Using Behavioral Science: Applying Theory to Practice

New York City Department of Health and Mental Hygiene
Program Evaluation Unit
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Our Goals

✓ To increase awareness of behavioral science theories

✓ To learn how to apply behavioral science theory to HIV prevention programs
You will learn about...

- Behavior change
- Behavioral science
- Using behavioral science theory in HIV prevention
- Specific theories
- Putting theory into practice!
What affects our health?

What affects our behavior?
Health and Psychosocial Factors

- Social relationships and social support
- Stress
- Psychological factors
  - Anger
  - Hostility
  - Pessimism
  - Hopelessness
WHAT AFFECTS OUR BEHAVIOR?
Factors that Influence Behavior

- Knowledge
- Attitudes/Beliefs
- Intentions
- Self-Efficacy
- Emotions
- Self standards, Values, Identity
- Skills

- Sexual relationship dynamics
- Family, Cultural, Religious Norms
- Social/Peer Norms
- Policies
- Laws, regulations
- Environmental factors
Personal Influences that Impact Behavior

- **Risk Appraisal** - What are my chances of becoming infected because of what I do?
- **Self Perception** - What do I think about my ability to avoid risk?
- **Emotions and Arousal** - How do my feelings affect my behavior?
- **Relationship/Social Influence** - What people, places and things affect me?
- **Environmental** - How does society influence my behavior?
How Do I Change My Behavior?

- Identify a behavior you changed or tried to change.
- What was the impact of the behavior on your health?
- How much did the change affect your life?
- Who/What were the obstacles to changing?
- What was the reward for changing?
- Who/What were your “helpers” for change?
1. Behavior – a set of actions; the ways we conduct ourselves; the things that we do.

2. Science - systematic knowledge of natural or physical phenomena; an organized way of thinking; an examination of how something works.

3. Behavioral Science - is an organized way of understanding people’s actions.
Behavioral Science Helps Us...

1. ...assess individual and community health risks

2. ...know with whom, when, where, and how to intervene to prevent disease

3. ...know how to evaluate the effectiveness of our interventions
Behavioral Science is Important to HIV Prevention

- Knowledge about HIV transmission alone is not sufficient for behavior change to occur.

- HIV transmission occurs through behaviors that are linked with sex and drug use, which occur in a social context.
Why are Behavioral Science theories Important to HIV Prevention?

- Frames a problem to help you choose activities/interventions
  - Meet clients where they are
- Common language for practitioners
- Demonstrate program effectiveness
- Funders believe in it
Using behavioral science theory in your program
Developing a Successful Intervention: Key Components

- Identify & know your target populations.
- Identify the behavioral goals.
- Identify the influencing factors.
- Identify appropriate strategy for affecting each influencing factor.
Behavioral Science Theories

- Focus on behavior change
- Approach behavior from a slightly different angle
- Focus on just a few behavioral factors or influences

Successful interventions draw from more than one theory!
Health Belief Model

- Health behaviors depend on 4 key beliefs, all of which must be operating.
  - Perceived **severity**: “HIV is deadly”
  - Perceived **vulnerability**: “I could get HIV”
  - **Benefits**: “I can prevent HIV if I use condoms”
  - **Barriers**: “Condoms ruin the mood”
Health Belief Model (2)

- The beliefs that the benefits of performing a behavior need to outweigh the consequences of not performing it.
  - “I would rather use condoms than get HIV.”
- Triggers
  - Individuals may experience a trigger or cue to action which prompts them to consider their risk behavior and make a change in their actions.
HBM Program Application

- Do clients feel HIV is serious?
- Do clients see themselves at risk?
- Do clients believe that risk reduction techniques will decrease their risk?
- What are the barriers to practicing new behaviors?
Social Cognitive Theory (SCT)

- Behavior is dynamic and influenced by personal, environmental, and social factors.
  - Changes in one area will affect the others
- Behavior is learned through personal experience or by observing others.
- Individual must have the skills necessary to perform the behavior.
Social Cognitive Theory (2)

- Personal Factors
  - **Self-Efficacy**: Perceived ability/confidence to perform a behavior
  - **Skills**: Obtaining/increasing skills either through experience or observation/modeling
  - **Outcome Expectations**: The extent to which one values the expected outcome of performing a behavior
Social Cognitive Theory (3)

- Environmental Factors
  - Access to accurate information, social support
    - For example, access to condoms/clean needles

- Social Factors
  - Behavior is learned by observing and modeling others
SCT Program Application

- Do clients have the skills to use condoms?
- How much experience do clients have in discussing condoms with partners?
- What situations present barriers to using condoms?
- Do clients expect that using condoms will protect them from HIV?
- Do clients have the self-efficacy to discuss condoms?
Theory of Reasoned Action (TRA)

- In order for behavior change to occur, one must have an intention to change.

- Intentions are influenced by 2 factors:
  - **Attitude** towards the behavior
    - Belief regarding performing behavior based on past experience
    - Consequences of performing behavior
  - **Subjective norms** towards the behavior
    - What peers think
    - Willingness to conform to peers’ views
TRA Program Application

- Clients’ intention to change current behavior
- Clients’ attitude towards risk reduction behaviors
- Clients’ perception about the attitudes and behaviors of peers
AIDS Risk Reduction Model (ARRM)

- Three stages for explaining behavior change specifically related to the sexual transmission of HIV.

1. Recognition and labeling one’s behavior as "risky"
   - Hypothesized Influences:
     - Understanding of sexual activities associated with HIV
     - Believing one is personally susceptible to HIV
     - Believing HIV is harmful
2. Make a commitment to reduce high-risk contacts and increase low-risk activities

- **Hypothesized Influences:**
  - Compare cost and benefit of making change
  - Understand response efficacy
    - will safer sex really reduce risk?
  - Understand the health utility and enjoyability of sexual practices
    - will condoms decrease my enjoyment?
  - Self-efficacy
  - Social factors: group norms/social support
3. Take action:

- Seek Information
- Obtain remedies
- Enact solutions

Hypothesized Influences:
- Level of self esteem
- Quality of social networks
- Problem-solving and communication skills
ARRM Program Application

- Encourage clients to understand the real risk of HIV
- Work on self-efficacy; develop skills to protect themselves
- Provide information about safer sex
- Work on communication/negotiation skills
Stages Of Change

- Change occurs in steps, over time
- Clients are in different stages of readiness to change for different behaviors
- Bi-directional or spiral movement through stages, rather than linear

*Intervention activities need to be matched to stages*
5 Stages of Change

1. Precontemplation
2. Contemplation
3. Preparation
4. Action
5. Maintenance

- Relapse
- Termination
Precontemplation

No intention to change in the foreseeable future - defined as the next six months.

- Person might be unaware, deny risk
- Discouraged by past attempts to change
Contemplation

Have formed intentions to change in the next six months.

- Weighing the pros and cons of making the change
Preparation

Have plans to change (within the next month) and might have taken initial actions.
Action

- Has begun changing behavior but change is relatively recent (within the last six months).
- Demonstrates commitment.
- Being aware of the risk of relapse and guarding against it is critical at this stage.
Maintenance

- Consistent change for an extended period of time (more than six months).

- More work is done on preventing relapse than making “the change”.
Relapse

- Is a natural and expected part of the process.

- Can occur at any stage during the process.
How Do I Know What Stage My Client Is In?

- What client records tell me
- Informal communications
- What the client says/does

Use survey/questionnaire to stage clients...

or clients can stage themselves
Stages of Change

- Incorporates elements from other behavior change theories
- Acknowledges “where the client’s at” in their thinking, feeling and behavior relative to change
- Staging the client’s “readiness to change” is the key for your work with them
Harm Reduction

- A set of practical strategies that reduces negative consequences of risk behaviors (e.g. drug use/sex).
  - Includes a spectrum of activities from safer use, to managing use, to abstinence.
- For people unwilling or unable to stop the risk behavior
- Meet clients “where they’re at”
Harm Reduction Program Application

- Work with clients to understand risks and find opportunities to reduce harm
  - Conduct thorough needs assessment to determine specific skills clients need to minimize risk.
  - Example: syringe exchange programs
Diffusion of Innovation

The process by which new ideas are communicated, responded to, and accepted.

Key components:
- Communication channels
- Opinion leaders
- Time
Diffusion of Innovation (2)

The Innovation Is:
- Easy to use
- Advantageous
- Compatible with values/lifestyle
- Can observe others doing it

Peer leaders practice innovation openly and endorse it
Diffusion of Innovation
Program Application

- What are the most effective means to get the message out?
- Who are the community leaders?
- What are the social networks within the community?
Social Network Theory

- Humans are social animals and we have interconnected social networks (family, friends, coworkers).

- Social networks can...
  - foster ways of behaving or thinking.
  - be a source of social support for behavior change.
  - can discourage behavior change.
Social Network Theory
Program Application

- Does client engage in negative behaviors with peers?

- Can client associate with a more positive group of peers?

- Strategy: Teach skills to avoid peer pressure.
Summary

- Biology, Environment, and Behavior interact to influence health
- Individual, Social, Institutional, and Policy factors interact to influence behavior
- Behavioral Science Theories suggest
  - how the interaction of factors affects health
  - how and when interventions can work for different populations.
Summary (2)

- There are many behavioral science theories; each one approaches health behaviors from a slightly different perspective.
- Interventions can draw from different theories.
- Tailor your interventions to the community you serve & the specific risks of your population.
How To Build a Program Using Behavioral Science

In order to help our defined target population, do a specific behavior. We will use a needs assessment and focus on some constructs to help through program intervention.
# Behavior Science Worksheet

<table>
<thead>
<tr>
<th>Target Population</th>
<th>Factors Influencing Behavior</th>
<th>Theoretical Framework</th>
<th>Theoretical Construct</th>
<th>How are you making an impact on these constructs in your program activities?</th>
<th>How will you measure change?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Lack of knowledge about HIV transmission</td>
<td>SOC</td>
<td>precontemplation</td>
<td>Educate about risky behaviors</td>
<td>Sample every X client approached</td>
</tr>
<tr>
<td></td>
<td>Lack of condom use skills</td>
<td>SCT</td>
<td>skills</td>
<td>Teach condom use skills and encourage practice (role play)</td>
<td>Pre and post-test Interviews</td>
</tr>
<tr>
<td></td>
<td>Poor self-efficacy to use condoms</td>
<td>SCT</td>
<td>self efficacy</td>
<td>Role play situations to practice condom use skills</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Do not feel they are at risk</td>
<td>HBM</td>
<td>perceived susceptibility</td>
<td>Define populations at risk; personalize risk</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Perceived barriers to using condoms</td>
<td>SCT and HBM</td>
<td>outcome expectations</td>
<td>Work with clients to identify barriers to condom use; teach clients that using condoms will decrease likelihood of contracting/transmitting HIV; associate condoms with positive expectations (will feel good about self, positive rxn from partner)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social norms</td>
<td>TRA</td>
<td>norms</td>
<td>PTI interns are peers and serve as positive role model thereby impacting norms</td>
<td></td>
</tr>
</tbody>
</table>
What Theories Does My Program Use?

How are theoretical constructs translated into program activities?
Theory to Practice

- Let’s fill in the boxes - target population and factors influencing behavior.
- Identify a theory and the theoretical constructs you would like to work with.
- Create some activities to help your target population achieve behavior change.
- How will you measure the change?
References

- www.fhi.org