Do Fences Really Make Good Neighbors?  
A Side-by-Side Comparison of RDD and Geofencing Methods Using Risk Factor Surveys

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New Sampling and Measurement Opportunities
Challenges with Traditional Survey Methods

Measurement

• People must notice and encode events to report them later
• Recall of behaviors and events is imperfect; worse with time
• Intentions to act are less predictive than actual behavior

Sampling

• Must screen many households to identify eligible respondents
  – Particularly for rare characteristics or infrequent activities
• Expensive
• Time consuming
Research Motivation

Measurement

*Improve accuracy of health measures by asking respondents about their experiences in situ (e.g., at the doctor’s office or at the gym).*

Sampling

*Know when respondents might be likely to engage in a particular behavior and ask them to report in that moment.*

New Source for Public Health Estimates

*Can the resulting data produce statistical estimates that are comparable to traditional survey methods?*
Our Methodology
Panel

MFour's Surveys On The Go® Opt-in Panel (www.mfour.com)

- Largest mobile panel in US (2M active members)
- Non-Probability selection, participation largely spread by word-of-mouth
  - No advertising, no internet pop-up ads
- Completely owned/managed by MFour
  - Limited overlap with other online opt-in panels
- Specializes in:
  - Point-of-Emotion® measurement
  - Diary studies; in-home measurement; and ad, entertainment, and behavior trackers
So what does it look like?
Smartphone Panel Interface

Panel Member Dashboard

A Single Question

Some surveys address topics that are relevant to specific industries. What is your current employment status?

- Unemployed
- Full-time White Collar/Professional
- Full-time Blue Collar
- Part-time
- Retired
- Homemaker
- Student

Continue
But is it representative?
Our Study
Questionnaire

Mode
• Smartphone-based app

Topics
• BRFSS and other health-related questions (for benchmarking)
  – Alcohol use
  – Smoking
  – Sugar-sweetened beverage consumption

Nontraditional Survey Tasks
• Image capture of in-store tobacco, alcohol, or sugar-sweetened beverage display (for respondents completing the survey while still in store)
Sampling and Contact Specifications

• Geofenced grocery, liquor, and convenience stores nation-wide
• Invited when cross geofence
  – Cash register “cha-ching” and visual notification
• Reminders at 1, 24, and 36 hours
Analysis Plan

Sample Size
• Planning for 1,500 completes

Benchmarking
• BRFSS (CATI/RDD)
• Similar health behavior data
  – Web and mail
  – Nonprobability web panels
Future Research

Test using probability sample

Utilize time-lapse geo-location tracking of panel members

• Geo-Tracking all panel members who grant permission
  – Targeting respondents who:
    – Visit fast food restaurants at least x times/week
    – Visit hospital or health care provider weekly
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