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

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

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?

TRA/TPB

TRA: Constructs

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TRA: Constructs

Subjective Norm = Normative Belief + Motivation to Comply

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

TRA + TPB: Constructs

- Perceived Behavioral Control = Control Belief + Perceived Power

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

TRA Assumptions

- Causal chain of events leading to a given behavior:
  
  Behavioral Beliefs + Normative Beliefs
  \[ \downarrow \]
  Behavioral Intention
  \[ \downarrow \]
  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

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
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

TRAI 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

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

\[ \text{vs.} \]

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

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

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
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 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 Strengths

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

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


Theory Mapping

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

- 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

- 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

- 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
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...