

turning knowledge into practice

Evaluating the Efficacy of Health Communication and Marketing Campaigns

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Presentation Objectives


- Compare efficacy and effectiveness design features and methods
- Evolution of efficacy studies in HCM
- Example of recent efficacy study
- Different ways to use efficacy studies
- Considerations in choosing an efficacy design
- Advantages of using an efficacy design
- Interactive activity



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What is Health Marketing?


Health marketing is
“creating, communicating, and delivering health information and interventions using consumer-centered and science-based strategies to protect and promote the health of diverse populations”
– Bernhardt 2006




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Theories of Behavior Change


- Predict that changes in behavior occur through a process
 - exposure to health message
 - reaction to the message
 - forming attitudes, beliefs and intentions around the message
 - acting upon the information by changing behavior




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Why Evaluate HCM Interventions or Campaigns?


- To assess the extent to which a HCM intervention or campaign met its objectives
- To identify improvements or refinements in objectives, target audience, strategies or implementation
- To assess reactions to the intervention or campaign
- To identify unintended consequences
- To assess the cost efficiency of the intervention or campaign
- To provide evidence for future initiatives
(Siegel & Lotenberg 2007)

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Efficacy Vs. Effectiveness




- Efficacy studies are designed to evaluate the effects of an intervention under optimum conditions (Flay 1986)
 - The "norm" in medical research studies
- Effectiveness studies evaluate the effects of an intervention under real world conditions
 - The "norm" in HCM evaluations

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Key Design Features


Design Feature	Efficacy Study	Effectiveness Study
Randomize participants	Yes	No
Manipulate intervention	Yes	No
Measure campaign exposure	No	Yes
Longitudinal tracking	Yes	Yes, with limitations
Internal Validity	Higher	Lower
Measure dose response	Yes	Yes, with limitations
External Validity	Lower	Higher
Cost	Lower	Higher

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Measures


- Efficacy and effectiveness studies use similar measures in terms of message reactions, moderators and mediators of behavior change
- Major difference is that
 - efficacy studies control exposure to messages as part of the experiment
 - effectiveness studies require measuring exposure through self-reported recall and recognition or environmental measures (e.g., GRPs)



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Measures


Measures	Efficacy	Effectiveness
Recall and Recognition	Yes	Yes, but requires self-reported exposure
Reactions to message targeting, tailoring, and specific ad executions	Yes	Yes
Behavioral precursors (e.g., attitudes, beliefs, intentions) compared across exposed and unexposed populations	Yes	Yes, but requires self-reported exposure
Behavior change compared across exposed and unexposed populations	Yes	Yes, but requires self-reported exposure
Paid media campaign implementation (e.g., GRPs)	No	Yes
Unpaid media campaign implementation (e.g., self report)	No	Possible, but rarely done
Moderators of behavior change	Yes	Yes
Mediators and other constructs from communication and behavior change theory	Yes	Yes, with limitations

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Considerations for Selecting Measures


- **Linked with intervention**
- **Meaningful to stakeholders**
- **Potential to change in time frame of evaluation**
- **Practical to measure**



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Principles That Make Evaluation Designs Stronger

- Design elements likely to produce better inferences:
 - Many measures over time
 - Incorporating control/comparison groups
 - Supplementing evidence about outcomes with evidence that the program operated as it was supposed to
 - Having larger (rather than smaller) samples (Hornik 2002)

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Effectiveness Studies – “The Norm”

- Much of the outcomes research in HCM use effectiveness designs conducted in real-time in the media markets or communities where the messages are delivered
 - National evaluation of American Legacy Foundation’s truth@ campaign
 - The Office of National Drug Control Policy (ONDCP) evaluation of large-scale, national, multi-channel, anti-drug campaign

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Potential Challenges to Conducting Well Designed Effectiveness Studies


- Limited funds (limited reach) to generate sufficient levels of exposure to detect campaign effects using population survey methods
- Logistical constraints such as campaign timelines and lengthy clearance processes

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Evolution of Efficacy Studies

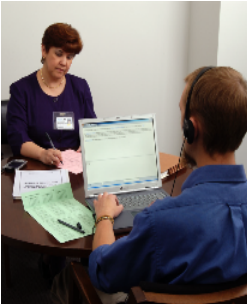
- Traditionally...
 - In person – bring participants into a central location or “laboratory”
 - Pre-testing, exposure, post-testing all done in one session
 - Repeated exposure or longitudinal tracking rarely done
 - Tend to have relatively small sample sizes




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Efficacy Studies with Web-Based Panels

- Ability to expose participants to multimedia interventions via their computers in their own homes
- Faster, easier and more inexpensive sampling and data collection
 - Knowledge Networks - probability-based sample
 - Harris Interactive - large sample of opt in participants
 - Many other market research panels including e-Rewards and Mysurvey



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Example of Recent Efficacy Study: Parents Speak Up National Campaign

- Developed by U.S. Dept. of Health and Human Services
- Encourages parents to talk “early and often” to their children about delaying sexual activity
- Target audience: parents of children ages 10-14



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Campaign’s Communication Channels

- Uses TV, radio, and print public service announcements (PSAs)
 - Campaign launched June 2007, airs nationwide
- Utilizes a Website www.4Parents.gov
 - Provides information to parents on how to talk with their children about sex

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Evaluation Overview


- Field-based effectiveness evaluation not feasible due to use of PSAs
 - Low reach/exposure prevents measurable levels of awareness and detectable behavioral effects
- Efficacy study design was chosen to evaluate PSUNC messages under controlled conditions
 - Utilized the national Knowledge Networks (KN) online panel to develop randomized controlled trial of parents
- Main hypothesis: Exposure to PSUNC will change knowledge, attitudes, beliefs, and behaviors of parents about parent-youth communication

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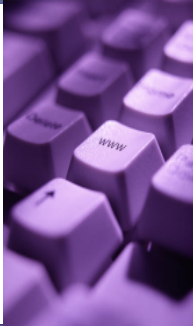
Knowledge Networks Online Panel


- Probability-based sample of U.S. population with sufficient sample sizes of the target population
- Panel recruited via random digit dial telephone methodology
- All panelists have Internet connectivity through a computer or Web TV appliance provided by KN
 - Enables inclusion of individuals who would otherwise not have Internet access

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Efficacy Study Design


- All study participants first completed a baseline survey on knowledge, attitudes, beliefs, intentions, and behaviors related to parent-child communication about sex
- Parents randomly assigned to experiment conditions:
 - Control – No exposure
 - Core Treatment – Exposure to core PSUNC messages
- Treatment participants exposed to campaign spots via online multimedia
 - Media spots available at www.4Parents.gov
- Follow-up surveys conducted at 4-weeks and 6-months after baseline
 - Mothers in core treatment condition randomized to receive additional messages (booster treatment) after 4-week follow-up



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Strengths


- Enabled researchers to develop a true randomized experiment with treatment and control conditions
- Allowed application of experimental design to a large population-based sample of participants
- Permitted dose-response comparisons
- Enabled longitudinal tracking within condition creating opportunity for causal attribution of campaign effects
- Avoided troublesome issues of potentially low campaign exposure

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Key Limitation


- Does not measure actual campaign implementation or reaction to campaign ads under natural conditions



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Different Ways to Use Efficacy Studies


1. Alone to determine the efficacy of campaign messages prior to implementation of a campaign (ideal)
2. Alone to determine the efficacy of campaign messages on a campaign that is already being implemented
3. In combination with other methods as part of a comprehensive evaluation

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Considerations in Choosing When to Conduct Efficacy Studies

- Are there important theory-based questions about message effectiveness to be answered?
- Do evaluators anticipate low levels of measurable exposure to the HCM campaign?
- Is the campaign aimed at a highly specific target population such as people within a limited age range or who engage in a specific behavior?



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Advantages of HCM Efficacy Designs

- Opportunity to answer questions about message reactions, dose-response relationships, and causal effects of message exposure not easily (or as rigorously) answered by effectiveness studies
- Solutions to problems in terms of comparison conditions and experimental design facing effectiveness studies
- Capability to optimize exposure to messages independent of the timing or logistics of campaign implementation
- Online efficacy studies with existing panels are significantly less expensive than field-based studies that rely on phone surveys

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Efficacy and Effectiveness Evaluation Design Activity

- **Review description of fictional campaign**
- **What evaluation questions will you address in your assessment?**
- **What design will you use to address the evaluation questions?**
- **What are the advantages/disadvantages and challenges related to the proposed approach?**

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