CaNvPHTC
CALIFORNIA-NEVADA
Public Health Training Center

Applying Behavior Change Theory to Public Health Programs

Presented by:

The California-Nevada Public Health Training Center

Learning Objectives

1. Understand how to select theories to fit programs.
2. Apply theoretical constructs to program activities.

What is a Theory?

"A set of relatively abstract and general statements which collectively purport to explain some aspect of the empirical world."

Chafetz (1978) in Glanz et al (2008)

Characteristics of Theories

Theories…
1. …are explanatory.
2. …tend to be abstract.
3. …are general.
4. …have multiple constructs
5. …specify relationships among constructs
6. …follow a deductive system of logic

Theories vs. Conceptual Frameworks

Theory

- Explanatory
- Abstract
- General
- Multiple constructs
- Specify relationships among constructs
- Deductive system of logic

Framework

- ~~Explanatory~~
- Abstract
- General
- Multiple constructs
- Specify relationships among constructs
- ~~Deductive system of logic~~

Understanding and Applying Theories

- What is the change paradigm of the theory?
- What are the central constructs of the theory?
- How do theoretical constructs apply to my population and program?

Practice Case Study: Reducing Methamphetamine Use

- Goal
  - Reduce methamphetamine use among young adults, age 18-25, from 5% to 3%.
- Possible theories
  - Health Belief Model
  - Social Cognitive Theory
  - Diffusion of Innovations

Health Belief Model

- Value expectancy theory
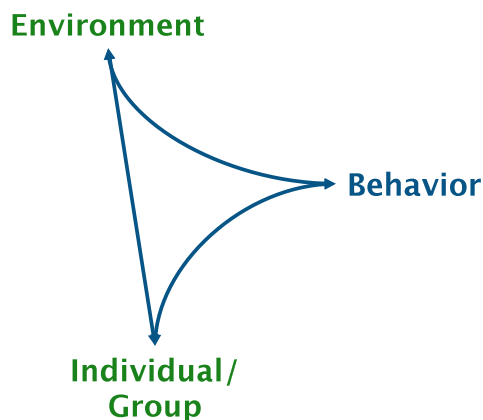 - New outcome must be valued and expected to occur

Current behavior ⟶ Current outcome

Expected

New behavior ⟶ New outcome

Valued
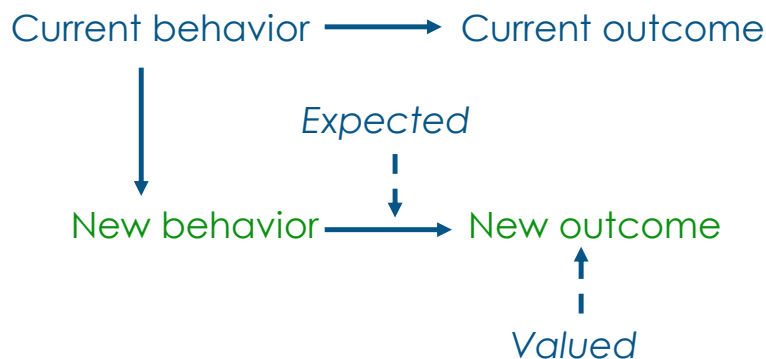
Health Belief Model: Key Constructs

- Perceived susceptibility ⎤
- Perceived severity   ⎦ Perceived risk
- Perceived benefits
- Perceived barriers
- Cues to action
- Self-efficacy

Social Cognitive Theory

- Reciprocal determinism

Social Cognitive Theory: Key Constructs

- Observational learning
- Psychological determinants
  - Outcome expectations
  - Self-efficacy
  - Collective efficacy
- Self-regulation

- Environmental determinants
  - Incentive motivation
  - Facilitation
- Moral disengagement

Diffusion of Innovations

- Maximizing adoption of an idea, practice, or object perceived as new by a particular population

Diffusion of Innovations: Key Constructs

- Relative advantage
  - Better than before?
- Compatibility
  - Does innovation fit the audience?
- Complexity
  - Easy to use?
- Trialability
  - Try before adopting?
- Observability
  - Measure results

Comparing Theories

	Health Belief Model	Social Cognitive Theory	Diffusion of Innovations
Change paradigm	Behavior is a function of beliefs about behavioral outcomes	Reciprocal determinism: Behavior is a result of interaction between the individual, their environment, and the behavior	Maximize adoption of a "new" idea, practice, or object
Key Constructs	Perceived susceptibility Perceived severity Perceived benefits Perceived barriers Cues to action Self-efficacy	Observational learning Psychological determinants Environmental determinants Self-regulation Moral disengagement	Relative advantage Compatibility Complexity Trialability Observability

Practice Case Study: Reducing Methamphetamine Use

- Why do people use methamphetamines?
  - Rationale 1: Users don't think methamphetamine use is a problem.
  - Rationale 2: High level of availability of methamphetamine.
  - Rationale 3: No new innovative approaches to reducing methamphetamine use.

Practice Case Study: Choosing the Most Appropriate Theory

- Rationale 1: Users don't think methamphetamine use is a problem
  - Health Belief Model
- Rationale 2: High level of availability of methamphetamine
  - Social Cognitive Theory
- Rationale 3: No new innovative approaches to reducing methamphetamine use
  - Diffusion of Innovations

Practice Case Study: Applying the Health Belief Model

Health Belief Model	
Perceived susceptibility	
Perceived severity	
Perceived benefits	
Perceived barriers	
Cues to action	
Self-efficacy	

Practice Case Study: Applying the Health Belief Model

Health Belief Model	
Perceived susceptibility	Outreach efforts to heighten awareness of susceptibility to conditions such as neuronal damage, high blood pressure, depression, paranoia and psychotic symptoms.
Perceived severity	Outreach efforts to heighten awareness of severity of conditions such as neuronal damage, high blood pressure, depression, paranoia and psychotic symptoms.
Perceived benefits	Outreach efforts to heighten awareness of benefits of quitting methamphetamine use.
Perceived barriers	Provide services to assist methamphetamine users' quit attempts.
Cues to action	Substitute methamphetamine use with other activities to divert individual from methamphetamine cravings.
Self-efficacy	Introduce a sponsor system, similar to Alcoholic Anonymous.

Practice Case Study: Applying Social Cognitive Theory

Social Cognitive Theory	
Observational learning	
Psychological determinants	
Environmental determinants	
Self regulation	
Moral disengagement	

Practice Case Study: Applying Social Cognitive Theory

Social Cognitive Theory	
Observational learning	Partner client with former user who can sponsor client through cessation.
Psychological determinants	Increase self-efficacy by introducing achievable, short-term goals on path to cessation, including removal of client from environment where methamphetamines are available.
Environmental determinants	Introduce rewards for each short-term goal achieved on path to cessation, including placing clients in desired environment where methamphetamines are not available.
Self regulation	Develop techniques to help client identify sources of temptation for methamphetamine use and techniques to combat cravings.
Moral disengagement	Have person slowly realize the effects of their methamphetamine use on others and to take ownership of those effects.

Practice Case Study: Applying Diffusion of Innovations

Diffusion of Innovations	
Relative advantage	
Compatibility	
Complexity	
Trialability	
Observability	

Practice Case Study: Applying Diffusion of Innovations

Diffusion of Innovations	
Relative advantage	Instead of fliers publishing methamphetamine cessation resources, active outreach and enrollment into cessation programs at known methamphetamine use locations.
Compatibility	Maintain anonymity, do not adopt a law enforcement approach.
Complexity	Use technology to minimize client efforts for communication and support.
Trialability	Cessation is paced according to client readiness.
Observability	Utilize short-term goal identification and achievement to mark path to complete cessation.

Conclusion

- Identify change paradigm of theory and match it with the causal explanation of the undesired behavior.
- Identify main constructs of a theory.
- Apply theoretical constructs to achieve program goals.