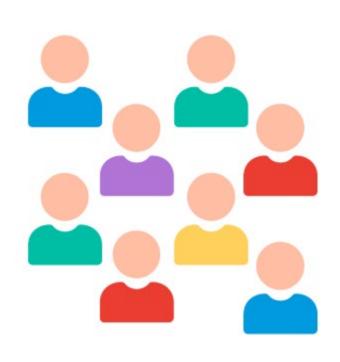
#### **Applications – Stages of Change Example 3**

George is experiencing challenges related to problematic gambling. His wife, Carol, has expressed concerns about the impact of these habits, which have resulted in missed household bill payments and a default on their mortgage. Additionally, their children have noted a decrease in his involvement and presence. Recognizing these issues, George has committed to making positive changes and has already taken several steps over the past year to address the situation. He is now prepared to achieve meaningful progress within the next 30 days.

What stage of change is George in?
As a prevention specialist, how would you assist George?



#### Applications – Stages of Change Example 3 stage



- George is in the <u>Preparation</u> stage.
  - How can we help him? In the preparation stage, George could benefit from the use of a planner or calendar to help him keep track of his intended progress. He is committed to his behavior change and needs to make a plan for a change.

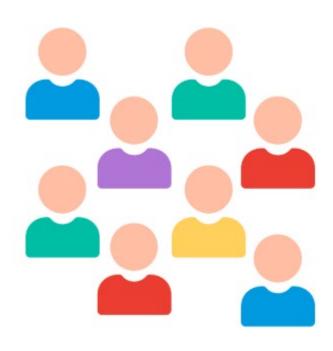
#### Applications – Stages of Change Example 4

Over the past ten years, Cindy has been working to address a tobacco dependency. Due to ongoing health concerns, including persistent shortness of breath and chest pains, she made a personal commitment to herself and her family to quit smoking. One and a half years later, Cindy has made significant progress and has been smoke-free for the past six months. When she experiences urges to smoke, she recollects her motivation for making this change and employs positive reinforcements, such as engaging in activities she enjoys, to support her continued success in cessation.

What stage of change is Cindy in?
As a prevention specialist, how would you assist Cindy?



#### **Applications – Stages of Change Example 4 stage**



- Cindy is in the <u>Action</u> stage.
  - How can we help her? In the action stage, Individuals may need support in maintaining their status to help them overcome challenges they may face.



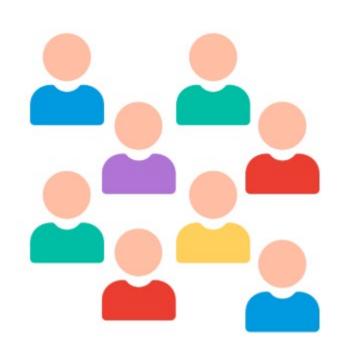
#### **Applications – Stages of Change Example 5**

Peter is a high school student who was initially influenced by peers involved in risky behaviors, leading him to experiment with certain substances early in his freshman year. He has always been a dedicated student with a strong academic record. However, in the latter part of his freshman year, his grades declined significantly, and he began experiencing serious health issues. Recognizing the need for change, he committed to improving his behavior and has maintained sobriety for the past year. His parents are very proud of his progress and hope he remains consistent in his efforts throughout the remainder of high school and into college.

What stage of change is Peter in?
As a prevention specialist, how would you assist Peter?



# **Applications – Stages of Change Example 5 stage**



- Peter is in the *Maintenance* stage.
  - How can we help him? In the maintenance stage, an individual could benefit from creating a contingency plan to help maintain their behavior for example implementing alternative ways of coping if the desire to act on that behavior returns. If one way of coping isn't helping, it would benefit the individual to plan ahead of time to engage in another activity that is more effective.



#### **Applications – When to use Theory of Reasoned Action**

- When is it appropriate to use the Theory of Reasoned Action?
  - When there is a need to change voluntarily controlled attitudes, perceived norms and intentions.
    - For example:
      - 1. Tobacco cessation
      - 2. Substance misuse prevention
      - 3. Problem gambling
      - 4. Alcohol reduction





#### **Applications – Reasoned Action Example**

A billboard was put up recently in a community where there are high rates of drug use amongst the youth. A grassroots coalition has been aware of the issue and implemented a billboard campaign which includes helpful details about the negative health impacts of drug use and a short testimonial from a youth who got help to quit using and has been successful obtaining a job. They also provided on the billboard a number for a helpline for those seeking support to quit using and an employment assistance line.

What categories did the coalition seek to address under the Theory of Reasoned Action?

How was the coalition willing to help youth in that community?



#### Applications – Reasoned Action Explanation

- The coalition sought to address both youth's <u>Attitude</u>, and Perceived Norms.
  - What did they do to accomplish this? They shared helpful information on the negative impacts of drugs offering youth more insight to change their attitudes about what it can do to their overall health. They also sought to change youth's perceived norms, showing them that others their age have quit using and that it is possible to do. With this, their aim was to influence youth's intention to quit using drugs.
  - They also offered youth both a support and employment line to help them accomplish this effort.



#### References

- 1. NIH. (Aug. 2023). Prevention Strategies. Retrieved from, Prevention Strategies StatPearls NCBI Bookshelf.
- 2. NIH. (Nov., 2023). *Health Promotion, Health Protection, and Disease Prevention: Challenges and Opportunities in a Dynamic Landscape.*Retrieved from, Health Promotion, Health Protection, and Disease Prevention: Challenges and Opportunities in a Dynamic Landscape PMC.
- 3. NIH. (2009). Preventing Mental, Emotional, and Behavioral Disorders Among Young People: Progress and Possibilities. Retrieved from, Defining the Scope of Prevention - Preventing Mental, Emotional, and Behavioral Disorders Among Young People - NCBI Bookshelf.
- 4. SAMHSA. (2023) SAMHSA strategic Plan 2023-2026. Retrieved from SAMHSA Strategic Plan 2023-2026.
- 5. NIH. (2019). Introduction Integrating Social Care into the Delivery of Health Care NCBI Bookshelf. Retrieved from, Introduction Integrating Social Care into the Delivery of Health Care NCBI Bookshelf.
- 6. SAMHSA. (2020). Focus on Prevention-Strategies and Programs to Prevent Substance Use. Received from, Focus On Prevention.
- 7. CDC. (Jan., 2022). *The Socio-Ecological Model: A Framework for Prevention.* Retrieved from, <u>About Violence Prevention | Violence Prevention | CDC.</u>
- 8. NIH. (Mar., 2023). Stages of Change Theory. Retrieved from, Stages of Change Theory StatPearls NCBI Bookshelf.
- NIH. (May., 2013). The Theory of Reasoned Action as Parallel Constraint Satisfaction: Dynamic Computational Model of Health Behavior-PMC.
   Retrieved from, The Theory of Reasoned Action as Parallel Constraint Satisfaction: Towards a Dynamic Computational Model of Health
   Behavior PMC.
- 10. APA. (2022). Strengths-Based Prevention: Reducing Violence and Other Public Health Problems. Retrieved from <u>Strengths-Based Prevention</u>: <u>Reducing Violence and Other Public Health Problems</u>.





# Thank you

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