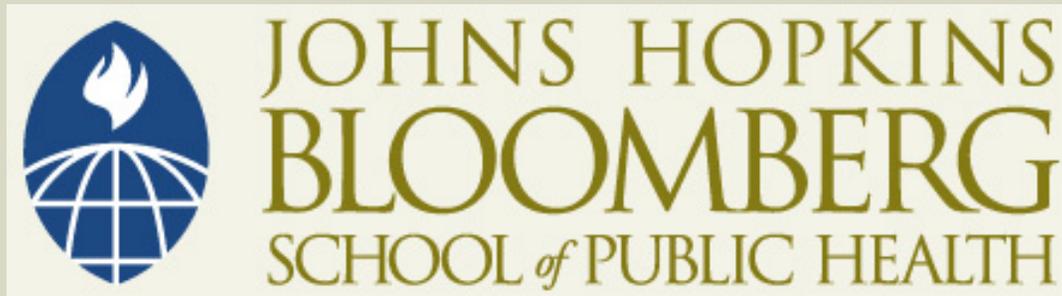


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# Changing People's Behavior

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# Changing people's behavior

- Review of approaches to behavior change
- The “transtheoretical model” as a unifying hypothesis
- “Motivational interviewing” as a clinical application of the TTM

# Major public health campaigns

- Stop:
  - Smoking
  - Drinking excessively
  - Eating unhealthy foods
  - Having unsafe sex
  - Over-consuming resources
  - Behaving violently

# Major public health campaigns

- Start or continue:
  - Exercise more
  - Shift diet to more fruits and vegetables
  - Use condoms
  - Use seat belts
  - Conserve water and energy
  - Attempt early detection of potentially serious illnesses

# A mixed record

- Some successes
  - Smoke detectors
  - Seat belts and air bags
  - Cigarette smoking
- Less or no success
  - Violent behavior
  - Substance use
  - Energy conservation

# “Truths” about behavior change

- Change is difficult
  - Our brains are wired to preserve behaviors that have been learned
- Family members and others in the social environment are powerful forces
- Many structural features of the environment promote behaviors that we wish to initiate or stop

# Example of food

- Conditioned responses related to eating very hard to extinguish
- Eating is a social activity that usually takes place in the company of others
- The environment has a huge influence on what we eat

Take a moment to reflect on changes we have tried to make and what contributed to success or failure (personal or directed toward others)

# Health Belief Model

- at this point one of most widely used theories of health behavior change
- developed in 1950's by USPHS to try to understand why people would not participate in preventive health campaigns (TB screening)

# Health Belief Model

- based on “value expectancy theory” – people act based on their reckoning of the value to them of acting
- a combination of behaviorism (do things that are reinforced) and cognition (act on our perceptions and expectations)

# Hochbaum 1958 data on TB screening

1. Perceived susceptibility
  - could you have TB even if you felt well?
2. Perceived benefits of screening
  - would an X-ray be able to find the TB?
  - would early detection and treatment make a difference?
3. % obtaining X-ray:
  - if “yes” to (1) and (2) 82%
  - if “no” to (1) and (2) 21%

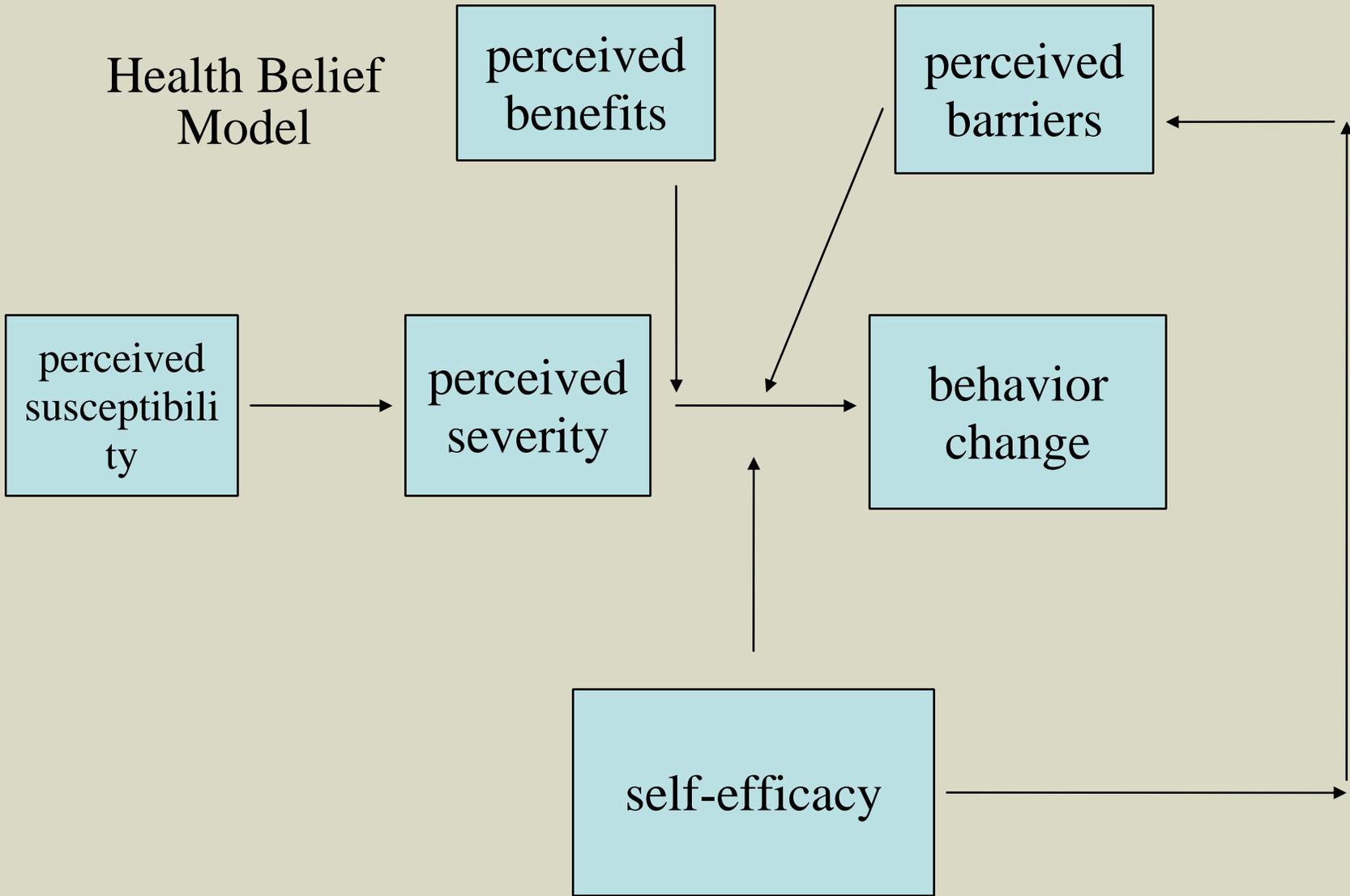
# Main components of the HBM

- Perceived susceptibility
  - try to personalize as much as possible
  - work on accurate perception
- Perceived severity
  - try to make as specific and individualized as possible

# Main components of the HBM

- Perceived benefits
  - not just the benefit but personal probability of obtaining that benefit
  - with regard to the specific action that is proposed
- Perceived barriers
  - can be psychological or material
- Self-efficacy (added later)
  - confidence in ability to take action
  - may vary greatly with specific behaviors related to a given health care goal (eg: diabetes care)

# Health Belief Model



# Points about the HBM

- Simple idea that each factor acts independently is probably wrong – sequences seem to work better; there is an order to the cognitive process
  - Eg, awareness of susceptibility may need to come first
- Salience or weight of factors varies with setting (it's a very general theory)
  - prevention: barriers>susceptibility>benefits
  - sick role: barriers>benefits>susceptibility

# Points about the HBM

- The kinds of nuances just discussed lead nicely into the “staged” approach
- The HBM sometimes seems to do better describing current states versus predicting change
- For example: describes smoking status better than which smokers will quit

# Transtheoretical model (Prochaska)

- evolved out of substance treatment field; have a party but nobody comes
- meant to incorporate common elements of many theories
- more explicitly than others poses temporal framework to evolution of intention and changes in behavior

# Major assumptions of transtheoretical model

- Change happens in stages
  - people can remain at any given stage
  - no inherent motivation to change, in fact change is feared
- Each stage has mechanisms that determine movement
  - each has "decisional balance" of pros and cons
  - progress happens when cons decrease relative to pros or vice versa

# What makes people change - TCM

- Readiness predicts success more than resistance
  - knowledge, skills, motivation, support more powerful predictors of movement than barriers, fear
  - increasing pros is much more powerful than decreasing cons
- Self-efficacy is a balance of confidence and temptation
  - confidence in ability to do the right thing
  - temptation = desire to avoid negative affect associated with resisting wrong (go over carefully)

# Need to match approach to stage

- Interventions have to match the stage
  - don't teach an action before someone has decided to act

# Six stages (varies with version)

## 1. Precontemplation

- no interest in change in foreseeable future (their definition: 6 months)
- "uninformed" despite exposure to risk; may be defensive, resistant
- often demoralized by prior failures
- rarely move from this stage without a planned intervention

# Six stages

## 2. Contemplation

- some degree of intention to change (within 6 months)
- aware of possibilities but cons >> pros; aware that change will cost something (effort, altered relationships, altered meaning and values, “temptation”)
- can remain here a long time; “substitute thinking for acting” even though may voice high levels of intent

# Six stages

## 3. Preparation

- Intend to change soon (defined as within a month)
- Have a plan, have taken some action within past year
- [Stage from which most action programs draw recruits]

## 4. Action

- Already engaged in behavioral change
- Can be period of most intense effort
- Usually needs to last 6 months or more to avoid relapse
- Difficulty countering expectation of quick success

# Six stages

## **5. Maintenance**

- active work to prevent relapse
- emotional stresses create vulnerability to relapse
- for some problems/people this stage can last indefinitely

## **6. Termination**

- behavior is solidly in place

# Fishbein's "transtheoretical" list

- Necessary and sufficient to produce behavior
  - Form a strong intention or make commitment
  - No environmental constraints
  - Possess skills necessary

# Fishbein's “transtheoretical list”

- Also important factors
  - Believe that advantages outweigh disadvantages (positive attitude)
  - Normative pressure supports the behavior
  - Behavior seems consistent with self-image or personal standards
  - Emotional reaction to behavior is positive (overall)
  - Feel that have skills (self-efficacy)

# 2-session “drinker’s checkup” based on TTM principles

- Directive-confrontive
  - Emphasize evidence of problem
  - Give direct advice
  - Disagree directly with minimization
  - State diagnosis and need to act
- Supportive-reflective
  - Empathetic replies
  - Develop conversation using reflective listening
  - De-emphasize label; focus instead on negative effects
  - Advice tailored to situation and value neutral
  - Miller, J Cons Clin Psychol 1993;61:455-461

# Some principles of “motivational interviewing”

- Express empathy for difficulties/dilemmas
- Ask permission to give information or advice
- Present choices
- Show curiosity rather than critique discrepancies
- “Roll” with resistance
- Be tolerant and patient

# Outcomes of counselling styles

- Confronting highly correlated with drinking at one year post intervention
  - Challenging
  - Disagreeing
  - Head-on disputes
  - Incredulity
  - Emphasizing negative characteristics

# Why is it hard for practitioners to adopt a supportive-reflective /TTM stance?

- Giving up control
- Requires trust and respect for individuals/populations that are traditionally not accorded trust or respect
- Doesn't grow out of Western philosophy??