

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

Matt Biggar
BECC
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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



(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

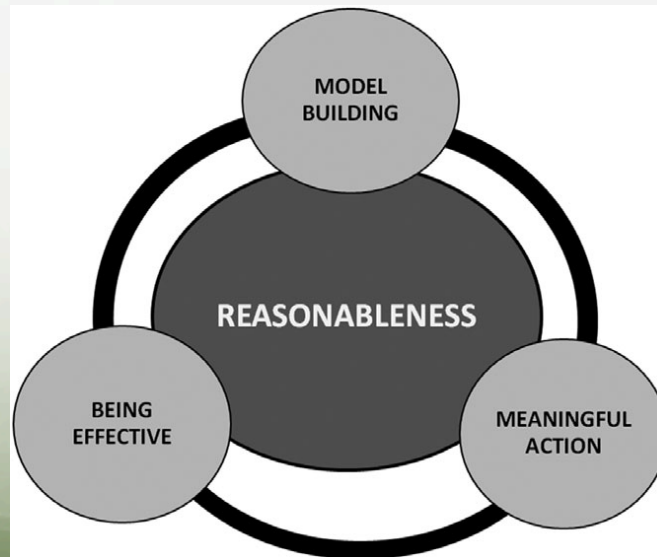
- Environmental Behavior Theories/Models
 - Theory of Planned Behavior (Ajzen & Fishbein, 1985; Ajzen, 1991)
 - Model of Responsible Environmental Behavior (Hines, Hungerford & Tomera, 1987)
 - Values-Beliefs-Norms model (Stern, 2000)
- Intention-Behavior Gap: theories strongly predict intention and predisposition but not behavior (Armitage & Conner, 2007; Bamberg & Moser, 2007; Stern, 2005)
- 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