Exploring the Influence of Conditions on Personal Transportation Behavior
Applying the Reasonable Person Model to Pro-Environmental Behavior

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SF to Palo Alto: An Informational Journey of 32 Miles, 2 Kids and 1 Commuter

- Safety Information
- Schedule Information
- Real Time Information
- Options Information and Knowledge of System
Pro-Environmental Behavior (PEB) and Personal Transportation

- Personal Transportation PEB- “difficult to achieve” (Corbett, 2005; Wals & Schwarzin, 2012, Steg & Vlek, 2009) yet high impact (Leon & Brower, 1999; Shulman, S., et al., 2012 Tanner, 1999) pro-environmental behavior

- Motivation for Research: How do we shift behavior in personal transportation?
The Intention-Behavior Gap

- Environmental Behavior Theories/Models
  - Model of Responsible Environmental Behavior (Hines, Hungerford & Tomera, 1987)
  - Values-Beliefs-Norms model (Stern, 2000)


- Attitude-Behavior Gap (Heimlich & Ardoin, 2008; Tanner, 1999; Blake, 1999)
Conditions for Pro-Environmental Behavior

- **Intercede intention and behavior**
- **Conditions** (Kaplan & Kaplan, 2009; Steg & Vlek, 2002; Kollmuss & Agyeman, 2002; Schultz, 2002; learning- Barron, 2004) can **support or inhibit** behavior and are defined as factors that constitute the physical, social and conceptual context for an individual.

- **Information related needs** “We are a species with immense dependence on information...we can’t live without it, but are readily impaired by its abundance.” (Kaplan 2011)
Reasonable Person Model (RPM)

- To bring out the best in people, conditions must meet people’s need to
  - Explore and understand (model building)
  - Be competent, clear-headed (being effective)
  - Participate and make a difference (meaningful action)
Research Study

- Teacher Institute setting - 32 teachers
- Personal Climate Action Plans
- 5 case studies (longitudinal) - personal transportation (purposive sample)
Research Methods

- Three interviews of each participant
- Short written surveys
- Document analysis
- Observation of institute
- Data analysis - a priori and open coding
- Individual vignettes
Individual Summaries

- **Bus/walk to work 2 days/week** - mostly successful
  - Family support; difficult with daily schedule

- **Bike to work every day** - very successful
  - Support from many; multiple personal benefits; overcomes barriers

- **No car twice a week** - somewhat successful
  - Some family and friends opposed or not supportive

- **Subway/walk to work at least 3 days/week** - very successful
  - Found system convenient and dependable; bonds with other riders

- **Bus to work twice a week** - not successful
  - No family or other support; limited experience
Findings: Influence of Conditions on Behavior

- Conditions matter (RPM)
  - Social conditions
  - Experiencing personal control and benefits of behavior (RPM with Theory of Planned Behavior)
  - Information access and use (RPM) as one factor

- Self-Interest and Motivation
  - Competency (RPM) as direct and motivating influence
  - Personal benefits
  - Social benefits
SF to Palo Alto: The Whole Story

- Supportive conditions
  - Information
  - Social influences
  - Learning through experience

- Future research
  - Role of information, social influences and learning through experience on overcoming barriers and changing habits in personal transportation