

# Scalability of Successful Behavior Change Programs

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# Basic Characteristics of Popular BB Programs

- Generally based on behavioral theory design
- Target's specific behavior that impacts energy
- Behavior Change !

# Why Behavioral Change for the long-term is hard?



# Challenges to Implementing BBE Programs

- Creating lasting change
- Well-learned habits
- Level of motivation to change
- Information about the target group
- The cost of saving energy
- Time needed to realize monetary savings

# Habits

Most behaviors:

- Habit or routine based
- Sequenced behaviors

Key to changing habits:

- ▶ Awareness of the habit and supporting behaviors
- ▶ Removing incentives that maintain the habit
- ▶ Avoiding/controlling negative consequences of change
- ▶ Finding rewarding alternatives

Three weeks – Eight months to break a habit

# Reinforcement Theories

Behavior is a function of its consequences

- Key to using reinforcement to change behavior:
  - ▶ Understand schedule and type of reinforcement most effective
  - ▶ Inconsistent reinforcement can undermine efforts at change

# Goal Theories

Powerful behavioral motivators and guides

- Influence direction, level, and persistence
- Specific, challenging and reachable most effective
- Feedback important
- Key to using goals to change/direct behavior:
  - ▶ Acceptance of a goal
  - ▶ Level of commitment

# Theory of Planned Behavior

- Intentions are good predictors of behavior, but...

## Affected by

- ▶ Attitudes, Social norms, Perceived and actual behavioral control
  - ▶ Context
  - ▶ Opportunities and resources
- To influence intentions, need to influence the above



# Expectancy Theory

Choice determined by the relative push or pull of possible behaviors

To influence choice, must influence:

- ▶ Perceived value or desirability of the outcomes of behavior
- ▶ Belief that effort will result in a certain level of performance
- ▶ Belief that a certain level of performance will lead to valued or desired outcomes

# Heuristics

- “Rules of thumb” applied automatically in uncertain conditions for what information likely to be used for decision making
- Familiar or unique information recalled better
- Stereotypes or scripts often used
- Move little from initial position

# Relevance to Energy Use

All the theories relevant for improving BBE programs and their scalability...but...often require

- ▶ More information about individual behavior, values, needs than available
- ▶ Closer tracking of behavior to link change with desirable rewards
- ▶ More control over contingencies and context that can extinguish behavior before it becomes habit

Programs that try to change norms probably do not

# Conclusions and Recommendations

- To be effective, BBE programs—at any scale—need to:
  - ▶ attract and hold interest and commitment
  - ▶ connect with important things, beliefs, values
  - ▶ connect closely with the people whose behavior they want to change
- Small, localized, interactive may be best for BBE programs
- Careful considerations of behaviors → local success[ or failure] →scalability [or improvement needs]

# Example

Multi-year pilot in several neighborhoods

Participating households decide as group what energy efficiency to demonstrate

Households set their goals

Energy provider provides

- ▶ Energy efficiency tools and equipment
- ▶ Experts for regularly scheduled meetings to discuss efforts, challenges, problems, successes
- ▶ Assistance to achieve and maintain energy goals