Introduction

• What are some examples of how social or cultural influences affect health?
• How Is Public Health related to the Social and Behavioral Sciences?
• How does Socioeconomic Status affect health?
• What other social factors explain the differences in health and response to disease?
• What are some of the common obstacles in helping others to change Health Behaviors?
Introduction

• Why are some individual Health Behaviors easier to change than others?

• How can individual behaviors be changed?

• What stages so Individuals go through in making behavioral change?

• How can behaviors within a group be changed?

• How can we combine individual, group, and social efforts to implement behavioral change?
You travel to a country in Asia and find that the culture affects most parts of life including health. From the food they eat and their method of cooking to their attitudes toward medical care and their beliefs about the cause of disease and the ability to alter it through public health and medical interventions, this country is profoundly different from the United States.
Social Influence on Health

You are trying to help your spouse quit smoking cigarettes and your kids from starting. You know that gentle encouragement and support on a one-to-one basis are essential but are often not enough since cigarettes cause addiction that produces withdrawal and long term cravings. Like most addictions, quitting requires a combination of individual motivation, support from family and friends, and sometimes use of medications. But you wonder: do warning labels on cigarettes, taxes on cigarettes, and no smoking zones in public places make any difference?
Social Influence on Health

Your efforts to convince teenagers to avoid smoking or at least stop smoking focuses on giving them the facts about how cigarettes cause lung cancer, throat cancer, and serious heart disease.

You are frustrated at how little impact you have had and are surprised that others are more successful by focusing on immediate impacts such as stained teeth and bad breath as well as the loss of control that goes along with addiction to nicotine.
Suppose that every day on your way to work, you pass the same young homeless man on the same corner. You notice that over the past few weeks he has been coughing, and you figure he must have a cold.

Today when you walk by his usual place on the corner, he is not there, but someone has left a sign that reads, “Rest in peace, Ramón.” You are surprised, especially because he was so young. You wonder whether there was anything that could have been done to prevent his death.
Social Influence on Health

As a new parent you hear from your pediatrician, nurses in the hospital, and even from the makers of your brand of diapers that babies should sleep on their backs. They call it “back-to-bed.” You are surprised to find that it’s part of the class on babysitting given by the local community center and a required part of the training for those who work in registered day care centers. It’s all part of a social marketing campaign, you find out, and it has reduced by half the number of deaths from SIDS.
How Is Public Health Related to the Social and Behavioral Sciences?

These subject areas share a fundamental belief that understanding the organization and motivation behind social forces, along with a better understanding of the behavior of individuals, can be used to improve the lives of individuals, as well as society as a whole.
Examples of Contributions of Social and Behavioral Sciences to Public Health

<table>
<thead>
<tr>
<th>Social Science discipline</th>
<th>Examples of disciplinary contributions to public health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychology</td>
<td>Theories of the origins of behavior and risk taking tendencies and methods for altering individual and social behaviors</td>
</tr>
<tr>
<td>Sociology</td>
<td>Theories of social development, organizational behavior, and systems thinking. Social impacts on individual and group behaviors</td>
</tr>
<tr>
<td>Anthropology</td>
<td>Social and cultural influences on individual and population decision making for health with a global perspective</td>
</tr>
</tbody>
</table>
## Additional Examples

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<tr>
<th>Social Science discipline</th>
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<tr>
<td><strong>Political science/ Public policy</strong></td>
<td>Approaches to government and policy making related to public health. Structures for policy analysis and the impact of government on public health decision making</td>
</tr>
<tr>
<td><strong>Economics</strong></td>
<td>Understanding the micro- and macroeconomic impact on public health and health care systems</td>
</tr>
<tr>
<td><strong>Communications</strong></td>
<td>Theory and practice of mass and personalized communication and the role of media in communicating health information and health risks</td>
</tr>
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## Additional Examples

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<tr>
<td><strong>Demography</strong></td>
<td>Understanding demographic changes in populations globally due to aging, migration, and differences in birth rates, plus their impact on health and society</td>
</tr>
<tr>
<td><strong>Geography</strong></td>
<td>Understanding of the impacts of geography on disease and determinants of disease, as well as methods for displaying and tracking the location of disease occurrence</td>
</tr>
</tbody>
</table>
How Are Social Systems Related to Health?

- Complex interactions
  - We are constantly interacting with our surroundings, including social systems composed of interactions we have with other people, institutions, communities, and policies
  - Efforts aimed at improving population health require an understanding of the complex relationship between social systems and health
How Are Social Systems Related to Health?

• Influencing behavior
  – Shaping norms and cultural expectations
  – Enforcing patterns of social control
  – Providing or not providing opportunities to engage in certain behaviors
  – Reducing or producing stress for which certain behaviors may be an effective coping strategy (at least in the short term)
How Do Socioeconomic Status, Culture, and Religion Affect Health?

• These three key components of the social system have a strong relationship with health

• Broad social influences can affect an individual’s response to disease
# Socioeconomic Status and Health

<table>
<thead>
<tr>
<th>Type</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Living conditions</strong></td>
<td>Increases in sanitation, reductions in crowding, better methods of heating and cooking</td>
</tr>
<tr>
<td><strong>Overall educational opportunities</strong></td>
<td>Education is the strongest association with health behaviors and health outcomes. May be due to better appreciation of factors associated with disease and greater ability to control these factors</td>
</tr>
<tr>
<td><strong>Educational opportunities for women</strong></td>
<td>Education for women has an impact on the health of children and families</td>
</tr>
</tbody>
</table>
## Socioeconomic Status and Health

<table>
<thead>
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<tr>
<td><strong>Occupational exposures</strong></td>
<td>Lower socioeconomic jobs are traditionally associated with increased exposures to health risks</td>
</tr>
<tr>
<td><strong>Access to goods and services</strong></td>
<td>Ability to access goods, such as protective devices and high quality foods and services, including medical and social services to protect and promote health</td>
</tr>
<tr>
<td><strong>Family size</strong></td>
<td>Smaller family size traditionally associated with improved socioeconomic status and with a better overall health status</td>
</tr>
</tbody>
</table>
## Socioeconomic Status and Health

<table>
<thead>
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<tr>
<td><strong>Exposures to high risk behaviors</strong></td>
<td>Social alienation related to poverty may be associated with violence, drugs, other high risk behaviors</td>
</tr>
<tr>
<td><strong>Environmental</strong></td>
<td>Lower socioeconomic status associated with greater exposure to environmental pollution, “natural” disasters, and dangers of the “built environment”</td>
</tr>
</tbody>
</table>
What are Some of the Ways that Culture May Affect Health?

<table>
<thead>
<tr>
<th>Ways that culture may affect health</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Culture is related to behavior—social practices may put individuals and groups at increased or reduced risk</td>
<td>Positive Food preferences—vegetarian, Mediterranean diet, Cooking methods</td>
</tr>
<tr>
<td></td>
<td>Negative Influences—History of binding of feet in China</td>
</tr>
<tr>
<td></td>
<td>Female genital mutilation (FGM)</td>
</tr>
<tr>
<td></td>
<td>Role of exercise</td>
</tr>
</tbody>
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### Examples of Ways that Culture May Affect Health

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<tr>
<td>Culture is related to response to symptoms, such as the level of urgency to recognize symptoms, seek care, and communicate symptoms</td>
<td>Cultural differences in seeking care and self-medication social, family, and work structures provide varying degree of social support low degree of social support may be associated with reduced health-related quality of life</td>
</tr>
</tbody>
</table>
Examples of Ways that Culture May Affect Health

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<tr>
<td>Culture is related to the types of interventions that are acceptable</td>
<td>Variations in degree of acceptance of traditional Western medicine including reliance on self-help and non-traditional healers</td>
</tr>
<tr>
<td>Culture is related to the response to disease and to interventions</td>
<td>Cultural differences in follow-up, adherence to treatment, and acceptance of adverse outcome</td>
</tr>
</tbody>
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## Examples of ways that Religion may affect Health

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<tr>
<td>Religion may affect social practices that put individuals at increased or reduced risk</td>
<td>Sexual: circumcision, use of contraceptives</td>
</tr>
<tr>
<td></td>
<td>Food: avoidance of seafood, pork, beef</td>
</tr>
<tr>
<td></td>
<td>Alcohol use: part of religion versus Prohibited use</td>
</tr>
<tr>
<td></td>
<td>Tobacco use: actively discouraged by Mormons and Seventh-Day Adventists as part of their religion</td>
</tr>
<tr>
<td>Religion may affect response to symptoms</td>
<td>Christian Scientists may reject traditional medical care as a response to symptoms</td>
</tr>
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Examples of Ways that Religion May Affect Health

<table>
<thead>
<tr>
<th>Ways that religion affects health</th>
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</table>
| Religion may affect the types of interventions that are acceptable | Prohibition against blood transfusions  
Attitudes toward stem cell research issue  
Attitudes toward abortion  
End-of-life treatments |
| Religion may affect the response to disease and to interventions | Role of prayer as an intervention to alter outcome |
What Are Social Determinants of Health?

• Conditions in which people are born, grow up, live, learn, work, play, worship, and age, as well as the systems put in place to deal with illnesses that affect health and quality of life
  – They are shaped by a wider set of forces, including economics, social policies, and politics
10 Key Categories of Social Determinants of Health

- Social status
- Social support or alienation
- Food
- Housing
- Education
- Work
- Stress
- Transportation
- Place
- Access to health services
How Do Social Determinants Affect Health?

• They contribute to a wide variety of diseases rooted in lifestyle, environmental, and social factors

• Connected with health disparities, a type of difference in health closely linked with social or economic disadvantages
  – Negatively influence groups with greater social or economic obstacles

• Affect both physical and mental health
Disparities in Health: Non-Communicable Disease & Environmental Safety

• **Coronary heart disease**
  - Black men and women more likely to die of heart disease and stroke

• **Colorectal cancer screening**
  - Disparities exist based on education and income level; as education and income increase, screening rates increase

• **Air pollution**
  - Racial/ethnic minority groups more likely to live in the most polluted urban areas and continue to experience a disproportionately larger impact
Disparities in Health: Environmental Safety & Communicable Disease

- **Motor vehicle crashes**
  - Men of all races/ethnicities are two to three times more likely to die in crashes than women
  - Death rates twice as high among American Indians/Alaska Natives

- **HIV**
  - Minorities experience disproportionately high rates of HIV diagnosis, as do men who have sex with men (MSM)
  - Rates are increasing among black, American Indian/Alaska Native, MSM groups

- **Influenza vaccination**
  - Whites aged 65 years and older have consistently higher rates of vaccination coverage
Can Health Behavior Be Changed?

- Some health behaviors are intentional, whereas others are not motivated by health concerns
- Behavioral change is possible
  - Both for the better and for the worse
- Examples of behavioral changes
  - Reduction in cigarette smoking
  - Seatbelt use
  - Back-to-Sleep practices for infants
- Some behaviors are easier to change than others
Why Are Some Individual Health Behaviors Easier to Change?

• Behavior change is easier when one behavior can be substituted for a similar one that is considered acceptable and convenient
  – Substitution of acetaminophen (Tylenol) for aspirin to prevent Reye’s syndrome

• Incentives can encourage rapid acceptance and motivate behavioral change
  – Reduced cost, increased availability, improvements in ease of use
Why Are Some Individual Health Behaviors Easier to Change?

• The most difficult behaviors to change are those that have a physiological component or addictive element
  – Binge Eating - Obesity
  – Cigarette smoking

• Physical, social, and economic barriers can stand in the way of behavior change
  – Even if the individuals are motivated
How Can Individual Behavior Be Changed?

• Individual behavior has connections with three primary factors:

  1. **Downstream factors** - directly involve an individual and can potentially be altered by individual interventions

  2. **Mainstream factors** - result from the relationship of an individual with a larger group or population

  3. **Upstream factors** - grounded in social structures and policies
How Can Individual Behavior Be Changed?

- Behavior change requires more than individual determination and motivation
  - Encouragement and support from groups, such as friends, family, coworkers, and peers are required

- Social policies and expectations may also need to be changed in order to reinforce individual efforts
How Can Health Behavior Be Explained and Predicted (Theories vs. Models)?

• Theory
  – A set of interrelated concepts that presents a systematic view of relationships among variables in order to explain and predict events and situations

• Model
  – Combination of ideas and concepts taken from multiple theories and applied to specific problems in particular settings
The Three Levels of Influence

1. **Intrapersonal** - Focusing on individual characteristics
   - Knowledge, attitudes, beliefs, motivations, self-concept, past experiences, skills

2. **Interpersonal** - Focusing on relationships between people
   - Other people influence behavior by sharing their thoughts, advice, feelings, and emotional support

3. **Population and community** - Focusing on factors within social structures
   - Norms, rules, regulations, policies, laws
Five Key Theories & Models Used to Address Health Behavior

1. Health Belief model
2. Stages of Change (Transtheoretical model)
3. Theory of Planned Behavior
4. Social Cognitive theory
5. Diffusion of Innovation theory
(1) Health Belief Model

- Intrapersonal model focuses on individuals’ perceptions and thought processes prior to taking health-related action.
- People are more likely to take action if they believe:
  - They are susceptible to the condition and it has serious consequences.
  - Taking action would benefit them, and the benefits outweigh the harms.
  - They have the ability to successfully perform the action (self-efficacy).
## Health Belief Model and Osteoporosis

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<tr>
<th>Construct</th>
<th>Description</th>
<th>Example: osteoporosis</th>
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<tbody>
<tr>
<td>Perceived susceptibility</td>
<td>An individual’s opinion of getting a condition</td>
<td>“Osteoporosis only happens to old women, not me.”</td>
</tr>
<tr>
<td>Perceived severity</td>
<td>An individual’s opinion of how serious a condition is and its consequences</td>
<td>“Osteoporosis is not a big deal.”</td>
</tr>
<tr>
<td>Perceived benefits</td>
<td>An individual’s belief in the advised action to reduce risk and/or severity of condition</td>
<td>“Screening for osteoporosis will catch it early so I can continue to live an active lifestyle.”</td>
</tr>
<tr>
<td>Perceived barriers</td>
<td>An individual’s belief of the costs (tangible and psychological) of the advised action</td>
<td>“Screening for osteoporosis takes too much time.”</td>
</tr>
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# Health Belief Model and Osteoporosis

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<tr>
<td>Modifying variables</td>
<td>Individual characteristics that influence personal perceptions</td>
<td>“Women in my culture are viewed as strong; therefore, we do not concern ourselves with osteoporosis.”</td>
</tr>
<tr>
<td>Cues to action</td>
<td>Strategies/events that encourage one’s readiness to act</td>
<td>“My sister was recently diagnosed with osteoporosis, so I should get screened.”</td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>Belief in one’s ability to take action</td>
<td>“If I am diagnosed with osteoporosis, I know I can manage it.”</td>
</tr>
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</table>

The Transtheoretical Model: Stages of Lifestyle Change

- **Precontemplation**: Individuals have no intentions of making a change in the next six months.
- **Contemplation**: Individuals are aware they have a problem behavior and are considering changing within the next six months.
- **Preparation**: Individuals intend to change a problem behavior within the next month.
- **Action**: Individuals are modifying their behavior according to their plan but not consistently.
- **Maintenance**: Individuals have continued to work at changing their behavior and have avoided relapse for at least six months.
- **Termination/Adoption**: Often after two to five years behaviors can become so deeply ingrained that a person cannot imagine abandoning it.
The Transtheoretical Model can be a Model of Progression or a Model of Relapse Prevention

# Stages of Behavioral Change

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<th>Stage of change</th>
<th>Actions</th>
<th>Example—Cigarette Smoking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Precontemplation</td>
<td>Prognosticate</td>
<td>Strategies</td>
</tr>
<tr>
<td>Individuals not</td>
<td>Assessing readiness for change—timing is key</td>
<td>Determine individual's readiness to quit. If not ready, indicate receptivity to help in the future</td>
</tr>
<tr>
<td>considering change</td>
<td></td>
<td>Look for receptive timing such as during acute respiratory symptoms</td>
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<tr>
<td></td>
<td></td>
<td>Social factors, such as workplace and indoor restriction on smoking and taxation, increase likelihood of entering contemplation Phase.</td>
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<tr>
<td>Contemplation</td>
<td><strong>Motivate Change</strong></td>
<td><strong>Strategies</strong></td>
</tr>
<tr>
<td>Individual thinks actively about the health risk and action required to reduce that risk</td>
<td>Provide information focused on short and intermediate gains from behavioral change, as well as long term benefits</td>
<td>Reinforce increase in exercise level, reduction in cough, financial savings, serving as example to children, protection of fetus, etc.</td>
</tr>
<tr>
<td>Issue of change is on the individual’s agenda but no action planned</td>
<td>Doubtful, dire, and distant impacts are less effective</td>
<td>Also continue to inform of longer term effects on health</td>
</tr>
<tr>
<td></td>
<td>Establish baseline to assess severity of the problem; focus attention on the problem and provide basis for comparison</td>
<td>Develop log of timing, frequency, and quantity of smoking, as well as associated events</td>
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## Stages of Behavioral Change

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<tr>
<td><strong>Preparation</strong></td>
<td>Prepare for action including developing a plan and setting a timetable</td>
<td></td>
</tr>
<tr>
<td><strong>Plan Change</strong></td>
<td>Set specific measurable and obtainable goals with deadlines</td>
<td>Quit date or possible tapering if heavy smoker</td>
</tr>
<tr>
<td></td>
<td>Two or more well chosen simultaneous interventions may maximize effectiveness</td>
<td>Family support, peer support, individual planning, medication, etc. may reinforce and multiply impacts</td>
</tr>
<tr>
<td></td>
<td>Recognize habitual nature of existing behavior and remove associated activities</td>
<td>Remove cigarettes, ashtrays, and other associated smoking equipment; Remove personal and environmental impacts of past smoking, such as teeth cleaning and cleaning of drapery; Anticipate temptations, such as associations with food, drink, and social occasions</td>
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<tr>
<td><strong>Action</strong></td>
<td><strong>Reinforce Change</strong></td>
<td><strong>Strategies</strong></td>
</tr>
<tr>
<td>Observable changes in behavior with potential for relapse</td>
<td>Provide/suggest tangible rewards</td>
<td>Provide rewards, such as alternative use of money—focus on personal hygiene or personal environment</td>
</tr>
<tr>
<td></td>
<td>Positive feedback encouragement of new behavior.</td>
<td>Focus on measurable progress toward new behavior; Provide receptive environment, but avoid focus on excuses; Take short term one-day-at-a time approach; Recognize cravings and have plan including use of medications; Recognize potential for symptoms to worsen at first before improvement occurs; Anticipate potential for weight gain and encourage exercise and other behaviors to reduce potential for weight gain</td>
</tr>
<tr>
<td></td>
<td>Anticipate adverse effects and frustrations</td>
<td></td>
</tr>
<tr>
<td>Utilize group/peer support</td>
<td></td>
<td>Family and peer reinforcement critical during action phase</td>
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<td><strong>Maintenance</strong></td>
<td><strong>Maintain Change</strong></td>
<td></td>
</tr>
<tr>
<td>New behavior needs to be consolidated as part of permanent lifestyle change</td>
<td>Practice/reinforce methods for maintaining new behavior</td>
<td>Avoid old associations and prepare/practice response when encountering old circumstances</td>
</tr>
<tr>
<td></td>
<td>Recognize long term nature of behavioral change and need for supportive peers and social reinforcement</td>
<td>Negative social attitudes toward smoking among peers and society along with social restrictions, such as limiting public indoor smoking and social actions, such as taxation, help prevent smoking and reinforce maintenance of cessation</td>
</tr>
</tbody>
</table>
# Stages of Change—Individual, Group and Population/Social Interventions to Change Smoking Behavior

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<th>Stage of change</th>
<th>Individual</th>
<th>At-risk group</th>
<th>Population/society</th>
</tr>
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<tbody>
<tr>
<td>Pre-contemplation</td>
<td>Assess readiness for change and offer future help</td>
<td>Social marketing aimed at specific groups Restriction on smoking at work</td>
<td>Cost affected by taxes, restrictions on smoking in public places, warning labels on packages</td>
</tr>
<tr>
<td>Contemplation</td>
<td>Information on hazards of smoking and gains from quitting</td>
<td>More receptive to social marketing aimed at specific groups Restriction on smoking at work</td>
<td>More receptive to costs of cigarettes, restrictions on smoking in public places, and warning labels</td>
</tr>
</tbody>
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### Stages of Change—Individual, Group and Population/social Interventions to Change Smoking Behavior

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<tbody>
<tr>
<td><strong>Preparation</strong></td>
<td>Set individual goals and develop strategy; Medication may be helpful</td>
<td>Support group/friends and family reinforce individual preparation; telephone “quit lines”</td>
<td>National efforts, e.g., American Cancer Society National Quit Day</td>
</tr>
<tr>
<td><strong>Action</strong></td>
<td>Remove connections between cigarettes and pleasurable activities Use of medications as needed</td>
<td></td>
<td>Pay for medication and other assistance with cessation as part of insurance</td>
</tr>
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Stages of Change—Individual, Group and Population/social Interventions to Change Smoking Behavior

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<tr>
<td>Maintenance</td>
<td>Education regarding long term physical addiction and potential for relapse</td>
<td>Continued reinforcement at work and by peer and social groups</td>
<td>Continued reinforcement by social marketing, taxes, and restriction on smoking</td>
</tr>
</tbody>
</table>
(3) Theory of Planned Behavior

• Intrapersonal model
• Intention is the main predictor of behavior
• Behavior intention is influenced by:
  – Individual’s attitude toward performing a behavior
  – Individual’s beliefs about whether people important to him or her approve or disapprove of the behavior (subjective norms)
  – Individual’s beliefs about their control over performing the behavior (self-efficacy)
(4) Social Cognitive Theory

• Interpersonal model
  – Interaction between individuals and their social systems

• Changing behavior requires an understanding of:
  – Individual characteristics
  – Influences in the social and physical environment
  – Interaction among all these factors

• Reciprocal determinism—dynamic interplay among personal factors, the environment, and behavior
  – Changing one of these factors will change them all
Reciprocal Determinism

# Social Cognitive Theory and Drug Addiction

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<th>Construct</th>
<th>Description</th>
<th>Example: drug addiction</th>
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<tbody>
<tr>
<td>Self-efficacy</td>
<td>Belief in one’s ability to take action</td>
<td>“I am able to stop taking drugs.”</td>
</tr>
<tr>
<td>Observational learning (modeling)</td>
<td>Learning by watching others</td>
<td>“My best friend has been drug-free for 3 years.”</td>
</tr>
<tr>
<td>Expectations</td>
<td>The likely outcome of a particular behavior</td>
<td>“If I quit taking drugs, I will be able to hold a job and earn income.”</td>
</tr>
<tr>
<td>Expectancies</td>
<td>The value placed on the outcome of the behavior</td>
<td>“Being able to work and have an income is very important to me.”</td>
</tr>
</tbody>
</table>

### Social Cognitive Theory and Drug Addiction

<table>
<thead>
<tr>
<th>Construct</th>
<th>Description</th>
<th>Example: drug addiction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional arousal</td>
<td>Emotional reaction to a situation</td>
<td>“When I take drugs, I feel like I am out of control and that is very frightening.”</td>
</tr>
<tr>
<td>Behavioral capability</td>
<td>Knowledge and skills needed to engage in a behavior</td>
<td>“I know I need to seek professional assistance to quit my drug addiction and I know where/how to get it.”</td>
</tr>
<tr>
<td>Reinforcement</td>
<td>Rewards or punishments for performing a behavior</td>
<td>“When I take drugs, people do not want to hang out with me. But when I am not taking drugs, I am surrounded by my friends and family.”</td>
</tr>
<tr>
<td>Locus of control</td>
<td>Belief regarding one’s personal power over events</td>
<td>“Only I can get myself drug free.”</td>
</tr>
</tbody>
</table>

(5) Diffusion of Innovation Theory

- **Five Stages**
  1. Knowledge of Innovation
  2. Persuasion of benefits
  3. Decision to adopt
  4. Implementation
  5. Confirmation

- **Classification for Adoption**
  - Early adopters
  - Early majority adopters
  - Late adopters
(5) Diffusion of Innovation Theory

- Population and community level model
- How a new idea, product, or social practice is disseminated and adopted in a population
- Diffusion and adoption/rejection are affected by personal attributes of the innovation such as:
  - Relative advantage
  - Compatibility
  - Complexity
  - Trial-ability
  - Observability
Diffusion of Innovation Theory

- **Early adopters** - those who seek to experiment with innovative ideas
- **Early majority adopters** - often opinion leaders whose social status frequently influences others to adopt the behavior
- **Late adopters** - those who need support and encouragement to make adoption as easy as possible
## Innovation-Decision Process of Diffusion of Innovation with Innovation of Sneeze into Elbow

<table>
<thead>
<tr>
<th>Stage</th>
<th>Description</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>Before people can accept an innovation, they must become familiar with it</td>
<td>Knowing that sneezing into the elbow exists as a public health recommendation</td>
</tr>
<tr>
<td>Persuasion</td>
<td>People develop an opinion about the innovation (highly influenced by persuasion)</td>
<td>“It’s low cost, easy to do, give it a try, I have seen others doing it”</td>
</tr>
<tr>
<td>Decision</td>
<td>People will either adopt or reject it</td>
<td>“I have decided to adopt (or reject)” this technique</td>
</tr>
<tr>
<td>Implementation</td>
<td>Trial period</td>
<td>“I will try it for a day or two”</td>
</tr>
<tr>
<td>Confirmation</td>
<td>Support is needed for the decision.</td>
<td>Trial becomes habit after continued use.</td>
</tr>
</tbody>
</table>

Table 4.9  p. 89
Choosing a Theory

• STEPS

1. Identify the health issue or problem and the population affected
2. Gather information on the issue, population, or both
3. Identify possible reasons or causes for the problem
4. Identify the level of interaction under which the reasons or causes most logically fit
5. Identify the theory or theories that best match the level and the reasons or causes
How Theories Can Be Applied in Practice: Social Marketing

- Use and extension of traditional product marketing to approach behavioral change
  - *The truth campaign*, *National Youth Anti-Drug campaign*, *The VERB campaign*
- Structured by the four *Ps*:
  - Product, Price, Place, Promotion (next slide)
- Relies upon branding
How Can Group Behaviors Be Changed?

• Social Marketing
  – The Truth Campaign® (ALF Foundation)
  – The National Youth Anti-Drug Campaign
  – The VERB™ Campaign
The 4 P’s of Social Marketing

• **Product**
  – The behavior or innovation being sold

• **Price**
  – Benefits, barriers, and financial costs

• **Place**
  – The target audience

• **Promotion**
  – The organization of a campaign or program (Branding)
The 3 P’s of Branding

• Clear understanding of the behavior to be changed (product)

• Strategies for reducing the financial and psychological costs (price)

• How each segment of the audience can be successfully reached (place)
How Theories Can Be Applied in Practice: PRECEDE-PROCEED

• Provides a structure to design and evaluate health education and health promotion programs using a diagnostic planning process followed by an implementation and evaluation process

• There are nine steps, divided into the two phases: PRECEDE and PROCEED
Diagnostic Phase: PRECEDE

1. Social assessment
2. Epidemiological assessment
3. Behavioral and environmental assessment
4. Educational and organizational assessment
5. Administrative and policy assessment
Implementation and Evaluation Phase: PROCEED (cont)

6. Implementation
7. Process evaluation
8. Impact evaluation
9. Outcome evaluation
Social Assessment

- Assess people’s perceptions of their own needs and quality of life through data collection activities such as surveys, interviews, focus groups, and observation.
- Example: gun violence
  - Gun violence emerged as a major concern among community members through focus groups that explored health and safety concerns in the community.
Epidemiological Assessment

- Determine which health problems are most important for which groups in the community, often by analyzing data from vital statistics, state and/or national surveys, etc.
- Assists in identifying subpopulations at high risk
- Provide data to set measurable objectives
- Example: gun violence
  - Data from death certificates and crime reports reveals that the majority of deaths among males less than 24 years old are due to gunshot wounds
Behavioral and Environmental Assessment

- Identify risk factors internal and external to the individual that contribute to the health issue of interest. Literature searches and theory application provide guidance.

- Example: gun violence
  
  • A literature search provides insight into factors contributing to gun violence among males less than 24 years old. Gang-related behavior is found to be frequent in populations with similar socioeconomic status as that of the target population.
Educational and Organizational Assessment

- Preceding and reinforcing factors that initiate and sustain behavior change are identified, such as an individual’s knowledge, skills and attitudes, social support, peer influence, and availability of services.

- Example: gun violence
  - Interventions aimed at males aged 16 and younger are found to be the most successful. Young males with older male role models are more likely to view gangs as negative and more likely to participate in sports and community service.
Administrative and Policy Assessment

- Identify policies, resources, and circumstances that may help or hinder implementation of the intervention.
- Example: gun violence
  - Communication system recently established between school systems and law enforcement to report truancy and criminal behavior among the student population. May assist in identifying subgroups to target intervention.
Implementation

– The intervention is implemented.

– Example: gun violence

• After-school program that incorporates educational, service-oriented, and physical activity components is implemented, led by males from the community. The program is tailored for males 12-16 years of age.
Process Evaluation

- Process evaluation assesses the extent to which the intervention was implemented as planned.
- Example: gun violence
  - Evaluate how program activities were delivered
Impact Evaluation

- Impact evaluation assesses the change in the factors identified by the behavioral and environmental assessment and the educational and organizational assessment.

- Example: gun violence
  - Evaluate gang associations among participants in the after-school programming
Outcome Evaluation

- Outcome evaluation assesses the effect of the intervention on the health issue of interest.
- Example: gun violence
  - Evaluate deaths due to gun violence in the community before and after intervention
Successful Behavior Change

• Social marketing efforts should:
  – be aimed at everyone (both high and low risk).
  – consider the entire population (society) as a whole.
  – take into account the “stage of change” theory
  – be preceded by a careful investigation of the beliefs, values, and cultural/religious practices of a target group.
  – convey the risks, benefits, and opportunities that arise from a cultural change.
The End

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Videos

• Sir Michael Marmot – How Social, Political Economic Policies Affect Health
• Truth: Quitting Ain’t Easy
• Above the Influence: We Rise Together
• Unnatural Causes video series
  (Clips are available online, but entire videos available for purchase)
Videos

- The Girl Effect
- The Girl Effect: The Clock is Ticking
- Care International: Learning to Lead
- The Fun Theory