# Understanding Recycling while Tailgating: Applying an Information-Motives-Behavior Skills Approach

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### Rationale

**Problem Statement:** Most academic studies that examine recycling behavior to date focus on household or curbside behavior. However, the environmental impacts of sporting events require attention due to their unique venue and the particularly large scale of their impact. For example, at Penn State, game and tailgating events produce 50-100 tons of waste each game<sup>1</sup>, but in 2008 football season, PSU recycled 112 tons of waste<sup>2</sup>.

Qualitative data<sup>3</sup> suggests tailgaters face unique barriers to recycling:

- High positive attitudes
- High misinformation about venue's infrastructure
- Low access to recycling facilities

**Theoretical Background:** We selected the IMB model because of it's ability to identify possible avenues for behavior change<sup>4</sup> and because it has been found to predict recycling behavior<sup>5</sup>. According to IMB<sup>6</sup>, behavior patterns are a function of:

- Information
- Motivation
- Behavioral Skills

### **Research Purpose:**

- Identify who among tailgaters is using the provided recycling infrastructure and how • much
- Identify psychological factors that predict recycling at tailgates  $\bullet$
- Identify possible avenues for future intervention •

## Method

**Participants:** 415 tailgates (97%) agreed to be observed and have one member complete our survey, for a total of 2,741 tailgaters observed.

**Procedure:** Researcher pairs measured observed behavior (group level) and surveys (individual level). One survey per group was completed.

### **Observed Measures:**

- Use of venue waste infrastructure (visible used and unused venue trash, venue recycling, and waste bags brought from home)
- Estimated group demographics (i.e. no. men, no. women, age, amount team apparel/ décor)

### **Survey Measures:**

- Venue Infrastructure <u>Information</u> (5 items; e.g. "I know where to leave my recycling when I'm done tailgating at Penn State."), alpha = .76
- <u>Motivation</u> to recycle (3 items; e.g. "Recycling at Penn State tailgates is important to me."), alpha = .49\*\*
  - -Single-item chosen to represent this construct
- <u>Behavioral capacity</u> to recycle at venue (3 items; e.g. "Recycling at Penn State tailgates takes too much time."), alpha = .68
- **Outcome:** "I am currently or plan to recycle at today's tailgate."
- Demographics (i.e. PSU alum, frequency of tailgating, home recycling behavior)

### **References:**

1=PSU Sustainability Institute website, 2013 2=EPA, 2009

4=Dartan, 2008, Govt Socl Rsrch. 5=Seacat & Northrup (2010). Jrnl Env Psy.

6=Fisher, Fisher, Williams, & Malloy (1994). *Hlth Psy*.

3=McCullough & Cunningham (2011). Intl Jrnl Sprt Mgmt and Mktg.



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32	7.7	PSU trash only	Increases venue impac	t	recycling bel	havior at t	he tailgate				
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Interventions need to be target specific to attend to different audiences' strengths and use patterns of the venue's infrastructure (e.g. alumni status, home recycling). **Future studies** should investigate the contribution to venue impact of bringing