Theory of Reasoned Action and Planned Behavior

TRA/TPB and HBM

- Both focus on rational, cognitive decision-making processes
- TRA/TPB adds the social context to the basic ideas of the HBM
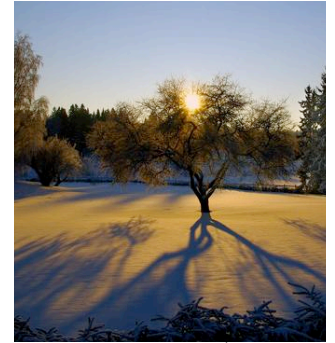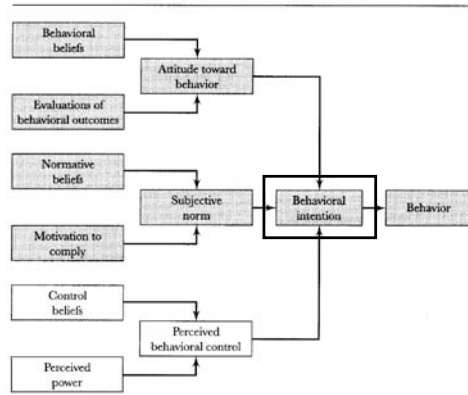

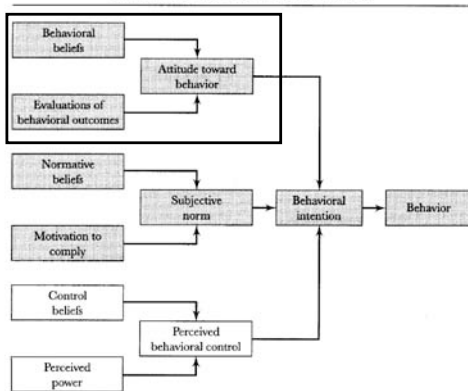FIGURE 4.1. THEORY OF REASONED ACTION AND THEORY OF PLANNED BEHAVIOR.

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

TRA: Constructs

- Behavioral Intention
  - Perceived (subjective) likelihood of performing the behavior
  - The *most important* determinant of a person's behavior
  - Behavioral Intention = Attitude + Subjective Norm

FIGURE 4.1. THEORY OF REASONED ACTION AND THEORY OF PLANNED BEHAVIOR.

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TRA: Constructs

Attitude = Belief + Evaluation

- Attitude: What are the possible outcomes, how good or bad are they, and how likely are they to occur?
- Behavioral Belief: A belief about what will happen if he or she performs the target behavior
- Evaluation: Is this expected outcome good or bad?

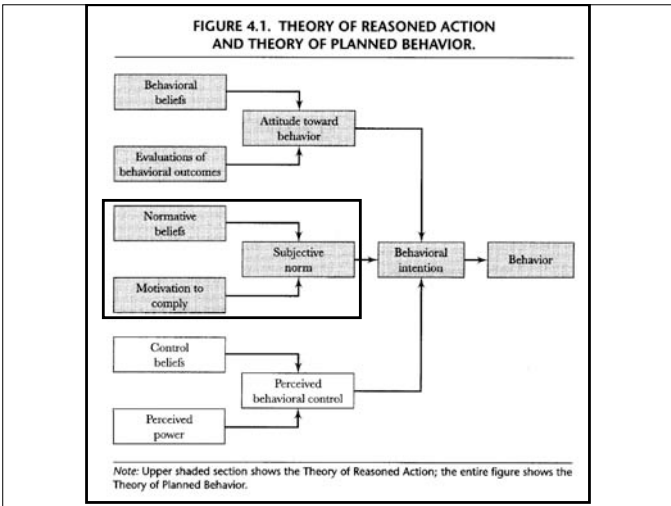FIGURE 4.1. THEORY OF REASONED ACTION AND THEORY OF PLANNED BEHAVIOR.

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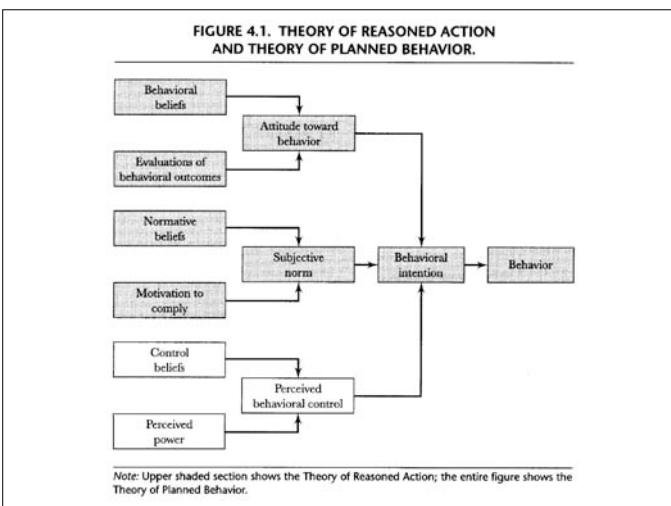

TRA: Constructs

<u>Subjective Norm</u> = Normative Belief + Motivation to Comply

– <u>Normative Belief</u>: belief about whether each referent (person) approves or disapproves of the behavior
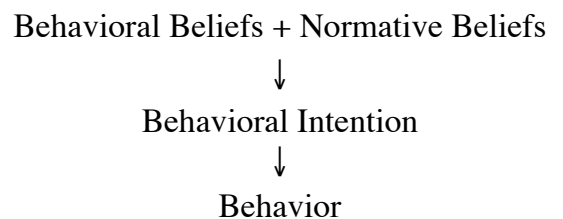– <u>Motivation to Comply</u>: Motivation to do what each referent (person) thinks is okay

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FIGURE 4.1. THEORY OF REASONED ACTION AND THEORY OF PLANNED BEHAVIOR.

TPB CONSTRUCTS

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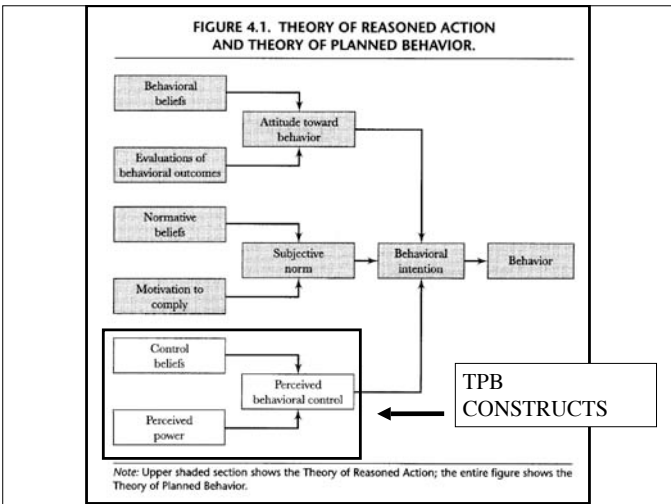
TRA + TPB: Constructs

• <u>Perceived Behavioral Control</u> = Control Belief + Perceived Power

– Overall measure of perceived control over the behavior
– <u>Control Belief</u>: Perceived likelihood of the occurrence of each facilitating or constraining condition
– <u>Perceived Power</u>: Perceived effect of each condition in making doing the behavior hard or easy

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TRA Assumptions

• Causal chain of events leading to a given behavior:

Behavioral Beliefs + Normative Beliefs
↓
Behavioral Intention
↓
Behavior

TPB Chain of Reason

- IF Jane has a positive attitude toward getting a mammogram....
- IF either her friends think it's a good idea OR she doesn't really care what they think...
- AND if she thinks she can get off work and get a ride and afford the mammogram,

- THEN the likelihood that she'll do it is high
  - Edberg 2007 p. 40

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TRA Assumptions

- Individuals are rational actors
  - They process information and are motivated to act on it
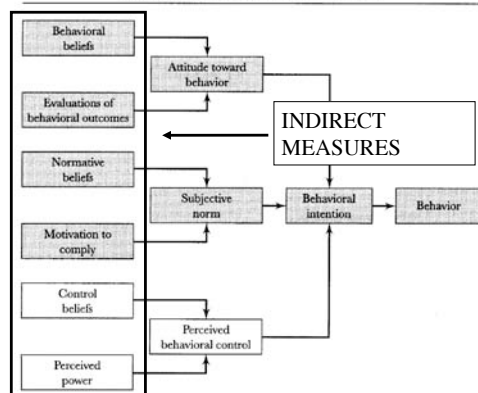 - There are underlying reasons for motivation and behavior

TRA Techniques

- Start with qualitative research
- This can be focus groups, interviews, and/or questionnaires (see textbook)
- This ensures that behavioral, normative, and control beliefs are relevant to the population

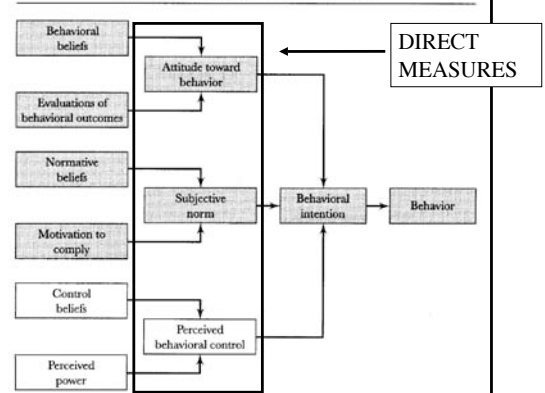## TRA Techniques

- Questionnaires
  - 5 to 7 point scales
    - Behavioral beliefs range from unlikely to likely to perform
    - Evaluations of outcome range from good to bad
  - Double negatives are avoided by adjusting sign at each end of the ranges

FIGURE 4.1. THEORY OF REASONED ACTION AND THEORY OF PLANNED BEHAVIOR.

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

INDIRECT MEASURES

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FIGURE 4.1. THEORY OF REASONED ACTION AND THEORY OF PLANNED BEHAVIOR.

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

DIRECT MEASURES

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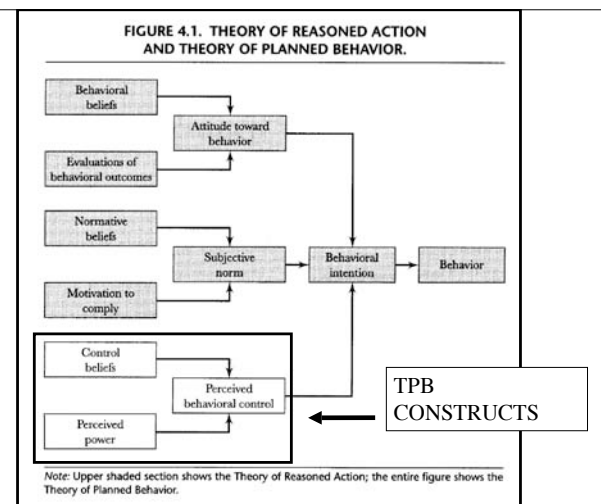
TRA Techniques

- Direct measures
  - Usually more strongly associated with intention and behavior than indirect measures
  - They help validate the indirect measures
- Indirect measures (expectancy + value)
  - Provide more specific information about what's motivating a person to behave a certain way

TRA Techniques

- Prospective Study Design
  - First assess attitudes, norms and intention
  - Then, at a later date, measure behavior
- Multiple Regression Analysis
  - Allows consideration of the relative strength of each construct in determining intention and behavior

Theory of Planned Behavior

- The pathway from intention to behavior is mediated by the extent to which the behavior is *under volitional control*
- HIGH VC: TRA is a good predictor of behavior
- REDUCED VC: Less predictive

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TPB CONSTRUCTS

Theory of Planned Behavior

- New Construct: Perceived Behavioral Control
  - Adds to the effort a person will apply to a behavior
  - An independent variable that determines behavior as Attitude and Subjective Norm remain constant

Theory of Planned Behavior

- Perceived Behavioral Control: Components
  - Control Beliefs
    - Presence or absence of facilitators and barriers
  - Perceived Power
    - Of each factor to help or hinder the behavior

Theory of Planned Behavior

Perceived Behavioral Control

vs.

Self-Efficacy

- SE addresses individual's judgments of efficacy in doing behavior *in the face of barriers*
- PBC is concerned with characteristics of an individual *or the environment* that *help or hinder* performance of the behavior

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TRA/TPB Applications

- Condom Use (textbook)
  - Seattle Study: 4 at-risk groups
    - 2 interviews 3 months apart
    - Measured all constructs as well as behavior
    - Intention:Behavior correlation was .55
    - Focus of study: what leads to the intention?
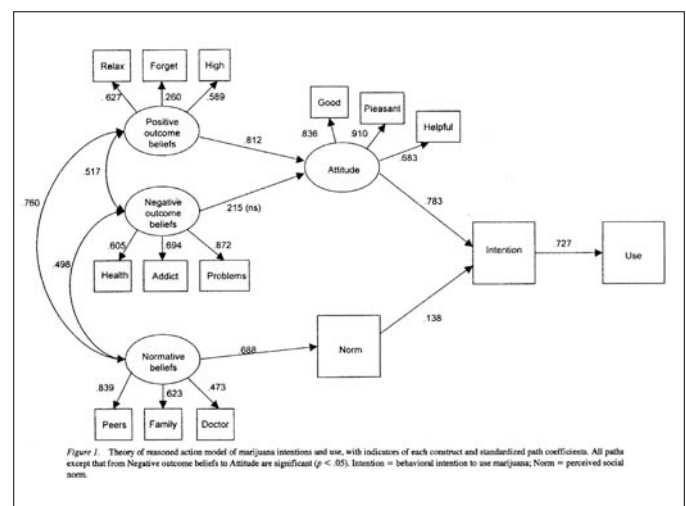

TRA/TPB Applications

- Seattle Condom Study (textbook)
  - Ethnic differences in relative importance of constructs leading to behavior
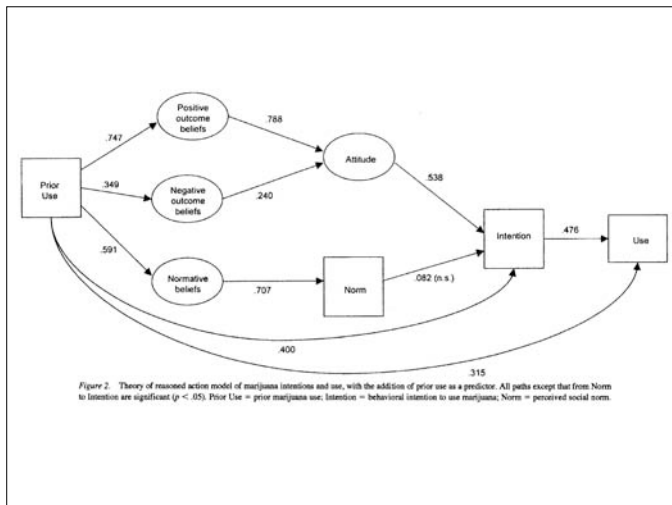 - Partner norm was more important than subjective norms

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TRA/TPB Applications

- Seattle Marijuana Study
- Morrison, Golder, Keller, & Gillmore
  - 2002, *Psychology of Addictive Behaviors 16*, 212-224
- Measured TRA constructs to predict marijuana use in pregnant teenage girls
- Goal: consider a wide range of consequences of smoking behavior beyond negative health effects
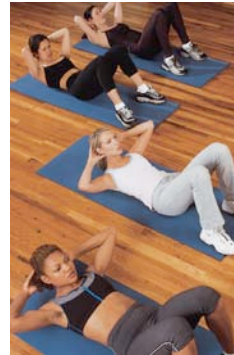 - Interpersonal
  - Hedonistic

TRA/TPB Applications

- Seattle Marijuana Study
- Added the concept of prior behavior as a possible determinant of future behavior
- N = 170 unmarried pregnant adolescents
- Followed for up to 48 months postpartum
- Questionnaires given in 90-minute interviews

Figure 1. Theory of reasoned action model of marijuana intentions and use, with indicators of each construct and standardized path coefficients. All paths except that from Negative outcome beliefs to Attitude are significant (p < .05). Intention = behavioral intention to use marijuana; Norm = perceived social norm.

Figure 2. Theory of reasoned action model of marijuana intentions and use, with the addition of prior use as a predictor. All paths except that from Norm to Intention are significant (*p* < .05). Prior Use = prior marijuana use; Intention = behavioral intention to use marijuana; Norm = perceived social norm.

TPB Application

- Armitage, 2005
- Maintenance of exercise program in 12-week study of adults belonging to a gym
- Perceived Behavioral Control (PBC) strongly predicted intentions and behavior
- Successful prior performance enhanced PBC

TRA/TPB Strengths

- Provides clear guidance for qualitative research
- Has successfully predicted a variety of health behaviors
- Questionnaire research gives specific guidance for designing interventions
- Model has flexibility

TRA/TPB Strengths

- Accounts for a wide range of behavior consequences, beyond the health-related
  - Interpersonal
  - Hedonistic
- Specifically takes social influence into consideration

TRA/TPB Weaknesses

- Attitude is a unidimensional construct
  - Good vs... Bad
- But many attitudes are multidimensional
  - Affective
  - Cognitive
  - Conative: the aspect of mental processes or behavior directed toward action or change
    - Impulse, desire, volition, striving

TRA/TPB Weaknesses

- Doesn't take prior behavior into consideration
  - Morrison et al., 2002
  - This explains significant variance in prediction of intentions and behavior
- Attitudes sometimes work directly on behavior, without the intentional step
 - "knee-jerk reactions"

References

- Morrison, D. M., Golder, S., Keller, T. E., & Gillmore, M. R. (2002). The theory of reasoned action as a model of marijuana use: Tests of implicit assumptions and applicability to high-risk young women. *Psychology of Addictive Behaviors, 16*, 212-224.
- Armitage, C. J. (2005). Can the Theory of Planned Behavior predict the maintenance of physical activity? *Health Psychology, 24*, 235-245.

Theory Mapping

- Apply TPB to your behavioral change project
- Begin with blank diagram of the theory...

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FIGURE 4.1. THEORY OF REASONED ACTION AND THEORY OF PLANNED BEHAVIOR.
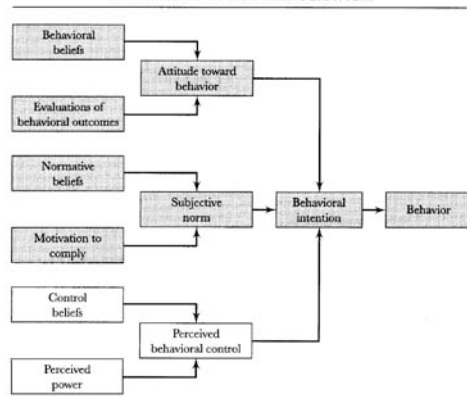
Note: Upper shaded section shows the Theory of Reasoned Action; the entire figure shows the Theory of Planned Behavior.

- What will happen if you perform your desired health behavior? List 3 or 4 things
- For each one, write down whether this is good or bad, and how much from 1-5, 3 being neutral
- For "bad," use negative numbers
- For "good," use positive numbers
- Add up the numbers for a score on attitude towards the behavior

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- Make a list of 3 to 5 people in your life with whom you have a lot of contact
- For each person, write down whether they will approve or disapprove of your proposed health behavior
- For each person, score 1-5, 3 being neutral, how important this person's opinion is to you
- Give each score a polarity depending on the person's approval or disapproval & sum the values for subjective norm score

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- Make a list of things in your life that will facilitate or constrain your desired behavior
- Rate each thing on the amount of power it has over whether or not you will accomplish your desired behavior using 1-5 scale
- Use negative numbers for constraining factors and positive numbers for facilitating factors
- Add them together to get your perceived behavioral control score

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Intention Score

- Add the three numbers together to get your intention score
- Is it negative?
- Is it positive?
- File this away for later to assess TBP's ability to predict your behavior...

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