Developing Theory and Research Driven Applications to Increase Eco-Friendly Behaviors

This poster summarizes a proposed project to research, develop, and release novel web-based tools that will increase participation in environmentally sustainable (eco-friendly) behaviors.

PSYCHOLOGICAL PRINCIPLES BEHIND THE TOOLS
- If people have different obstacles to engaging in the same eco-friendly behavior, a one-size-fits-all intervention will be effective for only a subset of its target population.
- People often are not aware of, or are unable to articulate, their psychological obstacles.
- Social motivations can play a significant role in facilitating eco-friendly behaviors.

Based on well-researched psychological principles, the tools will:

- "diagnose" users’ unique obstacles to eco-friendly behaviors,
- "prescribe" personalized feedback and strategies to clear these obstacles, and
- take advantage of online social environments (e.g., social networking websites) to create social motivations to change behavior (e.g., cooperation, competition, social desirability, and public commitment).

**Eco-Space** maps attitudes about eco-friendly behaviors onto two-dimensional spaces like those shown below.

**GreenList** capitalizes on the fact that there are some behaviors that need only to be completed once or on very few occasions (e.g., setting the water heater to 120 degrees) for lasting environmental benefits.

GreenList helps users create, monitor, and focus on manageable "to-do" lists of such single action behaviors.

**Footprint Unpacker** "unpacks" one's overall carbon or water footprint to reveal users’ unique situation and modality specific carbon footprint, which in turn will help identify each of their personal obstacles to reducing carbon emissions, water consumption, and waste production.

Note that Ed frequently brings reusable bags and coffee mugs to grocery stores and coffee shops, but he infrequently composts household food waste or recycles spoiled food containers. As his opposite pattern, Jo frequently composts food waste and recycles food containers, but she infrequently carries reusable bags or mugs.

**Differences in behavior patterns may reflect different situational roadblocks to eco-friendly behaviors.

- Footprint Unpacker identifies the influence of situational barriers to eco-friendly behaviors on each user. (e.g., "messiness" may impede Jo’s waste reduction. Carrying, or having to remember to carry, a reusable alternative to disposable goods may impede Jo’s waste reduction.)
- Using an algorithm based on multilevel modeling, Footprint Unpacker identifies the influence of situational obstacles to eco-friendly behaviors.
- Footprint Unpacker tailors feedback to remove the obstacles.

Subject: Scents and discounts for home weatherization

Weatherizing your home is a great way to help the environment, and home improvements can save you money in the long run. This is a list of home weatherization products. But do you know that "something" offers free and low-interest home weatherization services for those who live in moderate income households? Check out this site to see if you qualify.

Posted by: User123 5% of users found this post to be helpful.

Source: [http://www能量.gov/weatherization](http://www.energy.gov/weatherization)

Subject: Reducing your carbon footprint while saving money

RippleUnpacking.org has a cool calculator tool that computes your annual carbon savings and reveals cash savings at all once. Their unique tool is worth trying! If you have other "stuff" on this site, consider including them on your GreenList so you don’t forget to do them.

Posted by: User123 30% of users found this post helpful.

Source: [http://www.rippleunpacking.org/footprintcalc](http://www.rippleunpacking.org/footprintcalc)

Jenna Lee (UW PSYCH)
Yuichi Shoda (UW PSYCH)
James Landay (IRS/UW CSE)