Individual-level models of health behavior

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Health Behavior Change at the Individual, Household and Community Levels
224.689
Individual-level models of health behavior
Why models of health behavior?

“Theory provides a road map for studying problems, developing appropriate interventions, and evaluating their successes.”
Figure 1. Using Explanatory Theory and Change Theory to Plan and Evaluate Programs

Explanatory Theory

Why?
What can be changed?

Problem Behavior or Situation

Evaluation

Planning

Change Theory

Which strategies?
Which messages?
Assumptions about how a program should work

Individual-level models of health behavior

- Dozens of models exist – we do not attempt to present the full range of models in this course
- Our aims:
  - Make you an informed consumer of models
  - Understand range of applications of models
Becoming an informed consumer of health behavior models

- Know the history: Who came up with it, in response to what problem, and why?
- Understand the context for application of the model
  - Nature and immediacy of the problem
  - Time frame for data collection or intervention implementation
  - Knowledge and skills of partners
Becoming an informed consumer of health behavior models

- Think through the application of the model
  - Situation analysis/baseline assessment
    - Qualitative
    - Quantitative
  - Intervention development
  - Intervention evaluation
    - Qualitative
    - Quantitative
History of Health Belief Model
Social sciences and public health 1850-1900

- Poor and working classes noted to have much worse health status, this was linked to crowding, inadequate diet, poor hygiene, difficult working conditions, not to specific microbes, toxins or micronutrients
- Public health viewed as a social science
- Changes in social structures and living conditions were necessary to improve public health
Discoveries of bacteria and parasites in late 1800s ushered in the bacteriological era
Focus shifted to identification and control of biological pathogens
Subsequent discovery of antibiotics, antimalarials, vitamins etc. reinforced this focus on biological pathogens
Social sciences took a back seat, were no longer the core discipline in public health
Public health experts started to notice that even when you had identified the etiologic agent, and had a specific preventive measure or treatment, success was not assured. People might not use it.

US Public Health Service was rolling out a number of public health interventions in the 1950s, but acceptance of interventions was uneven.
Hochbaum’s study on TB screening

- Free screening of TB through mobile X-ray units was offered, but uptake was low.
- Hochbaum administered questionnaires to probability samples of over 1200 adults who were offered free TB screening.
  - If reported personal susceptibility and benefits from screening, 82% had X-ray.
  - If reported neither, 21% had X-ray.
Health Belief Model

- Result of studies by Hochbaum and others in the US Public Health Service were summarized in the Health Belief Model
  - Early model described in 1958
  - Rosenbaum published more detailed description in 1966
  - Further elaboration by Becker and others in 1970s and 1980s
Significance of Health Belief Model

- Indicated that we could analyze systematically why people do or do not accept public health interventions
- Promoted the idea of planning of educational interventions
- Indicated how we might intervene
  - e.g. if perceived susceptibility is low, need to explain to people why they are susceptible
Constructs in the Health Belief Model

- Perceived susceptibility to the health problem
- Perceived severity of the health problem
- Perceived benefits of the recommended solution
- Perceived barriers to adopting the recommended solution
- Cues to action
- Self-efficacy

Present in the original model

Later additions
Health Belief Model is a Cognitive Value-Expectancy Theory

- Emphasizes the perceived value of the outcome, and the subjective expectation that a behavior will result in the outcome ("value expectancy" theories)
HBM: Expectations and threat perceptions

- “Two major factors influence the likelihood that a person will adopt a recommended preventive health action
- First they must feel personally threatened by the disease i.e. they must feel personally susceptible to a disease with serious or severe consequences
- Second they must believe that the benefits of taking the preventive action outweigh the perceived barriers to (and/or costs of) preventive action”

**Background**

**Sociodemographic factors**
(e.g., education, age, sex, race, ethnicity)

**Perceptions**

**Expectations**
- Perceived benefits of action (minus)
- Perceived barriers to action
- Perceived self-efficacy to perform action

**Threat**
- Perceived susceptibility (or acceptance of the diagnosis)
- Perceived severity of ill-health condition

**Action**

**Cues to action**
- Media
- Personal influence
- Reminders

**Behavior to reduce threat based on expectations**
HBM: Expectations and threat perceptions

- Expectations
  - Perceived Benefits
  - Perceived Barriers
  - Perceived Self-efficacy (added later by Bandura – will discuss more next class)

- Threat perceptions
  - Perceived Susceptibility (also known as “risk perception”)
  - Perceived Severity
**Sociodemographic factors**
(e.g., education, age, sex, race, ethnicity)

**Background**

**Perceptions**

- **Expectations**
  - Perceived benefits of action (minus)
  - Perceived barriers to action
  - Perceived self-efficacy to perform action

- **Threat**
  - Perceived susceptibility (or acceptance of the diagnosis)
  - Perceived severity of ill-health condition

**Action**

**Cues to action**
- Media
- Personal influence
- Reminders

**Behavior to reduce threat based on expectations**
HBM: Cues to action and outcome behaviors

- Cues to Action
  - Media
  - Personal Influence
  - Reminders
  - Signs and Symptoms

- Outcome Behaviors (Dependent Variable)
  - Wear seat belt
  - Condom use
  - Sleep under mosquito net
When is HBM a good choice?

- Health problem is well known, it is on people’s minds, but there is variation in what people think about it
- Possible for people to see link between key behaviors and the health problem
- Main reason to practice behavior is for that specific health problem
- Behavior not so affected by social norms
- Practicing the behavior can be difficult
Appropriate for HBM?

- Wear helmet when riding motorcycle to prevent head injuries
- Apply sunscreen to prevent skin cancer
- Sleep under treated mosquito net to prevent malaria
- Refusal of cigarette by teenager when offered, so as to prevent lung cancer, heart disease, emphysema etc.
- Vaccination for H1N1 influenza
Applying HBM
(Similar considerations for other models)
Applying HBM

- Qualitative research
- Quantitative surveys
- Intervention design
Qualitative methodologies

**Model-based**

- Take a HBM or other model as basis for:
  - Questions to ask and/or
  - Coding and/or
  - Presentation of results

**Model-free approach**

- No starting model: Elicit local (emic) model or develop your own (etic) model based on the data
- Examples:
  - Ethnography
  - Grounded Theory
  - Phenomenology
Model-based examples

- Downing-Matibag & Geisinger 2009
  - Study on hooking up among college students
  - HBM guided questions asked, coding, presentation of findings

- Phuanukoonnon et al. 2006
  - Study on dengue fever in Thailand
  - HBM guided questions asked & presentation of findings, role in coding unclear
Coding

- Codes identifies the topic addressed in a piece of text
  - Way of organizing textual information by topic/theme
- Codes inserted manually or with software for textual analysis like NVivo, Atlas.ti
- Subsequent analysis may bring together all statements on that topic, then compare and summarize these findings
Example from Downing-Matibag 2009: Here the code may be “Perceived susceptibility” or “perceived risk” corresponding to the HBM construct

“Like I think [midwest state] has maybe as low as 2% population-wise of people with HIV compared to the nation. Of course that doesn’t mean I can’t get it. But I feel like it’s a risk that’s not nearly as high as if I lived somewhere else. So I don’t think about HIV.”
Model-based qualitative research: Strengths and weaknesses

Strengths
- Much faster, better for programmatic work with tight timelines
- Coding much easier, codes already defined
- Helps with communication of results
- More acceptable to biomedical scientists skeptical of qualitative research

Weaknesses
- Not considered “real” qualitative research by many
- Categories are pre-defined: Do you really learn what people are thinking?
- Crucial local concerns not fitting into model may be ignored
Applying HBM

- Qualitative research
- **Quantitative surveys**
  - Example: Lindsay and Strathman 1997 on recycling behavior
- Intervention design
HBM in quantitative surveys

- HBM can be used to select constructs to measure in quantitative surveys
  - Then develop questions to measure those constructs
Constructs in quantitative surveys

- In surveys, we distinguish between variables that are directly measurable like age and years of education, and constructs that cannot be measured directly.

- Examples of constructs:
  - Depression
  - Perceived susceptibility
  - Perceived severity
Constructs in quantitative surveys

- Ideally there are multiple questions (items) for each construct, then exploration of the relations between items and selection of items to include in a scale to measure the construct.

- Measurement of constructs with single items is problematic.

- But: Measurement of constructs with multiple items makes a very long survey.
Applying HBM to flossing behavior
Flossing behavior survey

- Sample: Students in this class
- N=37
- Response rate by Sunday night: 37/169 = 21.9%
Construct: Exposure to information

- I am very well informed about tooth brushing and dental flossing as part of hygiene
  - 1 (strongly agree) 59.5%
  - 2 (agree) 35.1%
  - 3 (neutral) 5.4%
  - 4 (disagree) 0%
  - 5 (strongly disagree) 0%

- **Comment**: HBM doesn’t work so well if respondents aren’t familiar with both a) the problem and b) the behavioral recommendation
Construct: Perceived susceptibility

- My chances of developing tooth decay or gum disease are high
  - 1 (strongly agree) 5.4%
  - 2 (agree) 21.6%
  - 3 (neutral) 32.5%
  - 4 (disagree) 35.1%
  - 5 (strongly disagree) 5.4%
Construct: Perceived susceptibility

- Within the next year I will develop tooth decay or gum disease
  - 1 (strongly agree) 0.0%
  - 2 (agree) 5.4%
  - 3 (neutral) 13.5%
  - 4 (disagree) 43.3%
  - 5 (strongly disagree) 37.8%
Construct: Perceived severity

- If I get tooth decay or gum disease it will be very serious
  - 1 (strongly agree) 40.5%
  - 2 (agree) 54.1%
  - 3 (neutral) 5.4%
  - 4 (disagree) 0.0%
  - 5 (strongly disagree) 0.0%
Construct: Perceived severity

- If I get tooth decay or gum disease I will suffer severe pain
  - 1 (strongly agree) 32.4%
  - 2 (agree) 46%
  - 3 (neutral) 16.2%
  - 4 (disagree) 5.4%
  - 5 (strongly disagree) 0%
Construct: Perceived severity

- Tooth decay and gum disease can cause other health problems
  - 1 (strongly agree) 48.6%
  - 2 (agree) 51.4%
  - 3 (neutral) 0.0%
  - 4 (disagree) 0.0%
  - 5 (strongly disagree) 0.0%
Construct: Perceived severity

- Tooth decay and gum disease will cost me a lot of money
  - 1 (strongly agree) 46.0%
  - 2 (agree) 43.2%
  - 3 (neutral) 8.1%
  - 4 (disagree) 2.7%
  - 5 (strongly disagree) 0.0%
Construct: Perceived benefits

- Flossing my teeth once per day will prevent tooth decay and gum disease
  - 1 (strongly agree) 18.9%
  - 2 (agree) 64.9%
  - 3 (neutral) 10.8%
  - 4 (disagree) 5.4%
  - 5 (strongly disagree) 0%
Construct: Perceived benefits

- My mouth feels better after I floss my teeth
  - 1 (strongly agree) 37.9%
  - 2 (agree) 35.1%
  - 3 (neutral) 13.5%
  - 4 (disagree) 10.8%
  - 5 (strongly disagree) 2.7%
Construct: Perceived benefits

- Flossing my teeth once a day will save me money on dental expenses
  - 1 (strongly agree) 29.7%
  - 2 (agree) 48.7%
  - 3 (neutral) 13.5%
  - 4 (disagree) 8.1%
  - 5 (strongly disagree) 0.0%
Construct: Perceived benefits

- My mouth will look better if I floss once a day
  - 1 (strongly agree) 35.1%
  - 2 (agree) 40.6%
  - 3 (neutral) 10.8%
  - 4 (disagree) 13.5%
  - 5 (strongly disagree) 0.0%
Construct: Perceived barriers

- Dental flossing is painful
  - 1 (strongly agree) 8.1%
  - 2 (agree) 18.9%
  - 3 (neutral) 18.9%
  - 4 (disagree) 43.3%
  - 5 (strongly disagree) 10.8%
Construct: Perceived barriers

- I often forget to floss once a day
  - 1 (strongly agree) 37.9%
  - 2 (agree) 37.8%
  - 3 (neutral) 2.7%
  - 4 (disagree) 13.5%
  - 5 (strongly disagree) 8.1%
Construct: Perceived barriers

- Dental floss is expensive
  - 1 (strongly agree) 2.7%
  - 2 (agree) 10.8%
  - 3 (neutral) 8.1%
  - 4 (disagree) 43.3%
  - 5 (strongly disagree) 35.1%
Construct: Perceived barriers

- I am too lazy to floss my teeth once a day
  - 1 (strongly agree) 18.9%
  - 2 (agree) 32.5%
  - 3 (neutral) 24.3%
  - 4 (disagree) 28.9%
  - 5 (strongly disagree) 5.4%
Construct: Perceived barriers

- I don’t have time to floss my teeth
  - 1 (strongly agree) 5.4%
  - 2 (agree) 13.5%
  - 3 (neutral) 10.8%
  - 4 (disagree) 48.7%
  - 5 (strongly disagree) 8.1%
Construct: Self-efficacy

- Flossing my teeth is hard to do
  - 1 (strongly agree) 8.1%
  - 2 (agree) 13.5%
  - 3 (neutral) 10.8%
  - 4 (disagree) 48.7%
  - 5 (strongly disagree) 18.9%
Construct: Self-efficacy

- I am confident I can floss my teeth once a day
  - 1 (strongly agree) 16.2%
  - 2 (agree) 48.7%
  - 3 (neutral) 18.9%
  - 4 (disagree) 13.5%
  - 5 (strongly disagree) 2.7%
Construct: Cues to action

- Someone else in my home reminds me to floss my teeth
  - 1 (strongly agree) 0.0%
  - 2 (agree) 5.4%
  - 3 (neutral) 5.4%
  - 4 (disagree) 29.7%
  - 5 (strongly disagree) 59.5%
Construct: Cues to action

- I have a way of remembering when it is time to floss my teeth
  - 1 (strongly agree) 2.7%
  - 2 (agree) 10.8%
  - 3 (neutral) 21.6%
  - 4 (disagree) 35.2%
  - 5 (strongly disagree) 29.7%
Behavioral outcome

- During the last week, how often did you floss your teeth?
  - Not at all 21.1%
  - Once a week 28.2%
  - Every second day 23.9%
  - Once a day 25.4%
  - More than once a day 1.4%

- (Better than dental patients in Australia: only 16% flossed once a day)
<table>
<thead>
<tr>
<th>Background</th>
<th>Perceptions</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sociodemographic factors</strong> <em>(e.g., education, age, sex, race, ethnicity)</em></td>
<td><strong>Expectations</strong></td>
<td><strong>Cues to action</strong></td>
</tr>
</tbody>
</table>
| | - Perceived benefits of action (minus)  
- Perceived barriers to action  
- Perceived self-efficacy to perform action | **Threat** | - Media  
- Personal influence  
- Reminders |
| | - Perceived susceptibility (or acceptance of the diagnosis)  
- Perceived severity of ill-health condition | **Behavior to reduce threat based on expectations** |
Applying HBM

- Qualitative research
- Quantitative surveys
- Intervention design
<table>
<thead>
<tr>
<th>Concept</th>
<th>Definition</th>
<th>Potential Change Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceived susceptibility</td>
<td>Beliefs about the chances of getting a condition</td>
<td>• Define what populations(s) are at risk and their levels of risk</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Tailor risk information based on an individual's characteristics or behaviors</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Help the individual develop an accurate perception of his or her own risk</td>
</tr>
<tr>
<td>Perceived severity</td>
<td>Beliefs about the seriousness of a condition and its consequences</td>
<td>• Specify the consequences of a condition and recommended action</td>
</tr>
<tr>
<td>Perceived benefits</td>
<td>Beliefs about the effectiveness of taking action to reduce risk or seriousness</td>
<td>• Explain how, where, and when to take action and what the potential positive results will be</td>
</tr>
<tr>
<td>Perceived barriers</td>
<td>Beliefs about the material and psychological costs of taking action</td>
<td>• Offer reassurance, incentives, and assistance; correct misinformation</td>
</tr>
<tr>
<td>Cues to action</td>
<td>Factors that activate &quot;readiness to change&quot;</td>
<td>• Provide &quot;how to&quot; information, promote awareness, and employ reminder systems</td>
</tr>
<tr>
<td>Self-efficacy</td>
<td>Confidence in one’s ability to take action</td>
<td>• Provide training and guidance in performing action</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Use progressive goal setting</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Give verbal reinforcement</td>
</tr>
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<td></td>
<td></td>
<td>• Demonstrate desired behaviors</td>
</tr>
</tbody>
</table>

Theory of Reasoned Action and Theory of Planned Behavior
# TRA/TPB constructs

## Table 4. Theory of Planned Behavior

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

Figure 3. Theory of Reasoned Action and Theory of Planned Behavior

Behavioral beliefs
Evaluation of behavioral outcomes
Normative beliefs
Motivation to comply
Control beliefs
Perceived power
Perceived behavioral control
Attitude toward behavior
Subjective norm
Behavioral intention
Behavior

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

What people think the situation is

Theory of Reasoned Action and Theory of Planned Behavior

What people think the situation is

How important the situation is to them, or how much control they have over it

Theory of Reasoned Action and Theory of Planned Behavior

Discussion in four parts:
1. Behavioral intentions
2. Attitude toward the behavior
3. Subjective norm
4. Perceived behavioral control
TRA/TPB:
#1. Behavioral intentions
Figure 3. Theory of Reasoned Action and Theory of Planned Behavior

- Behavioral beliefs
- Evaluation of behavioral outcomes
- Normative beliefs
- Motivation to comply
- Control beliefs
- Perceived power
- Attitude toward behavior
- Subjective norm
- Behavioral intention
- Behavior

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

The best predictor of actual behavior
Best measured by linking the behavior to specifically defined:
- Action
- Target
- Context
- Time
TRA/TPB: Behavioral intentions

- Be specific re: intentions and behaviors:
  - Action
  - Target
  - Context
  - Time

- “Reducing risk of HIV transmission (action) by formula feeding (target) when the mother is HIV infected (context) every time (time)”

- “Reducing risk of head injuries (action) by wearing a helmet (target) when skateboarding (context) at night (time)”
TRA/TPB:
#2. Attitude toward the behavior
Figure 3. Theory of Reasoned Action and Theory of Planned Behavior

- Behavioral beliefs
- Evaluation of behavioral outcomes
- Normative beliefs
- Motivation to comply
- Control beliefs
- Perceived power
- Attitude toward behavior
- Subjective norm
- Behavioral intention
- Behavior

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

- Much of HBM fits in here
- Two parts:
  - **Behavioral beliefs**: Beliefs about the consequences of carrying out the behavior, perceptions of the efficacy of the behavior
    - Formula feeding reduces HIV transmission
    - Breastfeeding provides my infant nutrients
  - **Evaluation of behavioral outcome**: What value is placed on these consequences
    - It is very important to me to reduce the chances that my child will get HIV, and give my child the best start possible
TRA/TPB:
#3. Subjective norms
Figure 3. Theory of Reasoned Action and Theory of Planned Behavior

- Behavioral beliefs
- Evaluation of behavioral outcomes
- Normative beliefs
- Motivation to comply
- Control beliefs
- Perceived power
- Attitude toward behavior
- Subjective norm
- Behavioral intention
- Behavior

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

Norms

- Norms are everywhere
  - What should I wear?
  - What should I eat?
  - Should I smoke?
  - How many children should a couple have?
Norms and group identity

- “Group identity-based codes of conduct that are understood and disseminated through social interaction” (Rimal & Real, 2003, p. 185)
- Norms reinforce group identity, and group identity reinforces norms
- “A rule that is socially enforced”
- Violators of norms are considered eccentric or even deviant, not good members of the group
- Violation of a critical norm, or persistent violation of norms, can result in stigmatization
Subjective norms

- Adding on normative/social dimension to HBM
- Two parts:
  - **Normative beliefs**: What do I think people I know think I should do?
    - My sexual partner thinks I should use a condom
    - My family thinks I should breastfeed
  - **Motivation to comply**: How important is it to me to do what others think I should do?
    - It is very important to me to do what my partner/family thinks I should do
TRA/TPB: Combining #2 and #3 into the “cognitive structure” for the behavior
TRA/TPB: Cognitive structure

- Norms & Beliefs combine to define what is called a “cognitive structure”
- A form of decision balance in the model
Figure 3. Theory of Reasoned Action and Theory of Planned Behavior

- Behavioral beliefs
- Evaluation of behavioral outcomes
- Normative beliefs
- Motivation to comply
- Control beliefs
- Perceived power
- Attitude toward behavior
- Subjective norm
- Behavioral intention
- Perceived behavioral control
- Behavior

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

TRA applied to wearing helmet

Wearing a helmet protects your head in a fall.
Crashing without a helmet can kill you.

I think wearing a helmet is good.

My friends think wearing a helmet is not cool.

If I wear a helmet my friends will think I am not cool.

I care a lot about what my friends think of me.

Specific to Action, Target, Context, Time.

TRA applied to sleeping under mosquito net

Using a bednet protects me from malaria.
Malaria can kill you.

I think using a bednet is good.

My family thinks using a bednet is for people who are weak.
I care a lot about what my family thinks of me.

If I use a bednet my family will think I am weak.

TPB:
#4. Perceived behavioral control
Figure 3. Theory of Reasoned Action and Theory of Planned Behavior

Theory of Planned Behavior: Perceived Behavioral Control

- Some similarity to self-efficacy
- Control Belief
  - Perceived likelihood of each facilitating (or constraining) condition
    - *Example – It is likely that the elevator will be crowded*
- Perceived Power
  - Perceived effect of each condition in making behavioral performance difficult or easy
    - *Example – If the elevator is crowded I will probably take the stairs*
Critiques of models like HBM, TRA, TPB
Critiques of models like HBM, TRA, TPB

- Individual level only (HBM) or mostly individual level (TRA, TPB)
- Environmental and structural factors largely missing
- Household and community missing
- Assumes people spend time thinking about health problems, especially HBM
- Assumes cognitive decision-making, weighing pros and cons of each decision
Critiques of models like HBM, TRA, TPB

- Attitude toward the behavior (TRA/TPB), perceived benefits (HBM) affected by illness terminology, local models of illness etiology, different levels of causation, different standards of efficacy
- Norms more complex than indicated in model, very context-dependent
- Subjective norms and perceived behavioral control will vary by type of self-construal: Independent or interdependent
Conceptual Representations of the Self

Independent view of self

Interdependent view of self

# Table 1

**Summary of Key Differences Between an Independent and an Interdependent Construal of Self**

<table>
<thead>
<tr>
<th>Feature compared</th>
<th>Independent</th>
<th>Interdependent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Definition</td>
<td>Separate from social context</td>
<td>Connected with social context</td>
</tr>
<tr>
<td>Structure</td>
<td>Bounded, unitary, stable</td>
<td>Flexible, variable</td>
</tr>
<tr>
<td>Important features</td>
<td>Internal, private (abilities, thoughts, feelings)</td>
<td>External, public (statuses, roles, relationships)</td>
</tr>
<tr>
<td>Tasks</td>
<td>Be unique</td>
<td>Belong, fit-in</td>
</tr>
<tr>
<td></td>
<td>Express self</td>
<td>Occupy one’s proper place</td>
</tr>
<tr>
<td></td>
<td>Realize internal attributes</td>
<td>Engage in appropriate action</td>
</tr>
<tr>
<td></td>
<td>Promote own goals</td>
<td>Promote others’ goals</td>
</tr>
<tr>
<td></td>
<td>Be direct; “say what’s on your mind”</td>
<td>Be indirect; “read other’s mind”</td>
</tr>
<tr>
<td>Role of others</td>
<td><em>Self-evaluation:</em> others important for social comparison, reflected appraisal</td>
<td><em>Self-definition:</em> relationships with others in specific contexts define the self</td>
</tr>
<tr>
<td>Basis of self-esteem*</td>
<td>Ability to express self, validate internal attributes</td>
<td>Ability to adjust, restrain self, maintain harmony with social context</td>
</tr>
</tbody>
</table>
Thursday

- 8:30-9:00: Lecture here on Social Cognitive Theory
- 9:00-10:20: Discussion groups
  - Be sure to read Markus & Kitayama pp 224-230 n.b. Figure 1 and Table 1