



DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR DISEASE CONTROL AND PREVENTION



Two Perspectives on Evaluation in Social Marketing: What Claims Can You Make with Small and Large Evaluations?

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The findings and conclusions presented here are those of the author and do not necessarily represent those of Centers for Disease Control and Prevention. (5/11/07)



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Outline

- Issues in social marketing evaluation
- Guides and curves on the roadmap of evaluation
- National efforts. Rich in resources; pressed for rigor
- Community efforts. Stretched resources; arguing for value



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Social Marketing Evaluation

- Exciting times for social marketing; rapid changes in communication
- Exciting: Evidence-discovery phase of SM
- Debate: “Best” way to evaluate SM
- “Best:” Driven by multiple factors



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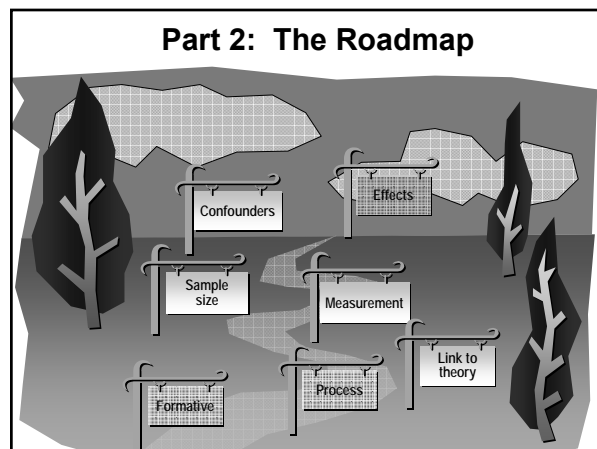


“Best” Driven by Multiple Factors

- What do your stakeholders expect from the campaign; from the evaluation?
- Is funding affected by your evaluation? What are the stakes?
- What type of campaign— individual or community/ policy?
- Is the dose large enough to find effects?
- \$\$ for evaluation

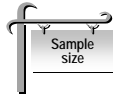


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Curves on the Road

- Sufficient sample size to find effects
 - What degree of change to find effects
 - Cross-sectional samples
 - Cohorts
 - Use incentives to maintain cohort sample

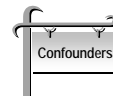


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Curves: Confounder Control

- Confounder: variables that are present prior to the intervention and associated with both treatment and outcome
- Confounders mean can't determine if outcomes are due to intervention or to prior conditions
- Cross-sectional vs. cohort



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III. Evaluation of National Efforts

- Truth campaign
- National Youth Anti-drug campaign
- VERB campaign

- Well-funded, pressed to prove rigor. All did formative, process, outcome evaluation



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VERB was a national mass media campaign guided by social marketing to encourage children 9 -13 years old to be physically active everyday.



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Overview

- 2002 - 2006
- Targeted all US tweens
- Individual level focus— increasing and maintaining PA
- Parents were secondary audience
- Well-funded \$339M



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VERB Evaluation Overview

- Non-experimental
- Cohort design, nationally representative samples of tweens and parents
- Data collected prior to campaign launch (2002) and each subsequent year (2003 – 2006)
- Analyzed for annual effects and trends after adjusting for confounders



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How VERB Handled the Curves

- Measurement
 - Developed telephone survey just for VERB
 - Awareness and understanding of VERB
 - Dose measure
 - Attitude and PA behavior measures
 - Reliability and validity



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How VERB Handled the Curves

- Sample
 - Primary cohort: Panel 1 Baseline: n = 3,000 child/parent dyads. Followed through 2006
 - Second cohort: Panel 2 in 2004 – 2006 n= 5,000 tweens and parents
 - Third cohort: Panel 3 in 2006 only n = 1,200
- All nationally representative
- Used small incentives



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How VERB Handled the Curves

- Confounder control
 - Panel conditioning
 - Propensity scoring



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Analytic Method Propensity Scoring

- Observational studies when have many variables
- Uses predictive modeling and weighting
- Baseline measures used to control for confounders at follow-up
- Associations between exposure to VERB and outcomes are practically free of the confounding effects of measured covariates



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Longitudinal Surveys

- Lower the cost of surveying rare populations
- Allowed us to examine the temporal nature of effects
 - Instant or delayed
 - Persistent or temporary
- When evaluating an on-going intervention, e.g., a media campaign, a longitudinal survey provides opportunity to assess the effects of cumulative or incremental exposure



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III. Evaluation of National Efforts

- Rigor. Now you found effects. Are there other explanations for your findings?
 - Measures e.g., self-report, bias
 - Secular trends
 - Selective exposure
 - Reverse causation (endogenous effects)



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III. Evaluation of National Efforts

- Rigor. Now you didn't find effects. Why?
 - Measures were highly correlated
 - Sample size was too small, not enough power
 - Secular trends smoothed out intervention effects
 - Dose was inadequate
 - Not the right message; too many messages; intervening programs



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VERB Evaluation Strategies Review

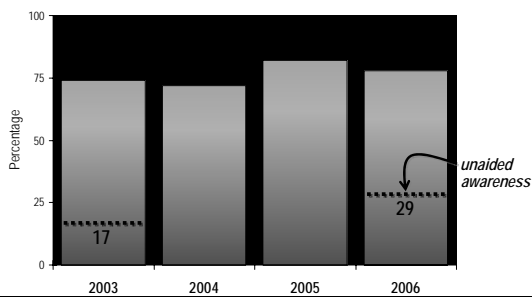
- Basics: Theory guided logic model, message content, measurement
- Formative evaluation guided advertising execution
- Process evaluation: Determined fidelity of the intervention
- Outcome evaluation: Quasi-experimental, but rigorous, attribution of effect (?)



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Results Tween's Awareness of VERB



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Understanding of VERB

In each year studied,
more than 90% of tweens aware of VERB
could report at least one of the
key messages of the campaign.



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VERB Campaign Outcome Results

- Year 1 (2003): effects on behavioral outcomes were detected for population subgroups--girls and younger tweens
- Year 2 (2004): positive effects were detected on 6 of 7 outcomes for the entire target population



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Results (*continued*)

- 6 outcomes positively affected by VERB:
 - Sessions of free-time activity in past 7 days
 - Percent physically active on day prior to survey
 - Total physical activity sessions in past 7 days
 - Expected benefits of being physically active
 - Social norms about physical activity
 - Social influences on physical activity



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IV. Community-based Interventions

- Lexington, KY. Implemented VERB Summer Scorecard 2004, 2005, 2006, adapted for 2007
- Evaluation: Formative
 - Focus groups on program materials. Interviews at events to assess what worked, what didn't



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IV. Community-based Interventions

- Lexington Evaluation: Process
 - Counts of participants, businesses. Interviews with businesses, vendors
 - Monitored VSS use, placement at businesses. Youth board members did field notes at summer events. Hits on Web site pre/post events.



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Evaluation: How many VERB Summer Scorecards were turned in?



- 2004: 355
- 2005: 838 (236%↑)
- 2006: 878 (5%↓)



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IV. Community-based Interventions

- Lexington outcome evaluation (tween level):
 - Cross-sectional design. Surveys in schools in 2005. Linked PA behavior to awareness of VERB and participation in VERB SS.
 - Challenges: Used YRBS questions. Potential biases. Confusion between VERB SS and national VERB.
 - Can claim associations



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IV. Community-based Interventions

- Lexington outcome evaluation (community level):
 - Document coalition's work
 - Reduction of barriers: Bus service accepted VERB SS as tickets
 - Community willing to sustain



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IV. Community-based Interventions

- Sarasota, FL. Implemented VERB Summer Scorecard 2005, 2006, adapted for 2007
- Evaluation:
 - Formative evaluation done for program materials
 - Process: Survey at final events to assess what worked, what didn't. Counts of participants, businesses. Interviews with businesses.



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IV. Community-based Interventions

- Sarasota outcome evaluation (tween level):
 - Cross-sectional design. Survey in 2005, 2006. Linking PA attitudes and behavior to participation in VERB SS.
 - 2006 added control community.
 - Challenges: Large samples needed to find treatment group (attended event). Sufficient dose to change behavior? Confusion between VERB SS and national VERB.



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IV. Community-based Interventions

- Sarasota outcome evaluation (community level):
 - Formal assessment of capacity of community coalitions to implement and sustain VERB SS.
 - *Wilder Collaborative Factors Inventory*
 - Example of results: Knowledge and skills needed: People skills, ability to sell program to others, explain program to vendors "from the heart."
 - Sustainability (i.e., continued implementation) should be included in program logic models and evaluated.



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Outcome Evaluation Overview

- Pre-post test on same group (cohort design)
- Pre-post on different groups (cross-sectional)
- Post only (cross-sectional)
- Retrospective post-test
 - Recall attitudes, behavior before and after intervention
 - Biases just like pretest – posttest
 - More likely to inflate effects



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Outcome Evaluation

- Pre--post or post only with control community
- Time-series
- Dose-response
- Objective measures— ↑ sales, facility use



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Limited \$\$ for Evaluation? — Build a Case

- Formative
- Process
- Use stories
- Any evidence of community level response
- Link to known effects of national program; similarities
- Rough cost-benefit estimate is compelling
 - Lexington: # of hours of PA /cost



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Limited \$\$ for Evaluation?

- If pressed, argue your decision to put \$\$ toward evaluation that would inform program improvements, given that individual level change is so expensive to measure meaningfully.
- Argue the importance of short and intermediate effects
- If outcome effects data required, admit the limitations



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Still Pressed for Outcome Evaluation

- Short and intermediate outcomes
- Consider a small one-time retrospective survey—
best to use subjective experience variables



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Summary

- Large and small evaluations share similar challenges
- Match the evaluation to your needs
- Drive prudently on the road of evaluation and . . .
- Enjoy the trip!



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