

HSC4211 Health, Behavior and Society

Theories and Concepts in Public Health Part 2

Lecture Outline

- o Individual (Intrapersonal) level theories
- o Interpersonal level theory
- o Community level theory

Individual (Intrapersonal) level theories

- o Health Belief Model (HBM)
- o Transtheoretical Model (TTM) – Stages of Change
- o Theory of Planned Behavior (TPB)

Individual (Intrapersonal) level theories

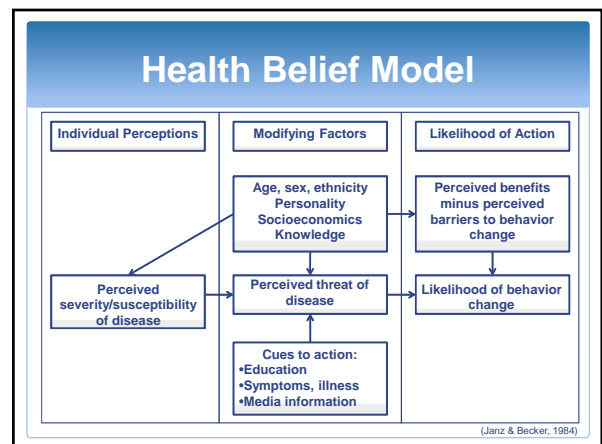
- o Health Belief Model (HBM)
 - Developed in 1950's by social psychologists
 - Value-expectancy theory
 - Main constructs

Construct	Definition
Perceived susceptibility	feeling about the chances of experiencing a risk
Perceived severity	belief about how serious a condition is and what its consequences are
Perceived benefits	beliefs about benefits of the advised action
Perceived barriers	beliefs about negative aspects of the advised action
cues to action	Factors that activate "readiness to change"
self-efficacy	confidence in one's ability to take action

Individual (Intrapersonal) level theories

- o Health Belief Model (HBM)
 - Main concepts and its application (TSE)

Concept	Measurement example
Perceived susceptibility	My chances of getting testicular cancer are great if I fail to perform testicular self-examination
Perceived severity	The thought of testicular cancer scares me
Perceived benefits	I have a lot to gain by doing testicular self-examinations
Perceived barriers	Testicular self-examinations can be painful
cues to action	Campaigns (e.g. posters, media -press, TV, radio etc) prompted me to do testicular self-examination. Symptoms (e.g. soreness, size/shape change) prompted me to do testicular self-examination
self-efficacy	If you are going to do testicular self-examination how easy is it for you to do it correctly?



Individual (Intrapersonal) level theories

- Transtheoretical Model (TTM) – Stages of Change
 - Generated based on an analysis of major theories
 - Assess a person's readiness to change
 - Identify the processes and principles of human behavior change
 - Main constructs
 - Stages of change
 - Processes of change
 - Decisional balance
 - Self efficacy

Individual (Intrapersonal) level theories

- Transtheoretical Model (TTM) – Stages of Change
 - Main concepts

Stage	Definition
Precontemplation	No intention to take action within the next 6 months
Contemplation	Intends to take a specific action within the next 6 months
Preparation	Intends to take the action within the next 30 days and has taken some behavioral steps in this direction
Action stage	Has changed overt behavior for less than 6 months
Maintenance	the person Changed overt behavior for less than 6 months
Termination	No temptation to relapse

Individual (Intrapersonal) level theories

- Transtheoretical Model (TTM) – Stages of Change
 - Example

Drinking and driving (Drunk driving) is defined as operating a motor vehicle while under the influence of alcohol. Have you ever engaged in drinking and driving according to this definition?

Stage	Question example
Precontemplation	No intention to take action within the next 6 months
Contemplation	Intends to take a specific action within the next 6 months
Preparation	Intends to take the action within the next 30 days and has taken some behavioral steps in this direction
Action stage	Has changed overt behavior for less than 6 months
Maintenance	the person Changed overt behavior for less than 6 months
Termination	No temptation to relapse

Trans-theoretical Model

Table 3. Stages of Change Model

Stage	Definition	Potential Change Strategies
Precontemplation	Has no intention of taking action within the next six months	Increase awareness of need for change; personalize information about risks and benefits
Contemplation	Intends to take action in the next six months	Motivate; encourage making specific plans
Preparation	Intends to take action within the next thirty days and has taken some behavioral steps in this direction	Assist with developing and implementing concrete action plans; help set gradual goals
Action	Has changed behavior for less than six months	Assist with feedback, problem solving, social support, and reinforcement
Maintenance	Has changed behavior for more than six months	Assist with coping, reminders, finding alternatives, avoiding slips/relapses (as applicable)

Trans-theoretical Model

Pre-contemplation	Contemplation	Determination/Preparation	Action	Maintenance	Relapse/Recycle
No; Denial	Maybe; Ambivalence	0-3 Months Yes, Let's Go; Motivated	3-6 Months Doing It; Go	Over 6 months Living It	Start Over; Ugh!!

Regular Exercise is any **planned** physical activity (e.g., brisk walking, aerobics, jogging, bicycling, swimming, rowing, etc.) performed to increase physical fitness. Such activity should be performed **3 to 5 times per week for 20-60 minutes per session**. Exercise does not have to be painful to be effective but should be done at a level that increases your breathing rate and causes you to break a sweat.

Question:
Do you exercise regularly according to that definition?

- Yes, I have been for MORE than 6 months.
- Yes, I have been for LESS than 6 months.
- No, but I intend to in the next 30 days.
- No, but I intend to in the next 6 months.
- No, and I do NOT intend to in the next 6 months.

No, and I do NOT intend to in the next 6 months.	Pre-contemplation	Increase perception of risks and problems with current behaviors
No, but I intend to in the next 6 months.	Contemplation	Decisional balance of pros and cons Work on barriers
No, but I intend to in the next 30 days.	Preparation	Goal setting Developing a change plan Developing coping skills
Yes, I have been for LESS than 6 months.	Action	Reinforcement Evaluation of high risk situations
Yes, I have been for MORE than 6 months.	Maintenance	Support Reinforcement

Individual (Intrapersonal) level theories

- Theory of Reasoned Action (TRA) & Theory of Planned Behavior (TPB)
 - Theoretical constructs concerned with individual motivational determinants of the likelihood of performing a specific behavior
 - The best predictor of a behavior is behavioral intention.
 - Theory of Planned Behavior (TPB) was developed by Ajzen and colleagues (1991) through adding *perceived behavioral control* to (TRA).

Individual (Intrapersonal) level theories

- Theory of Reasoned Action (TRA) & Theory of Planned Behavior (TPB)

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    graph LR
        subgraph Beliefs
            B1[Behavioral beliefs]
            B2[Evaluation of behavioral outcomes]
            B3[Normative beliefs]
            B4[Motivation to comply]
            B5[Control beliefs]
            B6[Perceived power]
        end
        subgraph Attitudes
            A1[Attitude toward behavior]
        end
        subgraph Norms
            N1[Subjective norm]
        end
        subgraph Control
            C1[Perceived behavioral control]
        end
        subgraph Intention
            I1[Behavioral intention]
        end
        subgraph Behavior
            BE1[Behavior]
        end
        A1 --> I1
        N1 --> I1
        C1 --> I1
        I1 --> BE1
    
```

Note: Upper blue section shows the Theory of Reasoned Action; the entire figure shows the Theory of Planned Behavior

Individual (Intrapersonal) level theories

- Theory of Planned Behavior (TPB)

Concept	Definition	Measurement Approach
Behavioral intention	Perceived likelihood of performing behavior	Are you likely or unlikely to (perform the behavior)?
Attitude	Personal evaluation of the behavior	Do you see (the behavior) as good, neutral, or bad?
Subjective norm	Beliefs about whether key people approve or disapprove of the behavior; motivation to behave in a way that gains their approval	Do you agree or disagree that most people approve of/disapprove of (the behavior)?
Perceived behavioral control	Belief that one has, and can exercise, control over performing the behavior	Do you believe (performing the behavior) is up to you, or not up to you?

Individual (Intrapersonal) level theories

- Theory of Planned Behavior (TPB)
- Example

Concept	Measurement example
Behavioral intention	I intend to perform testicular self-examination once a month. (Very likely – Very unlikely)
Attitude	My performing testicular self-examination in the next month would be harmful/beneficial
Subjective norm	Most people who are important to me think that I should perform testicular self-examination in the next month
Perceived control	Performing testicular self-examination in the next month is beyond my control

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Interpersonal level theory

- Social Cognitive Theory (SCT)

Interpersonal level theory

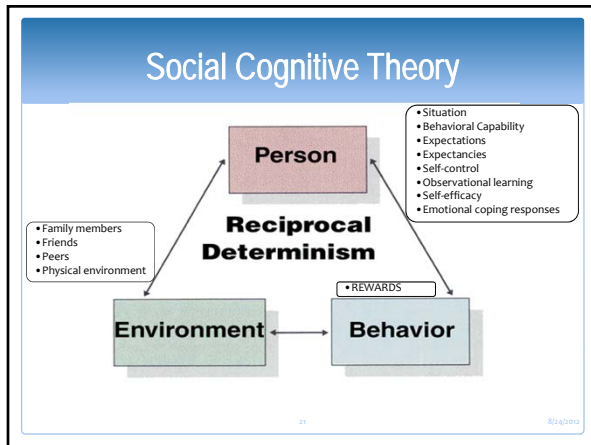
- o Social Cognitive Theory (SCT)

Concept	Definition
Reciprocal determinism	The dynamic interaction of the person, behavior, and the environment in which the behavior is performed.
Behavioral capability	Knowledge and skill to perform a given behavior
Expectations	Anticipated outcomes of a behavior
Self efficacy	Beliefs about personal ability to perform behaviors that bring desired outcomes
Observational learning (modeling)	Behavioral acquisition that occurs by watching the actions and outcomes of others' behavior
Reinforcement	Responses to a person's behavior that increases or decreases the likelihood of reoccurrence

Interpersonal level theory

- o Social Cognitive Theory (SCT)
- Example

Concept	Application
Behavioral capability	Teaching healthy cooking and exercise skills
Expectations	Healthy diet and exercise will benefit
Self efficacy	Create contracts to set incremental goals
Observational learning	Respected congregation members as role models
Reinforcement	Incentives and relaxing time
Reciprocal determinism	People bring healthier foods to church, reinforcing their healthy habits.



Social Cognitive Theory

Table 5. Social Cognitive Theory

Concept	Definition	Potential Change Strategies
Reciprocal determinism	The dynamic interaction of the person, behavior, and the environment in which the behavior is performed	Consider multiple ways to promote behavior change, including making adjustments to the environment or influencing personal attitudes
Behavioral capability	Knowledge and skill to perform a given behavior	Promote mastery learning through skills training
Expectations	Anticipated outcomes of a behavior	Model positive outcomes of healthful behavior
Self-efficacy	Confidence in one's ability to take action and overcome barriers	Approach behavior change in small steps to ensure success; be specific about the desired change
Observational learning (modeling)	Behavioral acquisition that occurs by watching the actions and outcomes of others' behavior	Offer credible role models who perform the targeted behavior
Reinforcements	Responses to a person's behavior that increase or decrease the likelihood of reoccurrence	Promote self-initiated rewards and incentives

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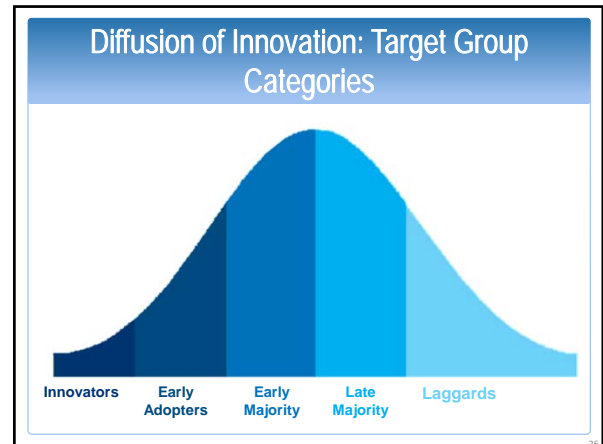
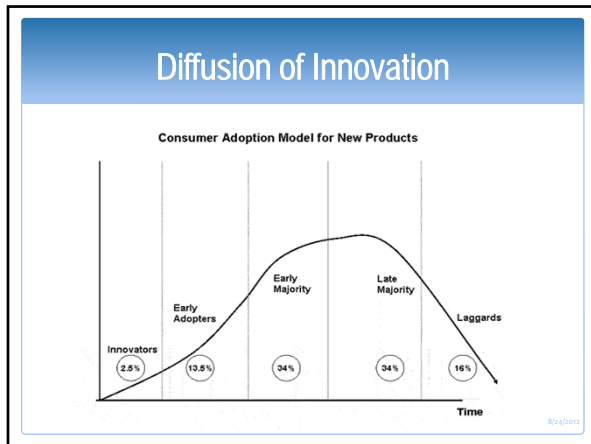
Community level theory

- Diffusion of Innovation

Community level Theory

- o Diffusion of Innovations – Key concepts

Concept	Definition
Innovation	An idea, object, or practice that is thought to be new by an individual, organization, or community
Communication channels	The means of transmitting the new idea from one person to another
Social system	A group of individuals who together adopt the innovation
Time	How long it takes to adopt the innovation



- ### Characteristics of Individual Adopters
- **Innovators** – venturesome; shortest time between awareness and adoption; reached by media
 - **Early adopters** – opinion leaders
 - **Early majority** – deliberators; reached by interpersonal channel
 - **Late majority** – skeptical; reached by interpersonal channel and increased outreach
 - **Laggards** – traditional; need more potent outreach and incentives

Community level Theory

- Characteristics of innovations

Attribute	Key Question
Relative advantage	Is the innovation better than what it will replace?
Compatibility	Does the innovation fit with the intended audience?
Complexity	Is the innovation easy to use?
Trialability	Can the innovation be tried before making a decision to adopt?
Observability	Are the results of the innovation observable and easily measurable?

- ### Conclusion
- Theory is important in understanding health behaviors.
 - You have now learned how to apply theory at the individual, intrapersonal, and community levels.

"There is nothing so practical as a good theory".
-Kurt Lewin, 1951

Resources

- Coreil, J., Bryant, C., & Henderson, J.N. (2001). *Social and Behavioral Foundations of Public Health*. Thousand Oaks, CA: Sage Publications.
- Glanz, K., Rimer, B.K., & Viswanath. (2008). *Health behavior and health education: Theory, research, and practice*. California: Jossey-Bass.
- Green, L. W. (1991). *Health promotion planning : an educational and nvironmental approach* (2nd ed.). Mountain View, CA: Mayfield Pub. Co.
- McLeroy, K. R., Bibeau, D., Steckler, A., & Glanz, K. (1988). An ecological perspective on health promotion programs. *Health education quarterly*, 15(4), 351-377.
- Rimer, B.K., & Glanz, K. (1995). *Theory at a glance: A guide for health education practice* [NIH Pub. No. 95-3896]. Washington, D.C.: National Cancer Institute.
- White, J. (2002). *Family Theories* (2nd ed.). Thousand Oaks, California: Sage Publications.