**Introduction**

- Scientists are convinced that climate change is occurring as a result of human-caused carbon emissions.1
- The American public is increasingly convinced as well.2
- Despite awareness and acceptance of climate change, efforts to reduce individual energy use are thwarted by low perceived efficacy: How much does recycling one bottle or washing one load of laundry affect global temperatures, ocean acidification, or drought in far off places?
- Behavioral apathy may be reduced through messages that focus on individual efficacy (e.g., reducing personal carbon footprint).
- Hypothesis: Telling participants that simple behavioral changes will create substantial reductions in personal carbon footprints will lead to:
  - Stronger intentions to conserve energy (Studies 1, 2, & 3).
  - Greater moralization of energy use and waste (Studies 1, 2, & 3).
  - Support for more energy conservation policies (Study 1, 2, & 3).
  - Greater efforts to conserve energy (Study 3).

**Study 1: High vs. Low Efficacy**

Participants: 282 Mechanical Turk workers.

Manipulation: All Ps read an article about climate change. Final paragraph differed by condition:
- Low Efficacy: Concluded that individual conservation behaviors are difficult to implement and have little effect on global carbon footprint.
- High Efficacy: Concluded that individual conservation behaviors are easy to implement and have strong effects on personal carbon footprint.

Measures:
- Conservation Intentions: Mean of 12 items (e.g., “I intend to recycle at home”), rated on 7-point scale (1 = strongly disagree; 7 = strongly agree).
- Energy Use Moralsization: Mean of 11 items ("Using too much energy is morally wrong"), rated on 7-point scale (1 = strongly disagree; 7 = strongly agree).
- Energy Policy Support: Number of policies supported (e.g., “A fee for each disposable plastic shopping bag used”), rated with yes/no.

Results: (See Figure 1)

**Study 2: Replication with Control Condition**

Participants: 240 Mechanical Turk workers.

Manipulation: Same as in Study 1 with the addition of a Control condition, in which Ps received no efficacy information.

Measures: Same as in Study 1.

Results: Due to the ordinal manipulation (Low Efficacy < Control < High Efficacy), data were analyzed using Somer’s d, which can be interpreted like r as the strength of association between the independent and dependent variables.3

**Study 3: Measuring Behavior**

Participants: 296 Mechanical Turk workers completed the study at Time 1. 221 of these responded to an email to complete a second survey one week later at Time 2.

Manipulation: Same as in Study 2.

Measures: At both time points, Ps completed the same measures as in Study 1 and a Wasteful Behavior Scale consisting of 7 items (e.g., “Compared to a typical week, did you drive more or fewer miles this week?”) rated on 7-point response scales (1 = many fewer/much less than normal; 7 = many/much more than normal).

Results, Time 1: (See Figure 1)

**References:**