Developing Media Interventions to Reduce Household Sugar-Sweetened Beverage Consumption

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BACKGROUND

• Approximately 12.5 million children and adolescents are obese (Ogden et al. 2006) – a figure that has tripled since 1980 (Ogden et al. 2010).
• The association between the consumption of sugar-sweetened beverages (SSBs) and obesity has become an important research topic (Rennie, Johnson, and Jeeb 2005).
• As soft drink consumption by children and adolescents has also increased over the last forty years (French, Lin, and Guthrie 2003), SSB consumption is an appropriate target for public health interventions designed to counter childhood overweight.
• In 2010, the City of Philadelphia received funding to address the problem of overweight and obesity among its residents.
• The Annenberg Public Policy Center (APPC) assisted in the development of a media campaign to encourage parents to reduce their children’s SSB consumption.

OBJECTIVES

Phase 1: Formative Testing

• Guided by the Integrative Model of Behavioral Prediction (IM; Fishbein & Yzer, 2003), conduct a theory-based survey of Philadelphia residents to determine whether eliminating SSBs at mealtime is driven by attitudes, normative pressure, or self-efficacy.
• Using the theory-based survey, inform the campaign messaging by identifying the most important underlying beliefs related to eliminating SSBs at mealtime.

Phase 2: Message Design

• Focus groups formatively tested four sets of messages.
  Three messages were selected: a TV, transit, and radio spot.
  The television spot emphasized the “make you feel that you were doing something good for your family” belief more than the transit and radio spot.
  All messages attempted to influence the “help prevent weight gain” belief.
  All messages highlighted the connection between SSB consumption and diabetes (based on the focus groups).
• Campaign was produced professionally by an advertising agency and began airing in January 2011.

Phase 3: Methods

Message Testing Design

• Quasi-experimental design used to collect a sample of urban households with children aged 3-16.
• Fielded between March 9-16, 2010.

Participants

• Total sample = 507 adult caregivers
• 23% of the respondents were interviewed on cell phones.

Measures

• SSB Consumption; IM items measuring intentions, attitudes, normative pressure, self-efficacy; and associated beliefs relevant to SSB elimination at mealtime; and demographic measures.

Analytic Approach

• Validate the self-reports of SSB consumption (not presented here)
• Estimate a path model with precursor variables and three IM mediators predicting intentions to eliminate SSBs at mealtime.
• Identify the most important underlying beliefs related to eliminating SSBs at mealtime.

ESULTS

Phase 1: Results

Integrative Model Analysis

• Intentions to eliminate SSBs at mealtime are primarily driven by attitudes, not normative pressure or self-efficacy.

Phase 2: Message Design

• Focus groups formatively tested four sets of messages.
• Four sets of messages were selected: a TV, transit, and radio spot.
• The television spot emphasized the “make you feel that you were doing something good for your family” belief more than the transit and radio spot.
• All messages highlighted the connection between SSB consumption and diabetes (based on the focus groups).
• Campaign was produced professionally by an advertising agency and began airing in January 2011.

Phase 3: Methods

Message Testing Design

• Quasi-experimental design used to collect a sample of urban households with children aged 3-16.
• Fielded between March 9-16, 2010.

Participants

• Total sample = 507 adult caregivers
• Quota for age, gender, and child race (40% African American)

Measures

• SSB Consumption; IM items measuring intentions, attitudes, and associated beliefs relevant to cutting back SSBs (5 from survey + 1 new related to diabetes); and demographic measures.

Analytic Approach

• Paired samples t-tests conducted to compare behavioral intention and behavioral beliefs before and after campaign exposure.

Phase 3: Results

Intention Analyses

• Exposure to all messages was associated with a significant increase in intention to cut back child and caregiver’s SSB consumption.

Behavioral Beliefs Analyses

• Exposure to all messages was associated with a small, but significant increase in four of six behavioral beliefs.

REFERENCES


ACKNOWLEDGEMENTS

This evaluation was funded by the Philadelphia Department of Public Health through a cooperative agreement with the Centers for Disease Control and Prevention, U.S. Department of Health and Human Services (Contract # 120D0516, PI: Dr. Amy Jordan).

The contents are solely the responsibility of the authors and do not necessarily represent the official views of the Philadelphia Department of Public Health or the Centers for Disease Control and Prevention.

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