ACKNOWLEDGEMENTS

The Florida Prevention Research Center (FPRC) at the University of South Florida and the Sarasota County Department of Health gratefully acknowledge the cooperation of the following groups of citizens who have been essential in the creation of the key products contained herein:

- The members of the Community Advisory Committee (CAC) whose tireless efforts have ensured the successful completion of the initial phases of this community-based prevention marketing project to reduce initiation and continuation of tobacco and alcohol use by Sarasota County’s most precious commodity – its children and youth.

- The administrators and teachers in the public, private, alternative, and special schools of Sarasota County, whose vision of the future and commitment to excellence in the education and well-being of youngsters have permitted collection of data that guarantees this county of being on the cutting edge of health promotion and disease prevention endeavors.

- The students of Sarasota County whose patience and participatory spirit contribute much to their own welfare and to that of their peers, and remind us all of their contributions to our future as the 21st century unfolds.

- The parents of Sarasota County youth, who by their sacrifice of time to give us their insights, feelings, and critical assessments, provide compelling evidence of the caring and concern that they have for the young people of the county.

- Last, but not least, Sarasota County’s citizens-at-large who seek to provide those incredibly important things that we know make a difference in the lives of children and youth, now as well as in the future.

Acknowledgements
SARASOTA COMMUNITY PARTICIPANTS
*indicates member of CBPM Community Advisory Committee

*Elaine Allen, Parent – North Port Sun
*Mary Ann Andrews, Executive Director, Drug Free Communities, Inc.
*Edna Apostle – AHEC
Migdalia Aponte, Hispanic Community
*Mike Bigner, Director – Venice Foundation
*Karen Bogues – Community Youth Development Project
Tierrany Boyle, North Port Youth
*Bonnie Bretherton, Sarasota Youth
*Judy Brewer, Communication Manager – Substance Abuse Prevention Coalition
*Stacy Carnahan – Girls INC.
Cassandra Coble – North Port Youth
*Richard Coccaro
Angie Creager, Hispanic Community
*David Cullen
*Tim Dutton – Executive Director, Human Services Planning Assoc.
Andrea Echstenkamper – Osprey Youth
Lauren Echstenkamper – Osprey Youth
Saida Fulda, Venice High Student
Douglas Glaser – School Resource Officer
*Sarah Gorman, Executive Director, Health Start Coalition of Sarasota County
*Carol Green, Marketing Coordinator – Coastal Recovery Centers, Inc.
Casey Haren – Sarasota Youth
Deanna Hattaway, Venice High Student
John Heim – Nokomis Youth
*Anita Hocker – School to Work
*Pauline Hodges – Project Challenge of the West Coast, INC.
*Greg Hutton – Sarasota County School Board
*Iona Anderson Jannier – North Port Boys & Girls Club
Lindsey Kelly, Venice High Student
*Catherine Lang, American Lung Association
*Mary Lanier – Sarasota Memorial Hospital
*Roland Liebert, Program Director – Substance Abuse Prevention Coalition
Kathy Lippa, Parent
*Judy Lyon – Guidance Counselor
Christine Marshall – North Port youth
*Betty McQueen – Chairperson, CBPM CAC
*Danny Myers – DOH, Tobacco Fee Youth of Sarasota
Sasha Nieves – Sarasota youth
Alicia Olson – Venice Youth
*Dawn Page
*Kim Painter – American Lung Association
*Patty Parisian – HERR Coordinator
Joyce Payne, Sarasota County Health Department
*Cynthia Porter – Greater Newton Community Redevelopment Corporation
*Sherri Reynolds – Sarasota County School Board
*Dianne Shipley – DOH, Public Relations and Health Educator
Susan Smith, Department of Health Intern
*Gary Spencer, Marketing Coordinator – Midtown Community Mental Health Center

Acknowledgements
*Kara Steinman, Youth – SWAT representative
*Joe Tarrer, CEO – Tarrer Consulting
*Jerry Thompson, Director Outpatient Services – Coastal Recovery Centers, Inc.
*Kristina Thurman, Program Coordinator, American Health Association
Carol Todd, School Board Member
*Kathy Turner, Director of Marketing / Public Relations
*Mary Weaks, Cancer Control Director – American Cancer Society
Sarah Wetherill, Venice youth
*Jone Williams, Program Coordinator – YMCA Hippy
Sonja E. Ziegler, Family Counseling Center

Assisted with allowing us access to population subgroups:
Joanie Alexander, Gulfcoast South AHEC
Kara Andrade, Sarasota County Health Department
Migdalia Aponte, Child Development Center
Edna Apostle, Gulfcoast South AHEC
Laurel Chase, Sarasota County Technical Institute Adult & Community Education Center ESOL Program
Angie Creager, Family Counseling Center
Maria Esquivel
Candy Millington, Venice High School
Alvaro Mosquera
Dan Parrett, Venice High School
Katherine Ridenour, Sarasota County Technical Institute Adult & Community Education Center ESOL Program
Sharon Sargent, Sarasota County Technical Institute Adult & Community Education Center ESOL Program
Dianne Shipley, Sarasota County Health Department
Sandra Terry, Laurel Community Civic Association
Padre Vincente St. Martha’s Church
Ruby Walsworth, Sarasota County Technical Institute Adult & Community Education Center ESOL Program
Sarasota County Personnel Dept, payroll stuffers
Human Services Planning Association, parent handouts

School Resource Officers:
Det. Rob Crane, Venice High
Det. Bill Morton, Sarasota Middle
Det. Darlene Standfer, Booker Middle

Provided assistance with youth research:
Todd Bellamy, McBean Boys and Girls Club
Randy Bouck & Tanya, North Port Boys and Girls Club
Carolyn Brown & Sarasota County Parks and Recreation staff
Stacy Carnahan & Girls Inc. staff
Dave Daniels, Marjorie Nolan, Fruitville Boys and Girls Club
Dan Quale, Venice YMCA

Donations of youth research incentives:
Sarasota Tobacco Free Youth
Donation of adult incentives:
Chili's
Woody's Bar-B-Q

Committee of youth to identify criteria for interviewers and incentives:
Bobby Barham, Riverview High
Katy Carson
Domique Heller
Fruitville Boys & Girls Club after school teen group
North Port CYD
PARTICIPATING SCHOOLS AND STAFF MEMBERS

BOOKER HIGH SCHOOL
Principal: Jan Gibbs
Contact: Dr. Jack McDonald

BOOKER MIDDLE SCHOOL
Interim Principal (at time of survey): Mary Watts
Current Principal: Wayne Green
Contact: Joy Bailey
Linda Campbell
Angel Chiarelli
Gary Clark
Perlie Green
Raymond Haneke
Cynthia Hughes
Judith McKenzie
Greg Nielsen
Marsha Powell
Robert Rinaldo
Jacqui Rogers
Laura Semian
Jill Spence
Jennifer Stabenow
Tracey Stark
David Wernicke

BROOKSIDE MIDDLE SCHOOL
Principal: Jeff Hradek
Contact: Deb Phillips
Agatha Taylor

CARDINAL MOONEY HIGH SCHOOL
Principal: Steve Christie
Scott Scheuer

LAUREL NOKOMIS SCHOOL
Principal: Wendy Katz
Contact: Kay Zahn
Linda Cleary
Jill Holda
Boyd Hoskins
Peggy Parrett
Carolyn Reichard
Jeanne Williams
Gretchen Zablackas

McINTOSH MIDDLE SCHOOL
Principal: Bob Hageman
Contact: Kate McManus
Sherri Braunstein

Acknowledgements
Michelle Brunsch
DeAnna Calltharp
David Gwatney
Lawrence Jones
Jane Laudano
Jane Maynard
Gloria Mines
Ted Watson
Sally Wilson
Tracy Wilson
Wyn Wright

OAK PARK SCHOOL
Principal: Brenda Meines
Contact: Judie DeMarco
Angela Ashley
Jib Browning
Jason Karasik
Joe Panzerelli
Cindy Pelosi
Joe Russell

PINEVIEW MIDDLE AND HIGH SCHOOL
Principal: Steve Largo
Contact: Flo Ames
Tripti Agarwal
Lou-Don Bates
Steven Dacey
Pamela Larocque
Eloise Malinsky
Debora Tweedie
David Yotsuda

RIVERVIEW HIGH
Principal: Dr. Louis Robison
Contact: Judy Lyons
James Anderson
Lloyd Daugherty
Sandra Feinsod
Darby Larkin
Jim Ward

SARASOTA HIGH SCHOOL
Principal: Daniel Kennedy
Anthony Grasso
Doug Holcomb

SARASOTA MIDDLE SCHOOL
Principal: Linda Nook
Contact: Tara Middleton
Kyle Blough
Jan Erhart

Acknowledgements
Karen Hamilton
Carolyn Harper
Doug Powell
Edward Sera
Mark Willis

SARASOTA SCHOOL OF ARTS AND SCIENCES
Principal: Vincent Buccirosso
Contact: Rachel Andersen

SUNCOAST INNOVATIVE STUDIES
Director: Karen Young

VENICE AREA MIDDLE SCHOOL
Principal: Gary Wetherill
Contact: Lonny Campbell
Carlos Carrion
Retsy Ewell
Allen Kretschmar
Nancy Monyhan
Jean Shaw
Cedona Sigmond
Frances Squires
Don Willis

VENICE HIGH SCHOOL
Principal: Daniel Parrett
Contact: Jennifer Mainey
Michele Cross
Barbara Farrar
Barbara Ginn
Jim Hansen
Tom McLaughlin
Carolyn Robinson
Larry Sandburg
Brian Wheatley

SARASOTA PREVENTION RESEARCH CENTER STAFF
William Little, Sarasota County Health Department Administrator
Liz Bumpus, Director of Health Promotion
Susan Calkins, Prevention Marketing Coordinator
Jennifer Harrod, Administrative Support
FLORIDA PREVENTION RESEARCH CENTER STAFF

Core Staff:
Robert J. McDermott, Director of Prevention Research Center
Carol A. Bryant, Co-Director of Prevention Research Center
Melinda S. Forthofer, Director of Methods and Evaluation Unit
Kelli McCormack Brown, Director of Sarasota Demonstration Project
Danielle C. Landis, Program Director
Karen Abrenica Bernabe, Program Assistant

Graduate Assistants:
Moya Alfonso
Lauren Bailey
Tom Buckingham
Jill Christy
Danice Eaton
Somer Goad
Michelle Hines
Jennifer Hudson
Caroline Mae
Tracie Merritt
Paula Perlmutter
Jon Poehlman
Bobbi Rosel
Andrea Seymore
Alyssa Voss
Dani Walter
Carol Williams
Michelle Wolper

Provided assistance with adult research:
Maria Cabrera, Graduate Student
Rebecca Cheney, Graduate Student
Nicole Deschenes, Graduate Student
Peggy Finley, Graduate Student
Dionne Mayhew, Graduate Student
Lynne Oldham, Graduate Student
## Acknowledgements

---

## Table of Contents

---

## Executive Summary

---

## Section 1: Research Methods

### Introduction

---

### Research Objectives

---

### Research Methods

---

### Phase 1: Qualitative Research – Youth

---

### Phase 2: Quantitative Research – Youth

---

### Phase 3: Qualitative Research – Parents

---

## Section 2: Youth Research Findings

### Introduction

---

### Tobacco Initiation and Use

---

### Determinants of Smoking Initiation

---

---
EXECUTIVE SUMMARY

The purpose of this consumer research was to explore perceptions of tobacco use among 6th-10th grade youth in Sarasota County, Florida. The research was conducted by Sarasota County researchers (youth and adult) and researchers at the University of South Florida Prevention Research Center.

Specific objectives of the research were to identify:

- the factors that motivate Sarasota youth to use tobacco;
- the factors that deter use of tobacco among Sarasota youth;
- effective information channels and spokespersons for preventing tobacco use among Sarasota youth; and
- effective strategies for preventing tobacco use among Sarasota youth.

The study was conducted in three phases. Phases I and II were conducted among 6th through 12th grade youth. The first phase was qualitative research followed by a more standardized survey research phase. In phase I, 206 youth participated in 22 focus groups and 112 individual interviews. The youth were interviewed by eleven Sarasota youth who had been trained to conduct both focus groups and individual interviews.

The second phase of the study focused on using the qualitative research results and literature to develop, pilot, and implement a standardized survey of youth in grades 6 to 10. All public middle and high schools participated in the survey. Among the 13 private schools invited to participate, 9 declined. Of the remaining four, one participated with the other three expressing interest to participate in the future. A total of 113 classes, comprised of 2,407 students, were surveyed.

Phase III consisted of qualitative research (focus groups and interviews) with Sarasota County parents of middle and high school youth. Forty-seven parents participated in 6 focus groups and 12 individual interviews. Recruitment of parents provided to be difficult. This phase focused primarily on alcohol use; however, some important themes emerged that cut across youth and risk behaviors (e.g., communication, supervision).
Smoking Initiation

Approximately 50% (1001) of the total survey respondents (2,407) reported having ever tried cigarette smoking. Smoking initiation rates varied by grade level, grades earned in school, family structure, employment, involvement in sports activities and level of depression.

**Perceived benefits of smoking initiation** included coping with problems and the ability to refuse the offer of cigarettes.

**Perceived costs of smoking initiation** included unpleasant taste of smoking and mother’s disappointment. Other costs included uncool, financial costs, addiction, health problems, and punishment.

Social influences included both peer influence and parental inference.

Gaining access to tobacco (cigarettes) appears to be relatively easy for youth in Sarasota County.

Trustworthy spokespersons for providing information about risks of smoking varied widely among grade levels. Sixth graders noted a DARE officer/Resource officer and school counselor, number one and two, respectively. Seventh graders ranked a celebrity and older kids, number one and two, respectively, whereas, 9th and 10th graders said that “other kids my age who smoke” would be their first choice. Older brother and sisters and other relatives (not parents or older siblings) were information sources ranked in the top ten by students in all grades.

Youth suggested a wide range of interventions they believe to be effective in preventing smoking initiation in Sarasota County.

Recent Smokers

Of the 1001 youth who have initiated smoking, the majority (634 or 64%) report that they **did not** smoke during the month before they completed the survey. Recent smoker rates varied by grade level and reported race.

**Perceived benefits of recent smoking** included coping with problems.

**Perceived costs of recent smoking** included mother’s disappointment, getting caught and tastes bad.
Trustworthy spokespersons for providing information about risks of smoking varied widely among grade levels. Sixth graders noted a DARE officer/Resource officer and other relative (not parents or older siblings), number one and two, respectively. Seventh graders ranked older kids and a DARE officer/Resource officer, number one and two, respectively. Tenth graders said that “other kids my age who smoke” would be their first choice, whereas, 9th graders surprisingly indicated “your doctor” as their first choice. Friends were information sources ranked in the top ten by students in all grades.
INTRODUCTION

The Sarasota Tobacco Free Youth Demonstration Project is designed to **prevent the initiation of smoking** among young people in grades 6 through 10. The Florida Prevention Research Center (FPRC) and a collaborative group of 20 community organizations have worked together for approximately two years to select target audiences and conduct consumer research to identify the factors that influence young people’s smoking (tobacco use) behavior.

This collaborative group, the Community Advisory Committee (CAC), uses “Community Based Prevention Marketing” (CBPM) to develop prevention programs to prevent disease and disability. Community based prevention marketing (CBPM) is a community-directed social change process that applies marketing theories and techniques to the design, implementation, and evaluation of health promotion and disease prevention programs (Appendix A – CBPM Process Article). CBPM also blends community organization principles and practices, behavioral theories, and marketing concepts and methodologies into a synergistic framework for directing positive change.

This report describes the results of the consumer research conducted with youth in Sarasota County. The results of the consumer research will help guide strategic decisions for prevention interventions/strategies initiated by Sarasota County community organizations and government agencies for use in preventing tobacco initiation among Sarasota youth.
RESEARCH OBJECTIVES

The purpose of this consumer research was to explore perceptions of tobacco use among 6th-10th grade youth in Sarasota County, Florida (hereafter referred to as “Sarasota youth”).

Specific objectives of the research were to identify:

- the factors that motivate Sarasota youth to use tobacco;
- the factors that deter use of tobacco among Sarasota youth;
- effective information channels and spokespersons for preventing tobacco use among Sarasota youth; and
- effective strategies for preventing tobacco use among Sarasota youth.
RESEARCH METHODS

The study was conducted in three phases:

• Phase I: Qualitative research (focus group and individual interviews) with Sarasota youth;

• Phase II: Standardized survey research in Sarasota middle schools and high schools (hereafter referred to as “the survey research”); and

• Phase III: Qualitative research (focus group and individual interviews) with parents of Sarasota youth. This phase focused primarily on alcohol use among Sarasota youth.
PHASE ONE: QUALITATIVE RESEARCH WITH SARASOTA YOUTH

Teams comprised of FPRC youth researchers and FPRC graduate assistants conducted focus groups and interviews with Sarasota County youth going into 5th through 12th grades. Sarasota youth researchers were hired to collect qualitative data because the research team realized that youth, rather than adults, would be in a better position to obtain high quality information from adolescent participants.

Training

FPRC staff, graduate assistants, USF faculty members, and CAC members collaboratively developed a 60-page curriculum guidebook and training agenda for a two-day FPRC youth researcher training session (Appendix B – Youth Training Article and Form to Receive a Copy of Youth Researcher Curriculum). Eleven youth researchers were trained to conduct focus groups and one-on-one, in-depth interviews.

Guide Development

Focus group and interview guides were developed by FPRC youth researchers, community members and FPRC staff. The guide included questions about youths’ perception of tobacco, access to tobacco products, potential spokespersons and strategies for preventing tobacco use and imitation (Appendix C – Alcohol/Tobacco Interview Guide). Questions concerning perceptions of alcohol use also were asked.

Study Sites and Participants

CAC members and FPRC staff worked collaboratively to select the age ranges for youth included in this study. The CAC developed a list of local community agencies, community leaders, and other community locations appropriate for recruiting youth to participate in the study. Incentives included movie certificates, pizza parties for youth and, in some cases, art supplies for specific programs that had a high number of participants.

Focus groups and interviews were conducted at schools and program sites throughout Sarasota County that were easily accessible to both eligible participants and FPRC Youth Researchers. When possible, only same grade/same gender groups were conducted. However, if there was a shortage of participants, groups were conducted with males and
females no more than two grades apart. Focus groups lasted between 30 and 75 minutes.

Individual interviews were semi-structured and lasted approximately 20 to 30 minutes. When possible, interviews were conducted by researchers of the same gender as the interviewee.

**Informed Consent**

The University of South Florida Institutional Review Board approved all consent forms and procedures (Appendix D – Youth Informed Consent Form). Parents of youth involved in the qualitative phase of the research were sent a letter to their home explaining the project and requested to complete and sign the informed consent form (Appendix E – Sample Parent Letter).

**Demographics**

Between July 1999 and February 2000, FPRC Youth Researchers conducted 71 (63%) interviews and 17 (77%) focus groups and graduate assistants conducted 41 (37%) interviews and 5 (23%) focus groups (see Table 1 below for information on number of interviews and focus groups according to site).

Two hundred and six youth participated in focus groups and interviews at 11 sites throughout Sarasota County. The majority of participants were white (75%), female (62%), and between the ages of 11 and 13 years (6th to 8th grade) (67%), with a mean age of 12.6 years (see Table 2 for sample size according to age and Appendix F for a summary of interviews and focus groups by gender and grade).
<table>
<thead>
<tr>
<th>Research Site</th>
<th>Interviews Conducted</th>
<th>Focus Groups Conducted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Venice Middle</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Fruitville Boys and Girls Club</td>
<td>17</td>
<td>5</td>
</tr>
<tr>
<td>NorthPort Boys and Girls Club</td>
<td>11</td>
<td>2</td>
</tr>
<tr>
<td>Girls Inc.</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>McBean Boys and Girls Club</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Sarasota Middle</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>McIntosh Middle</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>YMCA</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>TRIAD North</td>
<td>20</td>
<td>-</td>
</tr>
<tr>
<td>TRIAD South</td>
<td>18</td>
<td>-</td>
</tr>
<tr>
<td>Venice High</td>
<td>13</td>
<td>-</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>112</strong></td>
<td><strong>22</strong></td>
</tr>
</tbody>
</table>
Table 2
Percent of Sample by Age

<table>
<thead>
<tr>
<th>Age</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>11</td>
<td>6</td>
</tr>
<tr>
<td>11</td>
<td>53</td>
<td>30</td>
</tr>
<tr>
<td>12</td>
<td>38</td>
<td>22</td>
</tr>
<tr>
<td>13</td>
<td>28</td>
<td>16</td>
</tr>
<tr>
<td>14</td>
<td>14</td>
<td>8</td>
</tr>
<tr>
<td>15</td>
<td>14</td>
<td>8</td>
</tr>
<tr>
<td>16</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>17</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>19</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>177</td>
<td>100</td>
</tr>
</tbody>
</table>

Of the 206 youth interviewed, 136 completed demographic information sheets that asked questions about tobacco use and initiation.

Data Analysis

Data from focus groups and in-depth interviews were transcribed and entered into a computer. Using special software to analyze qualitative data (*Ethnograph*) the transcripts were read to identify themes. USF staff and community members identified recurring themes and the range of diversity in responses, made summary and interpretive statements, and marked passages worthy of quotation. FPRC youth researchers then reviewed all results and assisted with interpretation.
PHASE TWO: SURVEY RESEARCH WITH SARASOTA YOUTH

Survey Development

Using other surveys (specifically the Florida Youth Tobacco Survey and the CDC’s Youth Risk Behavior Survey), published literature on tobacco and alcohol use and youth, and the qualitative data collected, a 147-item survey was developed to: identify the factors that motivate Sarasota youth to use tobacco and alcohol; to identify the factors that deter use of tobacco and alcohol among Sarasota youth; to identify effective information channels and spokespersons for preventing tobacco and alcohol use among Sarasota youth; and to identify effective strategies for preventing tobacco and alcohol use among Sarasota youth. The final survey (inside the back pocket of the three ring binder) included questions related to demographic background, tobacco behaviors, alcohol behaviors, perceptions of norms related to alcohol and tobacco use, attitudes and beliefs regarding tobacco and alcohol use, parental tobacco and alcohol use, perceived quality of parent child relationships, school connectedness, psychological distress, delinquent behaviors, and involvement in various school and community activities. The CAC approved the content for the final survey.

Survey Pilot Testing

The survey questions were pilot tested with approximately 300 students in grades 6 through 10. Classes selected for pilot testing were not included in the survey implementation. The purpose of pilot testing was to make sure that students could read the questions and responses and that the meaning of the questions for youth matched the intentions of the research team.

Informed Consent

Parental passive consent through the Sarasota County Schools was obtained for the quantitative survey (Appendix G – Passive Consent Letter). Any child whose parent did not want them to participate was excused from the activity. Fewer than 10 students were excluded from survey administration due to lack of parental consent.

Research Participants

The survey was conducted among youth in grades 6 to 10 in Sarasota County. The sample of 6th-8th grade youth was drawn from the 10 mid-
Middle schools, exceptional schools, and alternative schools that included at least 1% of the county’s 6th-8th grade public school population. The sample of 9th-10th grade youth was drawn from the four public high schools in Sarasota County. A CAC subcommittee on research and survey design contributed to and approved the sampling process.

Thirteen private schools with at least 50 students from the target population were invited to participate in the survey research. Among the 13 private schools invited to participate, 9 declined. One of the remaining 4 schools participated in the research; the remaining 3 schools expressed a willingness to participate if participation could be postponed until Fall 2000.

Classes were randomly selected until the number of students enrolled in selected classes was approximately 480 students per grade. A random cluster sample of classrooms was selected based on the proportion of Sarasota students in each school. A total of 16 schools participated in the survey research (15 public schools and 1 private school). A total of 113 classes, comprised of 2,407 students were surveyed. See Appendix H for sampling details.

Table 3 summarizes the characteristics of survey respondents included in the data analysis. Overall, 51% of survey respondents were male; 49% were female. Eighty-one percent of respondents reported their race as white, 7% as black, and 12% as American Indian or Native American, Asian or Pacific Islander, or other. Ten percent of the survey respondents reported being of Hispanic or Latino origin. Students reported their academic performance, with the mean for all responses being “Mostly B’s.”
**Table 3**  
**Characteristics of Survey Respondents**

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>51%</td>
</tr>
<tr>
<td>Females</td>
<td>49%</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
</tr>
<tr>
<td>White</td>
<td>81%</td>
</tr>
<tr>
<td>Black</td>
<td>7%</td>
</tr>
<tr>
<td>Other</td>
<td>12%</td>
</tr>
<tr>
<td><strong>Hispanic Origin</strong></td>
<td>10%</td>
</tr>
<tr>
<td><strong>Grades</strong></td>
<td>Mostly B’s</td>
</tr>
<tr>
<td><strong>Tobacco Use</strong></td>
<td></td>
</tr>
<tr>
<td>Have you <em>ever</em> tried cigarette smoking, even on or two puffs?</td>
<td>52%</td>
</tr>
<tr>
<td><strong>In the past 30 days</strong>, have you smoked cigarettes, even one or two puffs?</td>
<td>19%</td>
</tr>
<tr>
<td>Do you think you will ever become a <strong>regular cigarette smoker</strong>?</td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>5%</td>
</tr>
<tr>
<td>I am already a regular smoker</td>
<td>4%</td>
</tr>
</tbody>
</table>

**Survey Administration**

FPRC staff worked closely with the Sarasota County Schools in administering the survey. FPRC staff members and a Sarasota County School employee (Sherri Reynolds, Director, Pupil Support Services) met with every principal to discuss the project and to determine classroom selection for survey administration. FPRC staff coordinated scheduling of survey administration to accommodate participating schools and teachers. FPRC staff and graduate students administered surveys. Appendix I includes more details regarding survey administration.

Each school designated a survey contact person with whom to work. Following survey administration, school contacts and participating teachers with whom classes were used in the survey received a thank you letter and a short questionnaire about the survey administration process. Teachers and school contact persons received a Wal-Mart merchandise card as an incentive for completing the questionnaire.
**Data Analysis**

Surveys were evaluated to determine whether they would be usable for analysis purposes. Two survey questions were included to aid in this evaluation process (G28 and G37). Question G28 asked students about use of a fictional substance (“Black Butterfly”), and G37 asked students to rate the extent to which their survey responses were truthful. Students who reported use of the fictional substance and those who reported that they were truthful half of the time or less were excluded from the analysis. Also, some surveys included enough missing or invalid responses to be unusable for analysis (i.e., greater than 50% of responses missing or invalid in any one section of the survey). These surveys also were excluded from the analysis. Altogether, 86% (2,079) of the surveys administered were included in subsequent analyses.

Frequency distributions, cross tabulations, and logistic regression analyses were performed using SAS statistical software. Audience segmentation analyses were performed using the AnswerTree 2.1 program produced by SPSS, Inc.

The main purpose of the survey data analysis is to identify the determinants of tobacco and alcohol behaviors and to identify population subgroups for whom the determinants of the target behavior may be different and to identify the population subgroups at highest risk with respect to the target behavior. Appendix J includes more details on the survey data analysis.
PHASE THREE: QUALITATIVE RESEARCH WITH SARASOTA PARENTS

After reviewing the qualitative data it became evident that parents were a potential source of information for youth, as well as role models based on their choice to use or not to use alcohol.

Parent focus groups and individual interviews focused primarily on alcohol use among Sarasota youth. These data were shared with the community at the September 21 Alcohol Strategy Workshop.

Target Audience

Community Based Prevention Marketing Community Advisory Committee (CBPM CAC) members, FPRC staff, and University of South Florida graduate students determined that the target audience should be parents or guardians of middle school and high school youth in Sarasota County, as well as some community leaders who work extensively with Sarasota County youth in the age groups of interest. Although the sample was one of convenience, an effort was made to have representation from diverse geographic locations and ethnic backgrounds within the county.

Focus Group Participants

There were six focus groups with 35 participants in all. The participants in two of the focus groups were comprised of Non-Hispanic Whites; participants in two other groups were comprised of primarily blacks; and the participants of two groups were comprised of Hispanics.

Individual Interview Participants

There were 12 interview participants. Of these participants, nine were Non-Hispanic White, and three were Hispanics.

Recruitment

CBPM CAC members and FPRC staff determined the various methods to be used for recruiting participants for focus groups and interviews. Some participants were recruited from the Sarasota County Health and Human Services Business Center through a departmental mailing or by word-of-mouth. Others were recruited through community organizations around the county. For example, participants were recruited through the
Laurel Community Center, St. Martha’s Catholic Church, Sarasota County Technical Institute’s English for Speakers of Other Languages (ESOL) classes, Booker Middle School, and the Substance Abuse Prevention Coalition. Other participants were acquaintances of CBPM CAC members. It should be noted that recruitment of participants for the study proved more difficult than had been anticipated. For example, one CBPM CAC member contacted 25 friends and neighbors to participate in focus groups, and all refused.

**Parent Interview Guide**

Researchers used the same questionnaire for focus groups and interviews. The questionnaire was developed in a four-step process. First, USF graduate students and FPRC staff constructed a draft interview guide. Second, the USF students and CBPM CAC members pretested the interview guide. Third, USF graduate students and FPRC staff revised the interview guide. Fourth, CBPM CAC members finalized the interview guide based on pretesting results.

**Informed Consent**

The University of South Florida Institutional Review Board approved all consent forms and procedures.

**Handout**

CBPM CAC members and FPRC staff developed a handout for participants to provide additional comments and suggestions on an anonymous basis. Three participants returned handouts to the researchers with additional written comments and suggestions about underage drinking.

**Focus Groups**

Focus groups were conducted at four locations that were convenient for the participants. Two of the focus groups were conducted at the Sarasota County Health Department; two were conducted at the Laurel Community Center; one was conducted at St. Martha’s Catholic Church; and one was conducted at the Sarasota County Technical Institute. Although some Hispanic participants spoke both English and Spanish, both Hispanic focus groups were conducted primarily in Spanish per the participants’ preference.
Moderators and co-moderators included three USF graduate students, an FPRC staff member, the Sarasota Prevention Marketing Coordinator, and two bilingual Hispanic community leaders from Sarasota. All moderators and co-moderators received training from FPRC staff members on the purpose of the study, the interview guide, and how to conduct focus groups and one-on-one interviews. The Hispanic moderator and co-moderator modified the interview guide and focus group procedures to tailor them more appropriately for the linguistic and cultural norms of the Hispanic participants.

Focus groups were recorded and transcribed, while co-moderators took notes. Participants completed an information form to capture some demographic data. Participants were provided a take-home form (Appendix N) along with a self-addressed, stamped envelope to provide additional comments and suggestions and return to the researchers. Information forms and handouts were translated from English to Spanish for Hispanic participants. Each focus group participant received a $20 Wal-Mart or K-Mart merchandise card as an incentive and, when available, a brochure entitled “Keeping Youth Drug Free.”

**Individual Interviews**

Individual interviews were conducted at various locations throughout Sarasota County, depending on what was mutually convenient for the participant and the interviewer. All interviews were conducted in English. Interviewers included three CBPM CAC members, the Sarasota Prevention Marketing Coordinator, and an FPRC staff member. Interviewers were trained by FPRC staff regarding the purpose of the study, the study questionnaire, and how to conduct individual interviews.

Two of the interviews were audiotaped, while the other eleven were recorded by taking written notes only. As with the focus group participants, interview participants completed an information form and were given a handout and self-addressed, stamped envelope to provide the researchers with additional information. Each individual interview participant received a $10 Wal-Mart gift card as an incentive and, when possible, a brochure entitled “Keeping Youth Drug Free.”

**Data Analysis**

All audiotapes were transcribed. An independent contractor transcribed the tapes from the four groups conducted in English. An FPRC staff member transcribed the tapes from the two groups conducted in Span-
ish and from the two interviews. The FPRC staff member typed and translated the co-moderators’ written notes from the two Hispanic focus groups. A native Spanish speaker reviewed translations for accuracy. Participants’ responses from the remaining interviews and the returned handouts also were typed.

Subsequently, at least two people read the transcripts and the typed notes from each focus group, interview, and handout. Readers included two USF graduate students, the Sarasota Prevention Marketing Coordinator, and three FPRC staff members. The readers coded the data by looking for themes that emerged and assigning a code word to each theme. Once the data were coded, an FPRC staff member entered the transcripts, notes, and codes into a computer program called Ethnograph. With Ethnograph, each code and its corresponding passages from the transcripts and notes were printed out. Subsequently, at least two people, including the Sarasota Prevention Marketing Coordinator, an FPRC staff member, and a USF graduate student, read each code and the corresponding passages to determine the main points found within each theme and to identify supporting quotes.
INTRODUCTION

This chapter contains a summary of the research conducted with youth regarding tobacco beliefs, attitudes, and behaviors. Data were collected from focus groups, individual interviews, and a survey of 6\textsuperscript{th} to 10\textsuperscript{th} graders.

**Research results are divided into five sections:**

1. A description of tobacco rates among youth and their intentions of tobacco use (**Tobacco Initiation and Use**);

2. A description of the determinants of smoking initiation (**Determinants of Smoking Initiation**);

3. A description of the determinants of recent smoking among those who have ever smoked (**Determinants of Recent Smoking**);

4. A table summarizing the determinants of **Smoking Initiation** and **Recent Smoking**, and

5. Comparisons between results of surveys about tobacco use among youth.

**Definitions**

*Smoking initiation* refers to whether or not youth report having “ever tried cigarette smoking, even one or two puffs?”

*Recent smoking* refers to those who have initiated tobacco use and who answered, “yes” to the question, “In the past 30 days, have you smoked cigarettes, even one or two puffs?”

*Qualitative research* in this report refers to focus group and individual interviews. As described in the methods section, qualitative research results assisted in the development of the survey.

*Survey research* in this report refers to the data analysis of the survey of 6\textsuperscript{th} through 10\textsuperscript{th} graders.
The initial data analyses revealed that many of the factors that contribute to explaining whether youth smoke are, themselves, other risk behaviors (e.g., alcohol use, delinquent behaviors) or risk behaviors of significant others (e.g., best friends, parents). Since these behaviors may not be direct intervention targets for programs aimed at preventing smoking, we have focused our subsequent analysis on identifying the factors that best explain youth smoking, among the factors that are promising and realistic intervention targets.

Significant findings from the survey research are reported for each smoking behavior, as well as highlights from the qualitative research results. Those factors that are significant explanatory factors are indicated with the following icons.

![Smoking Initiation](image)

**Smoking Initiation**

![Recent Smoking](image)

**Recent Smoking**

It is important to note that smoking behavior refers to the use of cigarettes, not smokeless tobacco products. Although our survey posed questions on smokeless tobacco use, only a small percentage of the sample had initiated smokeless tobacco use.
A large proportion of the youth reported that they have already “tried smoking a cigarette” and have “smoked a cigarette within the past 30 days.” As shown in Table 4, almost one-third (29%) of the 6th grade students reported having tried a cigarette with steady increases through tenth grade, whereas 70% have tried smoking.

Six percent of the 6th grade students reported having smoked a cigarette within the past 30 days, and steady increases across grade levels were once again observed, with nearly one-third of the 10th graders (32%) reporting having smoked a cigarette within the past 30 days.

Of particular note is the large increase in tobacco initiation and current smoking between 7th and 8th grades (39% to 53% and 13% to 20%, respectively). This indicates that the time period between sixth and seventh grades may be an appropriate intervention target.
<table>
<thead>
<tr>
<th></th>
<th>6&lt;sup&gt;th&lt;/sup&gt;</th>
<th>7&lt;sup&gt;th&lt;/sup&gt;</th>
<th>8&lt;sup&gt;th&lt;/sup&gt;</th>
<th>9&lt;sup&gt;th&lt;/sup&gt;</th>
<th>10&lt;sup&gt;th&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CIGARETTE SMOKING</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have ever tried cigarette smoking, even one or two puffs</td>
<td>29%</td>
<td>39%</td>
<td>53%</td>
<td>64%</td>
<td>70%</td>
</tr>
<tr>
<td><strong>SMOKING INITIATION</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have smoked a cigarette (even one or two puffs) within the past 30 days</td>
<td>6%</td>
<td>13%</td>
<td>20%</td>
<td>24%</td>
<td>32%</td>
</tr>
<tr>
<td><strong>RECENT SMOKING</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Belief they will become a regular smoker (yes and I am already a regular smoker)</td>
<td>5%</td>
<td>7%</td>
<td>11%</td>
<td>10%</td>
<td>15%</td>
</tr>
<tr>
<td>Belief they will try cigarette smoking during the next 12 months</td>
<td>31%</td>
<td>40%</td>
<td>54%</td>
<td>66%</td>
<td>71%</td>
</tr>
<tr>
<td>Belief they will try cigarette smoking ever in their lifetime</td>
<td>43%</td>
<td>55%</td>
<td>64%</td>
<td>70%</td>
<td>71%</td>
</tr>
<tr>
<td><strong>SMOKELESS TOBACCO</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Have ever tried chewing tobacco or snuff</td>
<td>3%</td>
<td>6%</td>
<td>11%</td>
<td>13%</td>
<td>19%</td>
</tr>
<tr>
<td>Have used chewing tobacco or snuff within past 30 days</td>
<td>&lt;1%</td>
<td>1%</td>
<td>3%</td>
<td>3%</td>
<td>5%</td>
</tr>
<tr>
<td>Belief they will try smokeless tobacco or snuff during the next 12 months</td>
<td>3%</td>
<td>6%</td>
<td>11%</td>
<td>13%</td>
<td>19%</td>
</tr>
</tbody>
</table>
This section contains a summary of the factors that influence smoking initiation among youth in Sarasota County.

Definition: Smoking initiation refers to whether or not youth report having “ever tried cigarette smoking, even one or two puffs?”

A comparison of students who have and have not ever smoked was conducted to identify the factors that explain smoking initiation. In addition to a description of these factors, information obtained in focus group and individual interviews are also summarized.

Those factors that are significant explanatory factors are indicated with the icon 🍿.

NOTE: In some tables, sums of percentages may be greater than 100% because some students selected more than one response.
At A Glance

The factors associated with whether or not a student has initiated smoking are divided into 4 categories: product, price, place and promotion.

Product (behavior – smoking initiation)

Youth Characteristics

  Grade Level
  Grades in School
  Family Structure
  Employment
  Involvement in Sports Activities
  Self-Reported Depression Level

Social Influences

  Peer Influence
  Parent Influence

Image

Benefits of Smoking Initiation

  Emotional Benefits
  Self Efficacy

Other Benefits

  Being Cool
  Fitting In
  Curiosity
  Maturity
  Experiencing a Rush
Price (costs of smoking initiation)

Mother’s Disappointment

Tastes Bad

Other Costs

Uncool
Financial Costs
Addiction
Health problems
Punishment

Place

Access to Cigarettes/Smoking

Promotion

Spokesperson
SMOKING INITIATION (PRODUCT)

One thousand and one youth (50% of the total survey respondents) re-
ported that they had ever tried cigarette smoking. Smoking initiation 
rates varied by grade level, grades earned in school, family structure, 
employment, involvement in sports activities and level of depression.

Characteristics of Youth Who Have Initiated Smoking

Grade Level

 Ninth and tenth graders were more than twice as likely as sixth 
graders to have initiated smoking.

By tenth grade almost three-fourths (70%) of youth had ever smoked a 
cigarette (Table 5).

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>6th</td>
<td>29%</td>
</tr>
<tr>
<td>7th</td>
<td>39%</td>
</tr>
<tr>
<td>8th</td>
<td>53%</td>
</tr>
<tr>
<td>9th</td>
<td>64%</td>
</tr>
<tr>
<td>10th</td>
<td>70%</td>
</tr>
</tbody>
</table>
Grades in School

The lower the self-reported grades youth usually earn in school, the more likely they were to report having initiated smoking.

Eighteen percent of youth participating in the survey responded that they usually earn C’s or lower grades in school (Table 6).

<table>
<thead>
<tr>
<th>HOW WOULD YOU DESCRIBE THE GRADES THAT YOU USUALLY GET IN SCHOOL?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mostly A’s</td>
</tr>
<tr>
<td>Mostly A’s and B’s</td>
</tr>
<tr>
<td>Mostly B’s</td>
</tr>
<tr>
<td>Mostly B’s and C’s</td>
</tr>
<tr>
<td>Mostly C’s</td>
</tr>
<tr>
<td>Mostly C’s and D’s</td>
</tr>
<tr>
<td>Mostly D’s</td>
</tr>
<tr>
<td>Mostly D’s and F’s</td>
</tr>
<tr>
<td>Mostly F’s</td>
</tr>
</tbody>
</table>
Family Structure

Youth whose living arrangements were divided between their mothers' and fathers’ homes and those who live with a parent and stepparent are \textit{nearly three times more likely} than youth who live with both parents to have initiated smoking.

Seven percent of youth participating in the survey reported that they divide their time between their mother’s and father’s homes, and 14% live with a parent and stepparent (Table 7).

<table>
<thead>
<tr>
<th>WHICH OF THE FOLLOWING STATEMENTS BEST DESCRIBES YOUR FAMILY SITUATION?</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>I live with both of my parents.</td>
<td>55%</td>
</tr>
<tr>
<td>I live with one of my parents.</td>
<td>22%</td>
</tr>
<tr>
<td>I live with one of my parents and a stepparent.</td>
<td>14%</td>
</tr>
<tr>
<td>I live in my mother’s house some of the time and in my father’s house some of the time.</td>
<td>7%</td>
</tr>
<tr>
<td>I live with my grandparents.</td>
<td>2%</td>
</tr>
<tr>
<td>Other</td>
<td>1%</td>
</tr>
</tbody>
</table>
Employment

Smoking initiation was related to the number of hours students work per week during the school year.

The *more hours* youth work at a job they get paid for during the school year, the *more likely* they were to have initiated smoking.

Twenty percent of youth participating in the survey reported that they typically work 10 or more hours per week during the school year (Table 8).

<table>
<thead>
<tr>
<th>TABLE 8</th>
<th>DURING THE SCHOOL YEAR, HOW MANY HOURS PER WEEK DO YOU TYPICALLY WORK AT A JOB THAT YOU GET PAID FOR (INCLUDING WEEK-ENDS)?</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 hours</td>
<td>60%</td>
</tr>
<tr>
<td>1-9 hours</td>
<td>20%</td>
</tr>
<tr>
<td>10-14 hours</td>
<td>8%</td>
</tr>
<tr>
<td>15-19 hours</td>
<td>5%</td>
</tr>
<tr>
<td>20 or more hours</td>
<td>7%</td>
</tr>
</tbody>
</table>
Involvement in Sports Activities

The more youth were involved in sports activities, the more likely they were to have initiated smoking. This result may be due to the fact that youth who are involved in sports have increased opportunities to hang out before and after sports practices and events and possibly smoke cigarettes.

In Table 9, team sports refer to group activities (e.g., basketball, volleyball and cheerleading), while individual sports refers to activities done alone (e.g., running and horseback riding).

In general, youth reported moderate participation in sports activities. Forty percent of youth participated in team sports more than once per month and approximately one third of youth participated in individual sports more than once a month.

<table>
<thead>
<tr>
<th>TABLE 9</th>
<th>PARTICIPATION IN SPORTS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Team sports</td>
</tr>
<tr>
<td>Less than once per year</td>
<td>27%</td>
</tr>
<tr>
<td>A few times per year</td>
<td>20%</td>
</tr>
<tr>
<td>About once per month</td>
<td>14%</td>
</tr>
<tr>
<td>More than once per month</td>
<td>40%</td>
</tr>
</tbody>
</table>
Self Reported Depression Level

The *higher the self-reported depression* level, the *more likely* youth were to have initiated smoking. In general, youth reported low levels of depression. On a scale of 1 to 4, with 1 indicating “never or rarely” (0-1 days) and 4 indicating “most or all of the time” (5-7 days), the mean depression score among survey respondents was 1.74.
Social Influences

Social influence has an important impact on many youth health behaviors. Social influence refers to youth’s perceptions of other people’s behavior as well as the advice they receive from peers, parents, and other adults.

Peer Influence

The higher youth’s perceptions of the proportion of kids their age who smoke increased, the more likely they were to have initiated smoking.

Fifty-seven percent of the youth believed that half or more than half of the kids their age smoke (Table 10).

<table>
<thead>
<tr>
<th>TABLE 10</th>
<th>I THINK _____ OF THE KIDS MY AGE SMOKE</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>5%</td>
</tr>
<tr>
<td>Some (fewer than half)</td>
<td>37%</td>
</tr>
<tr>
<td>About half</td>
<td>37%</td>
</tr>
<tr>
<td>Most (more than half)</td>
<td>20%</td>
</tr>
<tr>
<td>All</td>
<td>1%</td>
</tr>
</tbody>
</table>
Parental Influence

The more strongly youth believed that smoking is a good way to get back at their parents, the more likely they were to have initiated smoking.

Approximately one in five youth (21%) agreed or strongly agreed that smoking helps kids their age get back at their parents.

<table>
<thead>
<tr>
<th>TABLE 11</th>
<th>I THINK SMOKING HELPS KIDS MY AGE GET BACK AT THEIR PARENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree</td>
<td>4%</td>
</tr>
<tr>
<td>Agree</td>
<td>17%</td>
</tr>
<tr>
<td>Disagree</td>
<td>33%</td>
</tr>
<tr>
<td>Strongly Disagree</td>
<td>48%</td>
</tr>
</tbody>
</table>
**Product (Smoking Initiation) Image**

When asked during focus groups or individual interviews to “describe a smoker,” the following characteristics emerged:

- wears grungy (not necessarily a bad thing!), baggy clothes that may or may not have holes in them (these clothes do not have to be expensive);
- smells like smoke and may have holes in their clothing from cigarette burns;
- hangs out with other smokers and are desperate to be cool and will do anything to be cool;
- may be a member of popular group;
- receives attention from their peers because they are handsome or pretty;
- has a bad attitude characterized by not caring if they fail in school, does not think their parents care if they fail, and they talk about or back to their teachers;
- may appear to be unhealthy; and,
- is not that smart and may be considered an “idiot” by nonsmoking youth.

When asked to describe youth’s smoking behaviors, the following are some examples of youth’s perceptions:

- parents and others are aware of their behavior;
- youth smoking occurs away from home at gas stations, bus stops, alleys, woods, behind school, school parking lots, movie theaters, bathrooms, and locker rooms;

  “Wherever. As long as the cops don’t see you.” (10th grade male)

  “If their parents aren’t home and their parents smoke then they smoke in the house.” (8th grade female)

- youth smoking occurs between classes, after school, and at night;
- youth smoking occurs either with a group of friends or alone; and,
- youth who smoke alone tend to be regular smokers (addicted) while those who smoke with friends tend to be social smokers or smoke to be cool.
“If you’re smoking to be cool then the only time you are going to smoke cigarettes is around others that do. If it’s a social thing then you’re going to do it when you’re around a lot of people.” (10th grade female)
Perceived Benefits of Smoking Initiation (Product)

Emotional Benefit

The more strongly youth agreed that smoking provides emotional benefits, the more likely they were to have initiated smoking.

On a scale of 1 to 4, with 1 indicating ‘strongly disagree’ and 4 indicating ‘strongly agree,’ the mean ‘emotional benefits of smoking’ score for all grades was 1.99. The mean composite scores ranged from 1.69 (6th graders) to 2.28 (10th graders) indicating that 10th graders who have ever smoked perceive greater emotional benefits of smoking (e.g., relaxation, dealing with problems and boredom) than 6th graders.

<table>
<thead>
<tr>
<th></th>
<th>SA</th>
<th>A</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>I think smoking helps kids my age relax.</td>
<td>8%</td>
<td>30%</td>
<td>28%</td>
<td>35%</td>
</tr>
<tr>
<td>I think smoking helps kids my age deal with being bored.</td>
<td>7%</td>
<td>29%</td>
<td>29%</td>
<td>36%</td>
</tr>
<tr>
<td>I think smoking helps kids my age deal with their problems.</td>
<td>6%</td>
<td>15%</td>
<td>33%</td>
<td>47%</td>
</tr>
</tbody>
</table>

The focus groups and individual interviews revealed that the majority of youth were “fluent” at being able to discuss the use of smoking to cope with stress. They said youth smoke when they are “mad,” “stressed out,” when they are bored or when “something bad is going on in their life.”

Focus group discussants also identified cigarette smoking as a behavior that enables both youth and adults to control their anger, relax, cope with depression gives them something to do, and helps them make friends.

“That’s how like if I’m really upset I’ll go out in the back and light a cigarette up. If I’m not stressed I usually don’t smoke as much.”

(8th grade female)
“It just relieves my stress. I don’t know what else to do to relieve stress than smoking because I’ve been doing it for so long.” (9th grade female)
Self Efficacy

Self efficacy refers to youth’s perceptions of their ability to refuse cigarettes from friends, peers and others who encourage them to smoke. In this study, self efficacy also refers to youth’s perceptions of their ability to dissuade peers and adults from smoking.

The more strongly youth believed they would be able to refuse cigarettes offered by others, the less likely they were to have initiated smoking.

On a scale of 1 to 4 with 1 indicating ‘strongly disagree’ and 4 indicating ‘strongly agree,’ the mean ‘refusal skill’ score for all grades was 3.51. The self efficacy mean scores per grade were 3.56, 3.50, 3.46, 3.51, and 3.54 (6th through 10th grade respectively). These findings suggest that 6th and 10th graders feel more confident in refusing tobacco than 7th, 8th, and 9th graders.

<table>
<thead>
<tr>
<th></th>
<th>SA</th>
<th>A</th>
<th>D</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>If my best friend offered me a cigarette, I would be able to say no.</td>
<td>66%</td>
<td>23%</td>
<td>7%</td>
<td>5%</td>
</tr>
<tr>
<td>If someone more popular than me offered me a cigarette, I would be able to say no.</td>
<td>63%</td>
<td>26%</td>
<td>8%</td>
<td>4%</td>
</tr>
<tr>
<td>If an older brother/sister offered me a cigarette, I would be able to say no.</td>
<td>69%</td>
<td>23%</td>
<td>5%</td>
<td>3%</td>
</tr>
</tbody>
</table>

Focus group discussants described a variety of ways they refuse encouragement from others to smoke:

“I would just accept it and put it in my pocket and I’ll say, ‘I’ll smoke it later’ and then I’ll throw it away.”

(8th grade female)
“If a person asked me to smoke I’ll just say no. Because if you don’t want to you don’t have to.” (6th grade male)

“I’d say no, and that it’s bad for you and you could die.” (5th grade male)

Emotional responses to being offered a cigarette included feeling “forced,” “embarrassed,” “nervous,” “pressured,” “angry,” “uncomfortable,” “scared,” “terrible,” and “discomfort.”

Some youth who do not exhibit high self efficacy may doubt the effectiveness of the refusal skills they have been taught to use.

“I would not feel very good…If it’s one of my friends it’s going to be kind of hard to say no. Everybody thinks it’s real easy to say no. It’s not real easy.” (5th grade male)

Some youth felt very strongly that they have the ability to convince their peers and relatives not to smoke while other youth felt their efforts to convince others to not start or to stop smoking would fail to result in behavior change:

“If you’re a real friend then you’ll tell them to stop. And you’ll help them to stop.” (6th grade female)

“It wouldn’t bug me. It’s just, they’re your friends. What can you do about it?”

While many of the youth felt comfortable telling others not to smoke, some youth indicated they did not feel it was ‘their place’ to advise anyone to quit smoking or not to smoke. Many current smokers, in particular, felt attempting to convince others to not smoke would be hypocritical. However, some current smokers indicated they would feel good because they would be preventing someone from making the same mistake they had made:

“Well, I don’t think it’s good for them, but it’s their choice so I don’t try to butt in their life.”
“I would feel like a hypocrite because I smoke.”
(10th grade female)

“I would feel happy because I’m trying to influence my friends not to smoke. That’s why I’m trying to quit.”
(8th grade male)
Other Perceived Benefits of Smoking

In focus groups and individual interviews, several additional costs were mentioned for smoking. These actors were not explanatory factors of smoking initiation in the survey data analysis. Although they were not significantly associated with smoking initiation, qualitative and quantitative results related to these factors are reported below.

Being Cool

For some students, smoking was considered “cool.” They also said that smoking allows them to obtain things that are considered cool, such as access to the popular crowd, friends, belonging, attention, maturity, social ease, popularity, improved appearance, and a new identity, and smoking demonstrates to their peers that they are indeed cool:

“Because I tried a cigarette and it was so nasty but I thought that is was so cool so I just kept on trying it and trying it and then I got addicted so I stopped.”
(6th grade female)

In their view, smoking has the ability to establish a youth as being cool:

“And then your friends are like telling you that it’s cool and that you’ll be cool.” (8th grade)

It also enhances the coolness of a youth already considered cool by his or her peers:

“People that think they’re all cool so they start smoking and they think it makes them look better.”
(5th grade male)
Only 8% of youth agreed or strongly agreed that smoking makes kids their age look cooler (Table 14).

<table>
<thead>
<tr>
<th>TABLE 14</th>
</tr>
</thead>
<tbody>
<tr>
<td>I THINK SMOKING HELPS KIDS MY AGE LOOK COOLER</td>
</tr>
<tr>
<td>Strongly agree</td>
</tr>
<tr>
<td>Agree</td>
</tr>
<tr>
<td>Disagree</td>
</tr>
<tr>
<td>Strongly disagree</td>
</tr>
</tbody>
</table>
Fitting In

Many focus group and individual interview participants alluded to the ability of cigarette smoking to initiate peer group transitions, “...you could lose friends, or you might gain friends, but they’re bad friends, maybe.” They said smoking enables youth to get to know one another, “just to get to know people,” and to fit in to various groups.

“Some people, …they be smoking, they trying to be in the crew, and want to smoke with them just to be their friend” (8th grade male/female).

“Yeah mostly everybody is like smoking at the party and you’re not and you’re just the only one, I know most kids will try it. They don’t want to be left out.” (9th grade female)

Eleven percent agreed or strongly agreed that smoking helps kids their age fit-in (Table 15).

<table>
<thead>
<tr>
<th>TABLE 15</th>
<th>I THINK SMOKING HELPS KIDS MY AGE FIT-IN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree</td>
<td>2%</td>
</tr>
<tr>
<td>Agree</td>
<td>9%</td>
</tr>
<tr>
<td>Disagree</td>
<td>26%</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>63%</td>
</tr>
</tbody>
</table>
Curiosity

Several youth mentioned smoking initiation as a way to satisfy curiosity regarding the effects of cigarettes; to “just...see what it was like.”

“They see everybody else doing it or they’re curious about it and then they try it and then they find out that it kind of gets your mind off everything.” (10th grade male)
Maturity

Focus group discussants also said smoking can make them look more mature or older. The youth also associated maturity with their older siblings and older members of their social networks.

“It makes us think that we’ll be cool, because we all look up to our siblings.” (7th grade male)

More than 8 out of 10 youth (82%) agreed or strongly agreed that kids who smoked looked more grown up than kids who didn’t smoke (Table 16).

| TABLE 16 |
| I THINK KIDS WHO SMOKE LOOK MORE GROWN UP THAN KIDS WHO DON’T SMOKE |
| Strongly agree | 55% |
| Agree | 27% |
| Disagree | 12% |
| Strongly disagree | 5% |
Experiencing A Rush

Some adolescents believed tobacco has mood altering and other pleasurable qualities. However, adolescents expressed uncertainty regarding the actual physiological effects of tobacco. Also, it is not clear whether the respondents were referring to the rush of smoking or the rush of actually obtaining cigarettes or performing the behavior.

“I know some kids that smoke cigarettes after they get done getting high so that it increases their buzz and all that.” (10th grade male)

More than 6 out of 10 (65%) youth agreed or strongly agreed that kids who smoke like the feeling they get from smoking cigarettes (Table 17).

<table>
<thead>
<tr>
<th>TABLE 17</th>
<th>I THINK KIDS WHO SMOKE LIKE THE FEELING THEY GET FROM CIGARETTES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly agree</td>
</tr>
<tr>
<td></td>
<td>Agree</td>
</tr>
<tr>
<td></td>
<td>Disagree</td>
</tr>
<tr>
<td></td>
<td>Strongly Disagree</td>
</tr>
</tbody>
</table>
PRODUCT STRATEGY

Primary Target Audience

By tenth grade, 70% of youth have initiated smoking, suggesting that a prevention program should focus its efforts to reduce smoking initiation among middle school students, with special emphasis in 6th and 7th grades (Table 18).

<table>
<thead>
<tr>
<th>Have ever tried cigarette smoking, even one or two puffs</th>
<th>6th</th>
<th>7th</th>
<th>8th</th>
<th>9th</th>
<th>10th</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>29%</td>
<td>39%</td>
<td>53%</td>
<td>64%</td>
<td>70%</td>
</tr>
</tbody>
</table>

Secondary Target Audience

Middle school students look to a variety of sources for trustworthy information on smoking:

- DARE officer/resource officer
- School counselor
- Teacher
- Older kids
- Religious leader
- A celebrity

Parents would also be a secondary target based on the survey data suggesting that parental influence explains why youth initiate smoking.
**Behavioral Objectives**

Specific behaviors promoted by marketing plan for each target audience

**Primary target audience:** middle school students

- Do not start smoking

**Secondary target audiences**

- Encourage middle school youth to not start smoking
Prevention Marketing Questions

How can the perception that youth are not the only ones not smoking be supported/reinforced?

What can be done to counter the view that tobacco is a good way to cope with anger, depression, stress and other problems?

What are the refusal skills needed for youth?

What are some good ways to convey refusal skills?

How can youth be supported in using refusal skills?

What are other skills needed by youth to not smoke?

NOTES:
PERCEIVED COSTS (PRICE) TO SMOKING INITIATION

Mother’s (or Female Guardian’s) Disappointment

The more disappointed youth perceive their mother would be if they were caught smoking, the less likely they are to have initiated smoking.

Over eighty percent of the youth believed their mother would be disappointed quite a bit or very much if they were caught smoking (Table 19).

<table>
<thead>
<tr>
<th>TABLE 19 HOW DISAPPOINTED WOULD YOUR MOTHER (OR FEMALE GUARDIAN) BE IF SHE CAUGHT YOU SMOKING?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
</tr>
<tr>
<td>Very little</td>
</tr>
<tr>
<td>Somewhat</td>
</tr>
<tr>
<td>Quite a bit</td>
</tr>
<tr>
<td>Very much</td>
</tr>
</tbody>
</table>
**Tastes Bad**

The *more strongly* youth believed that smoking tastes bad, the *less likely* they were to have ever smoked.

Over three-fourths of the youth believed that smoking tastes bad (Table 20).

<table>
<thead>
<tr>
<th>TABLE 20</th>
<th>I THINK SMOKING TASTES BAD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree</td>
<td>53%</td>
</tr>
<tr>
<td>Agree</td>
<td>23%</td>
</tr>
<tr>
<td>Disagree</td>
<td>14%</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>11%</td>
</tr>
</tbody>
</table>

In focus groups and individual interviews, youth talked about how they were repelled by the smell of cigarettes in clothing, cars, and on the person’s breath and body. They noted that their peers and adults try in vain to hide the smell of cigarettes but often only make themselves smell worse with strong perfume or cologne.

Some youth also mentioned the “bad” taste of smoking as a negative aspect of the behavior.

“It really tastes bad.”
Other Perceived Costs of Smoking

In focus group and individual interviews, several additional costs were mentioned for smoking. These factors were not significantly associated with smoking initiation in the survey data. Although they are not explanatory factors of smoking, qualitative and quantitative research results related to these factors are reported below.

Uncool

While many youth indicated one of the reasons youth smoke is because of coolness (refer to Table 14), there were several youth that indicated smoking is “uncool.” These youth described smoking as “nasty,” “stupid,” and “disgusting.”

“People think it’s cool to just hold a cigarette in your hand, but it’s really not. I just makes them look like they weren’t brought up with good parents.”
(6th grade female)
Financial Costs

In focus groups, many youth said they did not want to waste money buying cigarettes that could be better spent on a car or other commodities.

“I wish cigarettes were never made. You waste your money. It’s like $3.00 a pack. It’s not even helping you. People think it calms your nerves, but it really doesn’t. It just hurts your body and it doesn’t help you with anything.” (6th grade female)

Nearly 3 out of 4 (74%) youth agreed or strongly agreed that cigarettes cost a lot (Table 21).

<table>
<thead>
<tr>
<th>TABLE 21</th>
<th>CIGARETTES COST A LOT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree</td>
<td>33%</td>
</tr>
<tr>
<td>Agree</td>
<td>41%</td>
</tr>
<tr>
<td>Disagree</td>
<td>20%</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>6%</td>
</tr>
</tbody>
</table>
Addiction

Focus group and individual interview participants were unable to reach a consensus on the number of cigarettes smoked or frequency of smoking required to qualify someone as addicted. However, many youth felt that even one cigarette could lead to addiction.

“I say one because if they start they wouldn’t keep doing it if they weren’t addicted.”

The youth described the characteristics of nicotine addiction, such as irritability, when their parents are ‘overdue’ for their cigarettes and the inability to leave the house without a supply of cigarettes. A current adolescent smoker described costs associated with addiction such as weight gain and withdrawal symptoms, she experienced when she tried to quit in the past, and decreased academic performance due to the “need” to skip classes to smoke.
Health Problems

It became clear during the focus group and individual interviews that youth were well-versed in both the short- and long-term negative health effects of cigarette smoking and the risks associated with second hand smoke, albeit the accuracy of the information they gave varied. Long-term costs mentioned included lung cancer, throat cancer, heart disease, emphysema, death, asthma, tracheotomies, wrinkles and stunted growth. Short-term effects included itchy eyes, voice problems, bad breath, yellow teeth, gum disease, memory loss that can cause youth to “do bad in school,” and interference with breathing and sports performance:

“…yeah, when the children inhale the smoke [from their parents] it damages their health, their heart, their lungs, and bloodstream.” (6th grade male)

Almost all youth (95%) agreed or strongly agreed that smoking causes health problems (Table 22).

| TABLE 22 |
| I THINK SMOKING CAUSES HEALTH PROBLEMS |
| Strongly agree | 84% |
| Agree | 11% |
| Disagree | 1% |
| Strongly disagree | 4% |
Punishment

When asked, “What happens when youth get caught smoking?” focus group discussants mentioned punishment by parents, school personnel, or police. Some youth referred to actual events they had witnessed, while others were not sure of the actual consequences but based their responses on what they thought or heard.

“Oh, my cousin, they tried to smoke one day and they were caught. And she said, ‘This is bad for you.’ And they made him eat it I think they said. And write a story [about] why they shouldn’t smoke. And they were the one’s who smoked.” (6th grade male)

Youth from alternative programs were more familiar with the punitive consequences of smoking. However, some youth said that anti-smoking rules are poorly enforced.

“Some cops will come out and tell you to put it out or some cops will just say ‘How old are you?’ and they’ll just kind of leave it alone.” (10th grade male)

“We feel like we can be any age. It’s our decision, but if we do get caught we will pay the consequences. Like if you get caught the first time with cigarettes, it’s a $28 fine. The second time you get caught it’s a $48 fine. And the third time you get caught you won’t get your license until you’re 18.” (8th grade male)
More than 6 out of 10 (62%) youth disagreed or strongly disagreed that kids who take cigarettes to school will get caught (Table 23).

<table>
<thead>
<tr>
<th>TABLE 23</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIDS WHO TAKE CIGARETTES TO SCHOOL WILL GET CAUGHT</td>
</tr>
</tbody>
</table>

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree</td>
<td>13%</td>
</tr>
<tr>
<td>Agree</td>
<td>26%</td>
</tr>
<tr>
<td>Disagree</td>
<td>45%</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>17%</td>
</tr>
</tbody>
</table>
PRICING STRATEGY

Prevention Marketing Questions

What can be done to reinforce the view that smoking tastes bad?

What can be done to show youth that if you take cigarettes to school you will be caught?

What can be done to help parents communicate the “disappointment” they would feel if they found out that their child(ren) smoke?
PLACE

Access to Cigarettes/Smoking

The *easier* youth believed it is to obtain cigarettes, the *more likely* they were to have ever smoked.

On a scale of 1 to 4 with 1 indicating ‘strongly disagree’ and 4 indicating ‘strongly agree,’ the mean ‘access to smoking’ score for all grades was 2.91. The mean access to smoking composite score ranged from 2.35 (6th graders) to 3.35 (10th grades). These data might suggest that 6th graders perceive greater barriers to accessing cigarettes (i.e., easy to get); whereas, 10th graders did not perceive substantial barriers to accessing cigarettes.

<p>| TABLE 24 |</p>
<table>
<thead>
<tr>
<th>ACCESS TO SMOKING</th>
</tr>
</thead>
<tbody>
<tr>
<td>SA</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>It is easy for kids my age to get cigarettes.</td>
</tr>
<tr>
<td>It would be easy for me to get cigarettes if I wanted to.</td>
</tr>
</tbody>
</table>

Individuals who either obtain cigarettes for youth or provide them with easy access include older friends, siblings, other kids who smoke, parents, and people who purchase tobacco from local stores.

“*Like if somebody goes in a store, a grown-up, to buy beer and everything, you know that they’re all screwed up so you just ask them, you give them the money and they’ll buy cigarettes for you, and they just go in.*”

(8th grade female)

Focus group data indicates that locations in Sarasota where youth obtain cigarettes include gas stations (Hess), stores (Winn Dixie, Wal-Mart), and “downtown” Sarasota. Youth said that they steal them from these locations, persuade clerks to sell to them, or convince other customers or older friends to purchase cigarettes for them. Some youth said kids their age purchase cigarettes from peers who work at locations
that sell cigarettes. One respondent stated that she is not carded and is able to purchase cigarettes and alcohol.

“I mean, look at me. I don’t look like I’m 16 years old. I can go in the store and buy beer, cigarettes, whatever.” (11th grade female)

Access to cigarettes was easy for those kids whose parents smoke. Youth whose parents smoke said they were either provided with cigarettes or steal cigarettes they find in their home.

“Yes, my friend’s parents, they have them all over the house. That’s where she gets them.”
(7th grade female)

“If your parents smoke, you can automatically [get your hands] on them. You can just like get one.”
(8th grade female)

“Some teenagers can smoke with their parents. Their parents will buy them cigarettes.” (10th grade male)

Access was more difficult for children of nonsmokers. These youth are “forced” to travel outside of the home for cigarettes, steal from local merchants, rely on legal age individuals to obtain cigarettes for them, or rely on handouts from friends.

“But if your parents don’t smoke, you either go to a friend, stand outside of a store, you know.”
(8th grade female)

“It’s a lot of money for it probably, because you have to pay your friends to get it.” (6th grade male)
PLACEMENT STRATEGY

Prevention Marketing Questions

What can be done to make it more difficult for middle school age youth to get cigarettes:

- from home?
- from retail outlets?
- from friends?
- from siblings?

What can be done to help parents limit youth’s access to cigarettes?
PROMOTION

Focus group and individual interview participants mentioned a variety of people – parents, teachers, school professionals, and other kids my age who smoke – as trustworthy sources regarding the risks of smoking.

Spokespersons

When survey respondents were asked to select from a long list of potential information sources, their responses varied considerably by grade. Table 25 displays the rank ordering of selected spokespersons by grade, with “1” representing the most frequently selected spokesperson. Older siblings were the only information sources ranked within the top 10 responses by students in all grades.
### TABLE 25
WHOM DO YOU TRUST THE MOST TO GIVE YOU GOOD INFORMATION ABOUT THE RISKS OF SMOKING? (AMONG EVERYONE)

<table>
<thead>
<tr>
<th>Responses</th>
<th>6th</th>
<th>7th</th>
<th>8th</th>
<th>9th</th>
<th>10th</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parents</td>
<td>8</td>
<td>7</td>
<td>-</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Older brothers/sisters</td>
<td>10</td>
<td>10</td>
<td>3</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>Other relatives</td>
<td>6</td>
<td>9</td>
<td>7</td>
<td>4</td>
<td>7</td>
</tr>
<tr>
<td>DARE officer/resource officer</td>
<td>1</td>
<td>4</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Teacher</td>
<td>3</td>
<td>8</td>
<td>-</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Religious leader</td>
<td>9</td>
<td>3</td>
<td>-</td>
<td>5</td>
<td>9</td>
</tr>
<tr>
<td>School counselor</td>
<td>2</td>
<td>5</td>
<td>9</td>
<td>10</td>
<td>-</td>
</tr>
<tr>
<td>Friends</td>
<td>-</td>
<td>6</td>
<td>6</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Older kids</td>
<td>7</td>
<td>2</td>
<td>4</td>
<td>-</td>
<td>6</td>
</tr>
<tr>
<td>Other kids my age who smoke</td>
<td>-</td>
<td>-</td>
<td>5</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Someone who used to smoke but doesn’t smoke anymore</td>
<td>-</td>
<td>-</td>
<td>8</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>A celebrity</td>
<td>4</td>
<td>1</td>
<td>2</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Your doctor</td>
<td>-</td>
<td>-</td>
<td>10</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>A T.V. commercial</td>
<td>5</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Student recommendations regarding spokespersons for television and radio advertisements suggest that a resource officer (i.e., DARE officer), a teacher and an adult would be the most effective spokespersons for reaching 6th and 7th graders. Ninth and 10th graders would be more likely to listen to other kids their age who smoke, other kids their age, or someone who used to smoke, but doesn’t anymore.
<table>
<thead>
<tr>
<th>Responses</th>
<th>Grade Level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6th</td>
</tr>
<tr>
<td>An adult</td>
<td>3</td>
</tr>
<tr>
<td>A DARE officer/resource officer</td>
<td>1</td>
</tr>
<tr>
<td>A teacher</td>
<td>2</td>
</tr>
<tr>
<td>Religious leader</td>
<td>4</td>
</tr>
<tr>
<td>Other kids my age</td>
<td>-</td>
</tr>
<tr>
<td>Other kids my age who smoke</td>
<td>-</td>
</tr>
<tr>
<td>Someone who used to smoke, but doesn’t any more</td>
<td>-</td>
</tr>
<tr>
<td>A celebrity</td>
<td>-</td>
</tr>
<tr>
<td>A doctor</td>
<td>5</td>
</tr>
</tbody>
</table>

**Prevention Strategies**

During the focus group and individual interviews, youth were asked to describe activities and/or strategies they believed to be effective or not effective. The following is a brief summary.

Effective strategies in preventing youth from tobacco use:

- Anecdotes
- Concrete Examples
- Practicing Refusal Skills
- Personally Relevant Examples
- Straight Facts/Direct Messages
- Expressing Feeling
- Change Social Norms
- Cessation Aids
- Pressure to Not Smoke
- Adolescent Smokers’ Stories

Strategies or approaches that do not work include:
✓ Billboards
✓ Preaching
✓ Exaggeration
✓ Incentives
✓ Lectures
✓ Fake Commercials
PROMOTION STRATEGY

Prevention Marketing Questions

How can trusted spokespersons at each grade level be used more effectively in communicating that middle school students should not start smoking?
AUDIENCE SEGMENTATION

Audience segmentation is a systematic approach of dividing a population into distinct segments based on characteristics they share. Segmentation is performed also to design messages and interventions for special target audiences, since “one size” may not “fit all.”

The results of the audience segmentation analysis reveal that three segments of the population are particularly likely to have initiated smoking.

<table>
<thead>
<tr>
<th>SEGMENT</th>
<th>CHARACTERISTICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Segment #1 (9% of population)</td>
<td></td>
</tr>
</tbody>
</table>
| 63% of the youth in this population segment have ever used tobacco. | * Ever had a drink of alcohol  
* Not used marijuana in the past year  
* Has siblings who do not smoke  
* Hold low to moderate belief that mother would be disappointed if she caught youth smoking |
| Segment #2 (11% of population) |
| 80% of the youth in this population segment have ever used tobacco. | * Ever had a drink of alcohol  
* Not used marijuana in the past year  
* Has siblings smoke  
* Hold Low self efficacy to refuse offers of tobacco |
| Segment #3 (14% of population) |
| 98% of the youth in this population segment have ever used tobacco. | * Ever had a drink of alcohol  
* Used marijuana in the past year  
* Hold belief that tobacco use improves self image |
DETERMINANTS OF RECENT SMOKING

This section contains a summary of the factors that influence recent smoking among youth in Sarasota County.

**Definition:** Recent smoking refers to those who have initiated tobacco use and who answered, “yes” to the question, “In the past 30 days, have you smoked cigarettes, even one or two puffs?”

The results highlight differences among youth who have initiated smoking but have not smoked in the past 30 days as compared to youth who have initiated smoking and have smoked in the past 30 days. The factors that explain recent smoking behavior are reported along with information obtained from focus groups and individual interviews.

Factors that are significant explanatory factors are indicated with the icon.

**NOTE:** In some tables, sums of percentages may be greater than 100% because some students selected more than one response.
Factors associated with recent smoking are divided into three categories: product, price, and promotion.

**Product (behavior – recent smoking)**

- Characteristics
  - Grade Level
  - Race

- Benefits of Recent Smoking
  - Emotional Benefits

- Social Influences
  - Self Efficacy
  - Parental Influence

**Price (costs of recent smoking)**

- Getting Caught

- Mother’s Disappointment

- Tastes Bad

**Promotion**

- Spokesperson
RECENT SMOKING (PRODUCT)

Of the 1001 youth who have initiated smoking, the majority (634 or 64%) reported that they did not smoke during the month before they completed the survey.

Characteristics of Youth Who Are Recent Smokers

Grade Level

Students in 6th grade were three times less likely than those in 7th, 8th or 9th grades, and more than four times less likely than those in 10th grade to have smoked during the previous month.

<table>
<thead>
<tr>
<th>Grade Level</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>6th</td>
<td>21%</td>
</tr>
<tr>
<td>7th</td>
<td>34%</td>
</tr>
<tr>
<td>8th</td>
<td>38%</td>
</tr>
<tr>
<td>9th</td>
<td>38%</td>
</tr>
<tr>
<td>10th</td>
<td>45%</td>
</tr>
</tbody>
</table>
Youth who identified themselves as “White” were more likely than those who identified themselves as “Black or African American” or “Other” to have smoked in the previous month.

**TABLE 28**

**IN THE PAST 30 DAYS, HAVE YOU SMOKED CIGARETTES, EVEN ONE OR TWO PUFFS?**

<table>
<thead>
<tr>
<th></th>
<th>No</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>61%</td>
<td>39%</td>
</tr>
<tr>
<td>Black or African American</td>
<td>85%</td>
<td>15%</td>
</tr>
<tr>
<td>Other</td>
<td>70%</td>
<td>30%</td>
</tr>
</tbody>
</table>
PERCEIVED BENEFITS OF RECENT SMOKING

The more strongly youth believed that smoking offers emotional benefits, the more likely youth were to have smoked in the past 30 days.

On a scale of 1 to 4 with 1 indicating ‘strongly disagree’ and 4 indicating ‘strongly agree,’ the mean ‘emotional benefits of smoking’ score for youth who had ever smoked in all grades was 2.24. The mean scores ranged from 2.01 (6th graders) to 2.44 (10th graders). These results suggest that older students hold stronger beliefs about the emotional benefits of smoking (e.g., relaxation, dealing with problems, and boredom).

Slightly more than half of the students who have tried smoking disagreed with the statement that smoking helps kids their age to relax. Slightly less believe it helps kids their age deal with boredom, and less than one-third of the students believed it helps them deal with other problems (Table 29).

<table>
<thead>
<tr>
<th>TABLE 29</th>
<th>EMOTIONAL BENEFITS OF SMOKING</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SA</td>
</tr>
<tr>
<td>I think smoking helps kids my age relax.</td>
<td>12%</td>
</tr>
<tr>
<td>I think smoking helps kids my age deal with being bored.</td>
<td>10%</td>
</tr>
<tr>
<td>I think smoking helps kids my age deal with their problems.</td>
<td>7%</td>
</tr>
</tbody>
</table>
Social Influence

Parental Influence

The more likely youth were to listen to their parents when they give advice about smoking, the less likely they were to have smoked in the past 30 days.

Parents appear to have an important role in preventing their children from smoking. Over two-thirds (71%) of survey respondents said they usually listen to their parents’ advice about smoking.

| TABLE 30 |
| WHEN MY PARENTS/GUARDIANS GIVE ME ADVICE ABOUT SMOKING, I USUALLY LISTEN TO THEM |
| Strongly agree | 27% |
| Agree | 44% |
| Disagree | 22% |
| Strongly disagree | 9% |

Most focus group discussants said their parents have talked to them about tobacco. Even parents who smoke appear to have discouraged their children from smoking by telling them about its impact on their health and how difficult it has been for them to quit.

“I’ve been told, ‘Don’t ever try it,’ because you know, because my dad been smoking for a long, long while and he can’t quit.” (8th grade female)

“I trust] my mom and dad. Because they told me their experience, coughing up blood and stuff.” (6th/7th grade male/female)

When asked how they felt when their parents talked to them about smoking, some youth stated they appreciated their parents’ advice, while some kids expressed irritation or boredom:

“I’d feel good because they were telling me something.”
“…like that’s very nice of you, mom, but I know already.” (8th grade female)
Parent focus group discussants believed talking with kids was effective, particular in conjunction with supervision, parent involvement, or role modeling. Many parents liked communication with their kids as a way to enhance their relationship with their children.

Some parents found it easy to talk to their kids, while others questioned their ability to communicate with children effectively.

“That is the easiest for me as well .. education slash talking, for me.”

“I can talk a blue streak, and it’s like ‘Are they listening or zooming me out, tuning me out?’”

“[One of the biggest challenges is] communication, getting them to understand what I am trying to get across to them. Kids do not care and are selective in what they listen to.”
Decision Making

Another parenting issue related to smoking was their concern about their children's friends. The *more frequently* youth were allowed to make their own decisions about the people they hang around with, the *more likely* they were to have smoked in the past 30 days.

Seventy-six percent of youth who participated in the survey indicated that their parents allowed them to make their own decisions about the people they hang around with most or all of the time.

<table>
<thead>
<tr>
<th>TABLE 31</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOW OFTEN DO YOUR PARENTS/GUARDIANS LET YOU MAKE YOUR OWN DECISIONS ABOUT THE PEOPLE YOU HANG AROUND WITH?</td>
</tr>
<tr>
<td>Always</td>
</tr>
<tr>
<td>Most of the time</td>
</tr>
<tr>
<td>Some of the time</td>
</tr>
<tr>
<td>Almost never</td>
</tr>
<tr>
<td>Never</td>
</tr>
</tbody>
</table>

In the parent focus groups the issue of discipline was a major concern for many parents. Parents generally felt that teaching their kids discipline is very important. The idea of discipline included setting and negotiating rules and limits for kids, maintaining control within the home, teaching kids about consequences for their actions, teaching kids responsibility, teaching kids respect, and punishing them.

Parents also expressed difficulty in balancing the need for disciplining children and the desire to teach them independence.

“I think there is a fine line between having control as a parent and also being able to give them the freedom that they need to be able to experience the things that they need to experience in order to grow into a young adult.”

Parents who are concerned about the friends their children spend time with have good reason: students whose best friends smoke are significantly more likely to smoke themselves than those who spend time with non-smokers.
Self Efficacy

The less strongly youth believed they would be able to refuse cigarettes from others, the more likely they were to have smoked in the past 30 days.

As shown in Table 32, several questions were used to measure students’ perception of their refusal skills. Most students strongly agreed with each question, suggesting that they felt prepared to decline offers from peers.

On a scale of 1 to 4 with 1 indicating ‘strongly disagree’ and 4 indicating ‘strongly agree,’ the mean ‘refusal skills’ score among youth who had ever smoked all grades were 3.75. The mean scores ranged from 3.71 (6th graders) to 3.88 (10th graders). These results suggest that older students are slightly more confident in their ability to refuse tobacco.

<table>
<thead>
<tr>
<th>TABLE 32</th>
<th>SELF EFFICACY TO REFUSE OFFERS OF TOBACCO</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SA</td>
</tr>
<tr>
<td>If my best friend offered me a cigarette, I would be able to say no.</td>
<td>51%</td>
</tr>
<tr>
<td>If someone more popular than me offered me a cigarette, I would be able to say no.</td>
<td>50%</td>
</tr>
<tr>
<td>If an older brother/sister offered me a cigarette, I would be able to say no.</td>
<td>56%</td>
</tr>
</tbody>
</table>
Prevention Marketing Questions

What can be done to counter the view that smoking has emotional benefits?

What can be done to teach youth better ways to deal with boredom, stress and other problems?

How can youths’ refusal skills be enhanced?

What can be done to support parents in determining whom their children spend time with?
PERCEIVED COSTS (PRICE) OF RECENT SMOKING

Getting Caught

The more strongly youth believed they will get caught if they take cigarettes to school the more likely they were to have smoked in the last 30 days.

Although fear of being punished may act as a deterrent to smoking at school, less than one-third (30%) of the students surveyed agreed or strongly agreed that kids who bring cigarettes to school will be caught. This low percentage may be because they have watched peers escape detection when smoking at or near school. Also, as mentioned earlier, actually taking cigarettes to school may be part of the “rush” students referred to.

<table>
<thead>
<tr>
<th>TABLE 33</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIDS WHO TAKE CIGARETTES TO SCHOOL WILL GET CAUGHT</td>
</tr>
<tr>
<td>Strongly agree</td>
</tr>
<tr>
<td>Agree</td>
</tr>
<tr>
<td>Disagree</td>
</tr>
<tr>
<td>Strongly disagree</td>
</tr>
</tbody>
</table>

Although some focus group discussants have witnessed peers get punished for smoking, others were not sure of the actual consequences of being caught smoking; others referred to events they had witnessed. Youth from alternative programs were more familiar with the consequences of smoking. They discussed punishments such as getting a ticket and being grounded. However, some youth said that security guards, cops and parents are lax in enforcing anti-smoking rules.

“Some cops will come out and tell you to put it out or some cops will just say ‘How old are you?’ and they’ll just kind of leave it alone.” (10th grade male)

“Oh some will go behind like at high school, the teachers they don’t really stop them from smoking cigarettes like out in the parking lot or whatever they won’t let them do it like in actual
classrooms or hallway and stuff. But they’ll go in the bathrooms and stuff to do it.” (8th grade male)
Mother’s (or Female Guardian’s) Disappointment

More disappointed youth believed their mothers would be if they were caught smoking, the less likely they were to have smoked in the last 30 days.

Only 10% of students did not expect their mothers to be at least somewhat disappointed if they smoked cigarettes (Table 34). It is not clear how many of these students’ mothers knew their children smoked or whether or not their children’s perceptions were accurate.

| TABLE 34 HOW DISAPPOINTED WOULD YOUR MOTHER (OR FEMALE GUARDIAN) BE IF SHE CAUGHT YOU SMOKING? |
|-------------------------------------------------|-----------------|
| Not at all                                       | 5%              |
| Very little                                     | 5%              |
| Somewhat                                        | 17%             |
| Quite a bit                                     | 28%             |
| Very much                                       | 45%             |
Tastes Bad

The more strongly youth believed cigarettes taste bad, the less likely they were to have smoked in the past 30 days.

Among students who have tried smoking, 67% agreed or strongly agreed with the statement that smoking tastes bad (Table 35).

<table>
<thead>
<tr>
<th>TABLE 35</th>
<th>I THINK SMOKING TASTES BAD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree</td>
<td>42%</td>
</tr>
<tr>
<td>Agree</td>
<td>25%</td>
</tr>
<tr>
<td>Disagree</td>
<td>22%</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>12%</td>
</tr>
</tbody>
</table>
PRICING STRATEGY

Prevention Marketing Questions

What can be done to reinforce the view that smoking tastes bad?

What can be done to reinforce school regulations about smoking?

What can be done to reinforce youths’ fears of disappointing their mothers?
PROMOTION

Focus group and individual interview participants mentioned a variety of people such as parents, teachers, school professionals, and other kids my age who smoke as trustworthy sources regarding the risks of smoking.

Spokespersons

When survey respondents were asked to select from a long list of potential information sources, their responses varied considerably by grade. Table 36 displays the rank ordering of selected spokespersons by grade, with “1” representing the most frequently selected spokesperson. Among recent smokers, friends were the only information sources ranked within the top 10 categories by students in all grades.

<table>
<thead>
<tr>
<th>Responses</th>
<th>Grade Level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6th</td>
</tr>
<tr>
<td>Parents</td>
<td>8</td>
</tr>
<tr>
<td>Older brothers/sisters</td>
<td>5</td>
</tr>
<tr>
<td>Other relatives</td>
<td>2</td>
</tr>
<tr>
<td>DARE officer/Resource officer</td>
<td>1</td>
</tr>
<tr>
<td>Teacher</td>
<td>4</td>
</tr>
<tr>
<td>Religious leader</td>
<td>-</td>
</tr>
<tr>
<td>School counselor</td>
<td>10</td>
</tr>
<tr>
<td>Friends</td>
<td>9</td>
</tr>
<tr>
<td>Older kids</td>
<td>-</td>
</tr>
<tr>
<td>Other kids my age who smoke</td>
<td>-</td>
</tr>
<tr>
<td>Someone who used to smoke but doesn’t smoke anymore</td>
<td>7</td>
</tr>
<tr>
<td>A celebrity</td>
<td>3</td>
</tr>
<tr>
<td>Your doctor</td>
<td>-</td>
</tr>
<tr>
<td>A T.V. commercial</td>
<td>6</td>
</tr>
</tbody>
</table>
Table 37 displays student recommendations regarding spokespersons for television and radio advertisements suggest that resources officers (i.e., DARE officer), teachers, adults and religious leaders would be the most effective for reaching 6th and 7th graders; whereas, 9th and 10th graders would most likely listen to other kids their age who smoke, other kids my age, someone who used to smoke but doesn’t anymore or a doctor.

<table>
<thead>
<tr>
<th>Responses</th>
<th>Grade Level</th>
<th>6th</th>
<th>7th</th>
<th>8th</th>
<th>9th</th>
<th>10th</th>
</tr>
</thead>
<tbody>
<tr>
<td>An adult</td>
<td></td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>A DARE officer/Resource officer</td>
<td></td>
<td>2</td>
<td>2</td>
<td>5</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>A teacher</td>
<td></td>
<td>1</td>
<td>1</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Religious leader</td>
<td></td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Other kids my age</td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Other kids my age who smoke</td>
<td></td>
<td>-</td>
<td>-</td>
<td>4</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Someone who used to smoke but doesn’t any more</td>
<td></td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>A celebrity</td>
<td></td>
<td>5</td>
<td>-</td>
<td>2</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>A doctor</td>
<td></td>
<td>-</td>
<td>5</td>
<td>-</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
PROMOTION STRATEGY

Prevention Marketing Questions

How can trusted spokespersons at each grade level be used more effectively in communicating that middle and high school students should not smoke?
AUDIENCE SEGMENTATION

Audience segmentation is a systematic approach of dividing a population into distinct segments based on characteristics they share. Segmentation is performed also to design messages and interventions for special target audiences, since “one size” may not “fit all.”

Among students who have tried smoking, two subgroups are at increased risk of having smoked recently.

<table>
<thead>
<tr>
<th>SEGMENT</th>
<th>CHARACTERISTICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Segment #1 (10% of the population)</td>
<td>• Best friend does not smoke</td>
</tr>
<tr>
<td></td>
<td>• Used marijuana in the past year</td>
</tr>
<tr>
<td></td>
<td>• Belief that smoking does not taste bad</td>
</tr>
<tr>
<td>56% of the youth in this population segment have used tobacco within the past 30 days.</td>
<td></td>
</tr>
<tr>
<td>Segment #2 (27% of the population)</td>
<td>• Best friend smokes</td>
</tr>
<tr>
<td></td>
<td>• Belief that smoking does not taste bad</td>
</tr>
<tr>
<td>75% of the youth in this population segment have used tobacco within the past 30 days.</td>
<td></td>
</tr>
</tbody>
</table>
Prevention Marketing Questions

What can be done to reach these special populations?
### SUMMARY OF DETERMINANTS

#### Determinants of Tobacco Behaviors among Sarasota Youth

<table>
<thead>
<tr>
<th>Target Behavior</th>
<th>Smoking Initiation</th>
<th>Recent Smoking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>All</td>
<td>Ever Smoke</td>
</tr>
</tbody>
</table>

#### Social Norms
- Perception of number of kids who smoke
  - X
- Belief that when kids smoke, they are usually with friends
  - X
- Refusal Skills
  - X

#### Perceptions of Access to Tobacco
- X

#### Perceived Benefits of Smoking
- Belief that smoking helps kids get back at parents
  - X
- Emotional Benefits of Smoking
  - X
- Social Image Benefits of Smoking

#### Perceived Costs of Smoking
- Belief that smoking tastes bad
  - X
- Belief that kids who take cigarettes to school will get caught
  - X

#### Parental Influence
- Perception about whether mother would be disappointed if she caught youth smoking
  - X
- Listening to parental advice about smoking
  - X
- Belief that parents think it is OK for child to smoke
  - X
- Freedom to make own decisions about friends
  - X

#### Background Characteristics
- Race
  - X
- Family Structure
  - X
- Grade Level
  - X
- Grades Usually Earned in School
  - X
- Number of Hours Spent in Paid Job
  - X
- Frequency of Involvement in Sports
  - X
- Depression
  - X
COMPARISONS BETWEEN SURVEYS

Within the past two years, several surveys have been used to gather information regarding substance use among Sarasota youth. The survey used in the present study included some overlap with other surveys so that comparisons between survey findings would be possible. The FPRC survey administration differed from survey administration protocols for other surveys in that teachers had no role in administering the survey, and the survey was not completed via scantron sheets.

Table 38 summarizes comparisons between rates of smoking behaviors obtained from the FPRC survey and other surveys, where data were available to make such comparisons. Across grade levels and tobacco behaviors, rates obtained from the FPRC survey are higher than rates obtained from other local or statewide surveys.

Differences in rates between the FPRC survey and other local and statewide surveys may suggest that whether teachers administer surveys has an influence on survey results.
<table>
<thead>
<tr>
<th>PRC Sarasota Youth Survey</th>
<th>National Statistic (CDC Survey)</th>
<th>Sarasota County YRBS - 6th &amp; 8th grade</th>
<th>Florida Youth Substance Abuse Survey</th>
<th>Monitoring the Future Study</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Smoking Initiation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6th</td>
<td>29%</td>
<td>13.3%</td>
<td>18.4%</td>
<td>-</td>
</tr>
<tr>
<td>7th</td>
<td>39%</td>
<td>-</td>
<td>27.9%</td>
<td>-</td>
</tr>
<tr>
<td>8th</td>
<td>53%</td>
<td>24.6%</td>
<td>40.2%</td>
<td>44.1%</td>
</tr>
<tr>
<td>9th</td>
<td>64%</td>
<td>61.8%</td>
<td>-</td>
<td>49.2%</td>
</tr>
<tr>
<td>10th</td>
<td>70%</td>
<td>73.9%</td>
<td>-</td>
<td>50.8%</td>
</tr>
</tbody>
</table>

| **Recent Smoking**        |                                 |                                        |                                     |                             |
| 6th                       | 6%                              | 3.8%                                   | 4.9%                                | -                           |
| 7th                       | 13%                             | -                                      | 9.6%                                | -                           |
| 8th                       | 20%                             | 9.2%                                   | 14.9%                               | 17.5%                       |
| 9th                       | 24%                             | 18.5%                                  | 18.9%                               | -                           |
| 10th                      | 32%                             | 27.0%                                  | -                                   | 20.7%                       |

| **Ever Use Smokeless Tobacco** |                                      |                                        |                                     |                             |
| 6th                          | 3%                                | -                                      | 6.1%                                | -                           |
| 7th                          | 6%                                | -                                      | 9.3%                                | -                           |
| 8th                          | 12%                               | -                                      | 12.1%                               | -                           |
| 9th                          | 13%                               | -                                      | 12.6%                               | -                           |
| 10th                         | 19%                               | -                                      | 14.8%                               | -                           |

| **Recent Use Smokeless Tobacco** |                                      |                                        |                                     |                             |
| 6th                           | <1%                               | 1.8%                                   | 2.5%                                | -                           |
| 7th                           | 1%                                | -                                      | 4.7%                                | -                           |
| 8th                           | 3%                                | 1.7%                                   | 4.4%                                | -                           |
| 9th                           | 3%                                | 6.8%                                   | 5.4%                                | -                           |
| 10th                          | 5%                                | 7.1%                                   | 5.3%                                | -                           |

* Smoked cigarettes on ≥20 of the 30 days preceding the survey
‡ Smoked at least one cigarette every day for the last 30 days
Community-Based Prevention Marketing: The Next Steps In Disseminating Behavior Change

Carol A. Bryant, PhD; Melinda S. Forthofer, PhD; Kelli R. McCormack Brown, PhD, CHES; Danielle C. Landis, MPH; Robert J. McDermott, PhD, FAAHB

**Objectives:** To develop and evaluate a new community-based social marketing (CBPM) model. **Methods:** CBPM is being piloted to prevent the initiation of smoking and alcohol consumption among middle-school students. The project's impact on behavioral outcomes and the community's ability to use CBPM to solve public health problems are being evaluated. **Results:** Community members have demonstrated an unexpected level of interest in learning CBPM and applying its principles to program planning. **Conclusions:** Community control of the social marketing process has the potential to enhance program integration into existing community structures, making them more effective and sustainable. 

Am J Health Behav 2000;24(1):61-68

Many public health professionals now believe that interventions designed and directed by community members are far more likely to succeed than those planned and executed exclusively by outsiders. The benefits and challenges of working with community groups in designing, implementing, and evaluating social marketing programs have been reported by Middlestat and associates. This article builds on their work by describing a community-based social marketing model being developed and evaluated by the Florida Prevention Research Center at the University of South Florida. We begin with an overview of the key elements and steps in our community-based prevention marketing (CBPM) model, followed by a discussion of the advantages of this blended approach and our efforts to develop and evaluate the model.

The Community-Based Prevention Marketing Model

Community-based prevention marketing (CBPM) is a community-directed social change process that applies marketing theories and techniques to the design, implementation, and evaluation of health promotion and disease prevention programs. CBPM blends community organization principles and practices, behav-

Carol A. Bryant, PhD, Associate Professor & Co-Director of the Florida Prevention Research Center; Melinda S. Forthofer, PhD, Assistant Professor & Director of Research and Evaluation; Kelli R. McCormack Brown, PhD, CHES, Associate Professor; Robert J. McDermott, PhD, FAAHB, Professor and Chair, the Department of Community and Family Health, & Director of the Florida Prevention Research Center, University of South Florida, Tampa, FL. Danielle C. Landis, MPH, Program Director, Florida Prevention Research Center at the University of South Florida, University of South Florida College of Public Health, Tampa, FL.

Address correspondence to Dr. Bryant, College of Public Health, 13201 Bruce B. Downs Blvd, MDC 56, Tampa, FL 33612. Email: cbryant@com1.med.usf.edu
Promoting Healthy Behavior

**Community participation is a central feature throughout the CBPM process.**

Educational theories, and marketing concepts and methodologies into a synergistic framework for generating positive change among selected audience segments.

**Community organization.** In the CBPM approach, "community-based" refers to the community's direction of program planning, implementation, and evaluation activities. Communities may be based on locality (geographical boundaries), ethnicity, sexual orientation, occupation, or other shared interests. The key characteristics distinguishing a community from other aggregates of people are the community's shared sense of identity, belonging, and connectedness, as manifest in common values, goals, and institutions. The defining elements of a community-based approach to social marketing are community participation, empowerment, and competence.

Community participation is a central feature throughout the CBPM process. CBPM places social marketers and academic-based researchers in a collaborative partnership with local public health professionals; other local health and education agency representatives; lay leaders and activists; representatives of local businesses, churches, and voluntary organizations; and residents. This partnership brings people together with a common goal, offer a variety of resources and expertise, and share a vested interest in solving the problem. Working together, these partners define and critically analyze community problems, set preventive health goals, conduct research, and, ultimately, design, implement, and evaluate interventions aimed at achieving the agreed upon goals.

CBPM uses participatory research in its formative, tracking, and evaluation research. With their experiential knowledge, community partners teach academic-based researchers to view the community from a new perspective, directing them to new research questions and methodologies. Faculty members gain a new perspective of community life and learn how to tailor interventions to fit community circumstances. The key principles of community-based research as proposed by Israel and associates guide all research activities.

A primary goal of CBPM is to build the community's capacity to work together to achieve consensus about critical issues, set goals, and solve problems. Academic-based researchers help community members use a systematic, data-driven marketing model to design effective behavior change strategies, critically analyze health problems, set goals, conduct formative research, and evaluate the intervention. They also train community leaders to use marketing's conceptual framework to design comprehensive public health interventions. Indigenous leaders may also be developed during the process, further enhancing the community's problem-solving capacity and the sustainability of change activities. Individual and collective empowerment is considered an important health outcome of the CBPM process. Through participation and increased competence, citizen groups gain more power over social and tangible resources. Recognizing that external resources are often an important catalyst for community development, academic and community partners work together to obtain funds to support local efforts. As citizens support each other, address problems within the community, and develop the ability to work together to influence decisions in the larger social system, the community becomes empowered to sustain and institutionalize this process.

Finally, CBPM builds on the community's strengths by combining assessments of community assets and "wants" with a needs-assessments process, when developing community profiles. This multidimensional approach to understanding the community context enables community-based prevention marketers to reinforce existing community strengths, without duplicating or undermining currently effective efforts. Community-based prevention marketers are also responsive to people's aspirations or values. Instead of designing programs that reflect the public health practitioners' assessment of public health needs, they develop products, services,
and/or behavioral recommendations that people truly want as well as need. The most important aspect of this approach is that community context is recognized to be synergistic, such that assets, needs, and community priorities must all be taken into consideration if a program is to be effective.

Prevention. In the CBPM approach, prevention refers to the promotion of health behaviors that are protective against the major causes of death and disability. Academic partners provide guidance in the selection of risk and/or protective behaviors appropriate for use in a prevention marketing approach. Addictive behaviors and risk behaviors with deep-seated psychological determinants that require psychotherapy or other individual-centered approaches are eliminated from consideration.

Marketing of protective health behaviors relies on the behavioral sciences to guide research and program design. Formative research is used to identify and prioritize behaviors that are both desirable (significantly impact disease outcomes) and feasible to promote within a community (compatible with cultural values, likely to be adopted, etc.). Program objectives are defined in behavioral terms, and behavioral theories are used to guide researchers in identifying the determinants of the protective behaviors being promoted. These include internal factors, such as perceived risk, attitudes, perceived consequences, self-efficacy, perceived norms or subjective norms, intentions and readiness to change or stage of change, and external factors, such as actual risk status, access to services, and a variety of community factors.

Finally, evaluation is conducted to assess the impact of program interventions on the determinants of the targeted behavior as well as the audiences’ adoption of protective behaviors. Contextual, process, and impact evaluation plans are discussed in greater detail later in this article.

Social marketing. In the CBPM model, marketing refers to social marketing: the application of commercial marketing technologies to the analysis, planning, execution, and evaluation of programs designed to influence voluntary behavior of target audiences in order to improve their personal welfare and that of their society. Social marketing provides a conceptual framework to manage formative research among target audiences, strategy development, marketing techniques, and program monitoring to identify ineffective activities that require modification and effective activities worth sustaining.

Marketing’s conceptual framework views the consumer at the center of an exchange process...
TABLE I
Conceptual Framework: Key Concepts in the Exchange Process

<table>
<thead>
<tr>
<th>Product</th>
<th>The behavior, goods, service, or program being promoted.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>✔ What are the benefits of the product from the consumers' perspective - what needs or wants do they have that the product can fulfill?</td>
</tr>
<tr>
<td></td>
<td>✔ How can we enhance the product's benefits to make it more attractive to consumers?</td>
</tr>
<tr>
<td>Price</td>
<td>The cost to the consumer - what he or she must exchange for the product's benefits.</td>
</tr>
<tr>
<td></td>
<td>✔ What are the monetary (direct and indirect) costs of the product?</td>
</tr>
<tr>
<td></td>
<td>✔ What are the nonmonetary costs? Does the consumer have to exchange time, effort, or psychological discomfort in order to get the product?</td>
</tr>
<tr>
<td></td>
<td>✔ How can we lower the product's costs?</td>
</tr>
<tr>
<td></td>
<td>✔ How can we make them more acceptable to consumers?</td>
</tr>
<tr>
<td>Competition</td>
<td>Products (services, behaviors, or commodities) compete with the product?</td>
</tr>
<tr>
<td></td>
<td>✔ What are people doing now that puts them at increased risk for premature death, disability, or disease?</td>
</tr>
<tr>
<td></td>
<td>✔ What services or commodities do they use now?</td>
</tr>
<tr>
<td></td>
<td>✔ How can the benefits of the competing product(s) be diminished?</td>
</tr>
<tr>
<td></td>
<td>✔ How can the price of the competing product(s) be raised?</td>
</tr>
<tr>
<td>Place</td>
<td>The locations where services are provided, tangible products are distributed, and consumers receive information about new products or behaviors.</td>
</tr>
<tr>
<td></td>
<td>✔ What are the &quot;life-path points&quot; people routinely visit where they make decisions about the product?</td>
</tr>
<tr>
<td></td>
<td>✔ Where do consumers practice the behavior, utilize the service, or purchase the commodity?</td>
</tr>
<tr>
<td></td>
<td>✔ When and where are consumers in the most receptive mood to listen and respond to our message?</td>
</tr>
<tr>
<td></td>
<td>✔ How can the product be made more accessible? Where should it be offered? Displayed?</td>
</tr>
<tr>
<td></td>
<td>✔ Where should information be placed about the product?</td>
</tr>
<tr>
<td>Promotion</td>
<td>A combination of activities designed to bring about behavior change.</td>
</tr>
<tr>
<td></td>
<td>✔ What activities are needed to promote the product, eg, service-delivery improvements, policy changes, community-based activities, incentives, public relations?</td>
</tr>
<tr>
<td></td>
<td>✔ What messages will promote behavior change?</td>
</tr>
<tr>
<td></td>
<td>✔ What media are appropriate, eg, mass media, print materials, for disseminating information?</td>
</tr>
</tbody>
</table>

evaluate public health interventions.

**Mobilize the community.** Phase I is devoted to building a community structure to guide the CBPM process. The local health department or other community organization serves as a lead agency, and a person is designated to coordinate local activities and serve as a program sponsor. Similar to the Planned Approach to Community Health (PATCH) model, the local coordinator, academic researchers, and members of key community agencies define community boundaries and organize a community coalition. The coalition comprises representatives from governmental bodies, local media, public and private schools, businesses, health provider organizations, local health department, hospitals, religious organizations, voluntary civic groups, human service organizations, chamber of commerce, and grassroots advocacy groups.

**Develop a community profile.** A community profile is developed that includes basic demographic data, mortality and morbidity data, behavioral data, and an
assessment of the community's capacity. A variety of overlapping concepts and associated measures are triangulated to assess community capacity, including community competence, social capital, perceived control, readiness to change, and asset-mapping. Academic partners train and assist the local coordinator and other community members in collecting existing data, conducting literature reviews, assessing community capacity, and assembling evidence, including any assessments of attributable risk associated with specific behaviors.

Select the risk/protective behavior to be promoted. The community coalition identifies and prioritizes problems and selects the issue(s) of project focus. Specific tasks involved in this phase are listed below.

- Determine the criteria that will be used to select the overall health focus and target audiences.
- Review the community profile, discuss analysis, and prioritize the health problems and risk factors associated with those problems.
- Identify information needed to select target audiences, behavioral objectives, and factors to be addressed by the intervention.

Develop a project-specific advisory committee. The community forms a specific advisory committee or a subcommittee (CAC) of an existing work group to direct the CBPM process. The CAC's first task is to prepare a set of bylaws or written guidelines that define the members' roles and responsibilities, operating procedures, and rules. CAC members receive training in social marketing principles and practices to enable them to identify the behavioral objectives, potential target audiences, and potential determinants of target behaviors that guide the marketing process. The CAC also approves the research design, research reports, marketing plan, implementation plan, and evaluation plan.

Formative research. Community members are trained to collect and analyze data. Research is guided by Israel and associates' principles of community-based research for participatory research. The balance of control between academic researchers and community researchers varies according to the level of experience and expertise community members have acquired. Experienced community researchers share responsibility with academic researchers in research design and data analysis, whereas those participating in their first research project provide input to all design issues, collect data, and assist with qualitative analyses and interpretation.

Strategy development. A marketing plan organized around the marketing framework is developed by the CAC and the academic partners. This plan contains a clear statement of the overall goals or mission of the project, a description of the audience segments to be targeted, the specific behaviors that will be promoted within each audience segment, and strategies for addressing the critical factors associated with target health behaviors.

Program development. All program materials and tactics are developed and pretested. The community coalition helps mobilize resources needed for program activities and work together to reinforce the institutional foundation upon which the campaign must be sustained.

Program implementation. The local coordinator works closely with the community coalition and CAC to ensure proper sequencing of legislative advocacy, organizational policy and procedural changes, professional training, materials distribution, public relations and public information. Careful coordination of all program components and activities is essential to the success of a project.

Tracking and evaluation. Academic and community researchers assess program context, process, and impact in a comprehensive evaluation of the project. The CAC uses tracking information to identify needed midcourse revisions. This step leads back to the refinement of program goals.

Advantages of the CBPM Model
A community-based approach recognizes the need for integrated interventions at the individual and environmen-
Marketing’s conceptual framework, audience segmentation, and close monitoring of program progress also lead to improved program outcomes.

Plans for evaluating the CBPM model include context evaluation (at the level of individual community projects), process evaluation, and impact evaluation. Context evaluation refers to the examination of the extent to which naturally occurring events, influences, and changes that occur in the community during the project affect the project’s impacts and outcomes. Contextual data will provide insight into how certain settings contribute to or impede project success. The emphasis on context in evaluation is particularly important when projects take place at the community level, in which the research team may have relatively little control over events that may affect the project’s success.

The purpose of the CBPM model’s process evaluation is to document and describe the extent to which the CBPM model is implemented as planned and the extent to which training in community-based research and prevention marketing is delivered as planned. The questions to be addressed by the process evaluation include (a) which elements of the CBPM model are feasible (able to be implemented) in real-world settings (b) which elements of the CBPM model are perceived as most valuable by community key informants and (c) the extent to which members of the CAC perceive that the research has been conducted in accordance with the principles of community-based research.

The purpose of the CBPM model’s impact evaluation is to assess (a) the extent to which the CBPM model produces increases in communities’ competence, perceived control, and social capital; (b) the extent to which community organizations involved in the use of the CBPM model begin to use prevention marketing strategies when addressing other community problems; and (c) whether the communities’ implementation of the CBPM model produces the desired changes in voluntary health behaviors.

SUMMARY
Community-based prevention marketing (CBPM) is a community-directed social change process that applies marketing theories and techniques to the design, implementation, and evaluation of health promotion and disease prevention programs. CBPM blends community organization principles and practices, behav-

Development and Evaluation of the CBPM Model
The CBPM model is being pilot tested via a demonstration project to prevent tobacco and alcohol use among middle-school students in Sarasota County, Florida. These assessments will be used to identify and recruit a second community to implement a CBPM demonstration project. If the CBPM demonstration projects are successful, funds will be sought to conduct a community-based randomized controlled trial.
itorial theories, and marketing concepts and methodologies into a synergistic framework for directing positive change among selected audience segments. Community participation and control are central principles that guide program planning, implementation, and evaluation activities. Research is used to identify the individual, social, and structural determinants of targeted health behaviors among distinctive segments of the population the program plans to reach. Marketing provides a conceptual framework to select population segments to target, guide formative research, develop a marketing strategy based on the notion of exchange and the 4 Ps and program monitoring to identify ineffective activities that require modification and effective activities worth sustaining. The impact of these interventions on behavioral objectives and the community's ability to apply marketing principles and techniques to solve other public health problems is evaluated rigorously.

REFERENCES
20. Bracht N, Kingsbury L, Rissell C. A five-stage community organization model for health pro-

Am J Health Behav™ 2000;24(1):51-68

67

Appendix A
Promoting Healthy Behavior


INTRODUCTION

The Florida Prevention Research Center (FPRC) is a part of the University of South Florida College of Public Health. Funded by the Centers for Disease Control and Prevention (CDC) in 1998, the FPRC is one of 23 Prevention Research Centers (PRCs) focusing on the development and implementation of innovative disease prevention and health promotion research. The FPRC uses “Community Based Prevention Marketing” (CBPM) to develop prevention and intervention programs within communities. Central principles of CBPM are prevention marketing and community participation.

Selected community members are trained in all phases of the CBPM process and assist in all phases of implementation and evaluation within their community. Through the use of the CBPM process, communities can use the “marketing mindset” in developing programs that are consumer-oriented, increasing the likelihood of long-term sustainability.

The FPRC’s first demonstration of CBPM is a joint effort with the Sarasota County (Florida) Health Department to reduce smoking and alcohol drinking initiation among middle school students. As part of the formative research phase, it became clear that to obtain the best information from the middle school students, youth (rather than adults) should collect the preliminary qualitative data. We initially questioned whether youth would be capable of serving in this role.

- Could youth conduct focus groups and interviews effectively?
- Could they understand the complexities of the topics that would be involved, such as probing, leading, and bias?
- Could youth comprehend the intricacies of issues such as confidentiality and research objectives, or have the maturity to address challenging group dynamic situations?
While a well-planned training is integral to the success of the project, the final determination of that success depends on the character and attributes of the youth involved.

Based on community input and existing research in the effectiveness of “youth as partners in collaborative research” (Harper & Carver, 1999), it was determined that youth have the capability and the motivation, but not the knowledge and skills necessary to conduct focus groups. Fortunately, knowledge and skills are variables that can be conveyed. With this deficiency in mind, we began to concentrate on developing a youth training program.

Recognizing that training youth would require an approach that varied from that of traditional adult training, we assumed that youth would have a different level of cognition and conceptualization, lower patience and attention spans and higher physical energy levels than the adult learners we had trained in the past. Maintaining their attention would require a combination of high-energy, multifaceted, and interesting training activities. In order to develop a framework of training elements to address these special audience needs, we combined this framework with the principles and concepts of focus group moderation and in-depth interviewing to create a 60-page curriculum guidebook and training agenda to support a two-day training.

The elements of the framework discussed in the next section are based on the knowledge and experience of the PRC Team, which included University faculty members, other FPRC staff, graduate assistants and community members.

Before we begin to discuss the training, however, it is important to briefly comment on the recruitment of youth. While a well-planned training is integral to the success of the project, the final determination of that success depends on the character and attributes of the youth involved. For this project, we began by holding discussion groups with a number of local high school youth to delineate attributes we should look for in our youth researchers. After developing a list of these attributes, we presented it to the project’s Community Advisory Committee (CAC), comprised of representatives from the local school board, county and community groups. The CAC was asked to review the attribute list and identify any youth that they felt would be appropriate for the project. At the same time, an article about the project appeared in the local newspaper, requesting that parents contact the program office if their children were interested in participating.

Both methods resulted in over 30 calls to the program office for more information or applications. Once the interested youth contacted the program office, they were sent an application that included several essay questions related to their interest in the project and their previous experience in community activities. Applicants were selected for final, personal interviews based on their responses to the essay questions, the hours they were available, what part of the county they lived in and their ability to attend the two-day training. All 11 applicants selected for final interviews were hired.
TRAINING FRAMEWORK ELEMENTS

ELEMENT #1: LOOKING THROUGH THE KALEIDOSCOPE

The training session included 11 unassociated, unrelated youth (except for two sisters) residing in five distinct geographic areas of Sarasota County, FL. The youth ranged in age from 14 to 17, with a mean age of 15. The attention spans of these youth proved to be shorter than we had anticipated. For example, we had originally estimated that youth attention would wane after one hour of activities involving a specific subject matter. In practice, however, concentration declined after approximately 45 minutes, depending on the topic and time of day. Fortunately, we had developed the training using what we labeled, “The Kaleidoscope Approach,” a fast-paced collection of methods, mediums, trainers, and interactive exercises that were varied throughout the duration of the training. This technique required some additional planning, coordination and consideration of logistics and equipment, but also proved to be the most valuable module of the training.

ELEMENT #2: YOU CAN’T WIN IF YOU DON’T PLAY

How many of us have been witness to a classroom lesson that reflected some interesting content, but was so monotonous that it was painful to endure? Youth are just as vulnerable (perhaps even more so) to such monotony, and with the importance and complexity of the material being presented, our primary fear was loss of attention. Throughout the training, it was necessary to engage youth by encouraging as much participation and interaction as possible. An example of this “play” mode included the use of role-playing.

For one exercise, we provided descriptions of “challenging situations” that could occur in focus groups, and asked students to role-play their response to the situation and its resolution.

ELEMENT #3: STUDENT, TEACH THYSELF

Many of us have heard the study results that indicate we preserve the least information when we are lectured to, retain more when we are required to write down the information we hear and absorb the most when we must teach information to others. This learning philosophy was applied during the training by asking youth to teach each other sections of the curriculum. The youth broke into smaller groups, reviewed and discussed an assigned section of the curriculum and then, using blank overheads and markers, presented that portion of the curriculum to the rest of the larger group.

ELEMENT #4: USING THE RIGHT SIDE OF THE BRAIN

Building upon the concept that youth would need to tap into their creative abilities in addition to their analytical skills, we attempted to incorporate varying methods of creativity into the agenda. For example, instead of lecturing about certain personality types that might be encountered in a focus group, we had participants act out each personality. Instead of asking the youth to describe a “smoker,” a “drinker,” or other research target, we had them break into groups and draw their representation.

ELEMENT #5: LET’S GIVE A ROUND OF APPLAUSE...

As the training progressed, youth received a tremendous amount of feedback on their ability to apply the principles they were learning.
They were sensitive to any type of feedback that could be construed as negative. For this reason, it was important for trainers to ensure that criticism was constructive and balanced with confidence-building. Trainers made a concerted effort to acknowledge successes as much as they encouraged improvements. Tangible rewards in the form of candies, party favors and stickers proved especially effective for all, regardless of age or gender. These “prizes” were given out each time a participant verbalized an idea, insightful comment, or correct answer. Stressing each accomplishment encouraged youth to participate more often.

Trainers continually affirmed the importance of the role that youth would play in the project and reminded them that the success of the project depended on how they, as researchers, approached it.

ELEMENT #6: THERE’S NO “I” IN TEAM
Because training in this topic was a first time experience for all of the youth, they were understandably nervous about their new role, their new colleagues, and their ability to apply this new information effectively. To ensure that the youth felt comfortable asking questions, contributing input, and articulating concerns and challenges, it was necessary to develop a strong environment of teamwork and trust. By incorporating several team-building activities and icebreakers into the agenda, participants learned to work with others as a team, become more comfortable with each other and enjoy their time in the training better. A number of icebreakers and team building exercises can be found in 201 Icebreakers: Group mixers, warm ups, energizers and playful activities (West, 1996).

ELEMENT #7: BE ALL THAT YOU CAN BE
Trainers continually affirmed the importance of the role that youth would play in the project and reminded them that the success of the project depended on how they, as researchers, approached it. This objective did not appear to pressure the trainees, but rather served to motivate them to “rise up to the challenge” of their new role. We also informed the youth, trainers, and staff that they were to refer to each other as “researchers” and “colleagues” at all times. An environment of mutual respect was necessary and we predicted that it would be difficult to establish and maintain an appropriate educational or research “culture” if the youth were being referred to as “the students” or even worse, “the kids.”

ELEMENT #8: DÉJÀ VU ALL OVER AGAIN
Youth and adults learn through repetition. They also can be bored by repetition. We felt that we could conquer tedium by repeating our messages throughout the day, but without repeating the method by which we delivered them. For example, in the focus group moderator training section, we wanted to convey the skills required of a good moderator. First, we had youth brainstorm about fundamental focus group moderation skills. Next, we had graduate assistants demonstrate a mock focus
When all is said and done, the most important determinant of whether youth can do the job is whether they think they can do the job.

group in which the youth critiqued the performance both verbally and using a checklist. Next, we had the youth conduct their own focus groups and discuss their strengths and special challenges. Finally, we had the youth watch a videotaped, professional focus group and discuss the moderator’s strengths and make suggestions regarding areas of improvement.

ELEMENT #9: SEE, SPEAK AND DO
Within each exercise, we tried as often as possible to combine learning approaches. We provided youth with the information that we needed them to know. Next, we demonstrated the way in which it was to be applied. Finally, we had the youth apply the information they had learned and observed. By providing opportunities for listening, watching and doing, we were able to respond to a wide range of learning needs.

ELEMENT #10: I THINK I CAN, I THINK I CAN
When all is said and done, the most important determinant of whether youth can do the job is whether they think they can do the job. We profited greatly by evaluating (both formally and informally) their perception of the effectiveness of the training, what could have been done differently, and most importantly, their perceived confidence level in applying each component of the training. This comprehensive evaluation assisted us in fine-tuning activities, exercises, and lessons to improve future training sessions.

LESSONS LEARNED
Although we believe the training was successful, we also learned a great deal about the process and changes that we would make in the future. The primary “lessons learned” are presented below.

LESSON #1: BE FLEXIBLE
When dealing with youth in this age group, even the best planned agendas can become instantly ineffective. It is important to watch the youths’ body language and be flexible enough to adapt the agenda to accommodate different needs. You may find yourself spontaneously revising the order of activities, deleting certain lessons, changing approaches, taking more frequent breaks, or even repeating topics based on your perception of youths’ moods, attitudes, non-verbal cues and verbal feedback.

LESSON #2: BEGIN AT THE BEGINNING
We began the youth research by using a previously completed moderator’s guide and interview packet. Upon implementation of the research, however, we found that it was difficult for some trainees to probe effectively and produce strong information. They contended that this difficulty was because they had not been part of the research objective or question development and, therefore, did not understand the broad depth of information that was desired from each question. To remedy this lack
The greatest lesson that we learned was never to underestimate the intelligence, creativity, motivation and maturity of youth.

Of understanding, youth researchers assisted in the development of objectives for the next topic guide. From those objectives, we worked together as a team to develop the final questions. This teamwork resulted in greater ownership of the research on the part of the youth, better understanding of the reasons we were asking the questions, better probing and information elucidation and, thus, higher-quality and more in-depth data for analysis.

LESSON #3: PRACTICE (AND RETRAINING) MAKES PERFECT

After the initial training, students will be excited to commence research, but they may also be overwhelmed. Youth also will face initial application challenges, especially with skills such as probing, generating follow-up questions when original questions are not understood, and learning to be flexible with the use of the guide. It is important to revisit the training and hold debriefing sessions after each day of research. Debriefing sessions are intended to elicit input from the youth on training guides and research status, as well as to provide input for improvement and refinement of their skills. A full-day training workshop also should be held at the end of the first or second week of research to obtain more detailed feedback from the youth, make any changes to the guides, and provide re-training in any deficient areas. Applying principles used in the first training will help ensure that youth maintain the momentum and confidence needed to keep them motivated throughout the project.

LESSON #4: BELIEVE

The greatest lesson that we learned was never to underestimate the intelligence, creativity, motivation and maturity of youth. While this project was challenging, exhausting and intense, it also was motivating, enlightening and valuable. With some pre-planning, appropriate tools, a high level of enthusiasm and an even higher level of faith in the youth’s capabilities, even the youngest trainee was able to conduct the research confidently and effectively.

ACKNOWLEDGMENT

The authors would like to acknowledge the following individuals for their input, guidance and participation in the youth training: Dr. Carol Bryant; Paula Perlmutter; Jon Peehlman; and Dani Walter.

ABOUT THE AUTHORS

Danielle C. Landis, M.P.H., is Program Director for the Florida Prevention Research Center in Tampa, FL and a doctoral candidate in the Department of Community and Family Health at the University of South Florida College of Public Health. Her research interests include family systems, health communication, and social marketing.

Moya Alfonso, B.A., is a Graduate Assistant for the Florida Prevention Research Center and a Research Assistant and graduate student in the Department of Community and Family Health at the University of South Florida College of Public Health.
Her research interests include the prevention of psychopathology, social marketing, family processes and social support and family research methods.

Sonja E. Ziegler, B.A., is Supervisor of Education and Prevention Services with the Family Counseling Center in Sarasota, FL.

Jill M. Christy, M.S.W., is a Graduate Assistant with the Florida Prevention Research Center. Her areas of research interest include domestic violence, community policing and social marketing.

Karen C. Abrenica, B.S., is a Program Assistant for the Florida Prevention Research Center.

Kelli McCormack Brown, Ph.D., C.H.E.S., is an Associate Professor in the Department of Community and Family Health at the University of South Florida College of Public Health. Her areas of research include community prevention, social marketing and oral health.

REFERENCES


For a copy of the Florida Prevention Research Center Youth Research Training Curriculum and Youth Research Trainer's Agenda, please contact Danielle C. Landis, FPRC Program Director at:
The Florida Prevention Research Center, University of South Florida College of Public Health, Department of Community and Family Health, 13201 Bruce B Downs Blvd., MDC 56, Tampa, Florida 33612-3805 (813) 971-2119 E-mail: dlandis@com1.med.usf.edu
Alcohol/Tobacco Interview Guide

Introduction

- Name
- Thank you

Purpose

- Project done by USF researchers about youth your age and their thoughts about alcohol/tobacco.
- Not a class or educational program
- Conversation- just like you have with your friends
- We’re interested in all your ideas, comments and suggestions
- No right or wrong answers: want both positive and negative comments

Procedure

- If at any time you want to stop please let me know
- Interview/about 1 hour
- Tape record- microphones very sensitive-no banging
- State first name or you can make up a name
- Confidential. No one except the researchers will listen to the tape
- Parents will NOT know what you’ve said

We’re interested in youth’s thoughts on tobacco and alcohol use in Sarasota. The first several questions will ask you about your thoughts on tobacco and the last several questions will ask you about your thoughts on alcohol.

When I say “smoking”, what is the first thing that comes to mind?

Imagine I’m a teenager and I just moved to Sarasota. What would you tell me about youth and tobacco in Sarasota?

Who smokes?
How old do they have to be to smoke?
What are some reasons why they smoke?
Who do they smoke with?
Where do they smoke?
What circumstances make it ok for youth to smoke or encourage them to smoke?
How do they get cigarettes/tobacco?
How often do they smoke?
What do they get out of smoking?
   Good things?
   Bad things?
How much does someone have to smoke to be considered “a smoker”?

How much does someone have to smoke to become addicted?

If a smoker quits what do they give up?
What would keep someone your age from smoking?

   Probe: imagine someone your age is hanging out with friends and everyone is smoking except for them- How do you think they would feel?

Do parents know their kids smoke?
Do they allow it? Do they buy it for youth your age?
What happens to youth your age when they smoke?
   Good things?

How do you feel about smoking?

Where do you get information about smoking?
   Probes: friends, parents, magazines, church, TV?

If you wanted accurate information on smoking, who would you trust the most?

Who wouldn’t you trust? What would keep you from trusting [insert source]?

If you were going to convince me not to smoke, what would you say to me?

Now let’s talk about your thoughts and experiences with alcohol.
How do you feel about drinking?
At what age do you think it’s ok for you to drink?
What do your friends say about drinking?
Do you think it’s ok for your friends to drink?
How do you feel when you’re with friends who are drinking and you’re not?
How much is too much for youth to drink?
How often is too often for youth to drink?
Is there a difference between beer, wine, and liquor?
What is responsible drinking from your point of view?
How much could someone drink before you would not let them drive you home?

Now let’s talk about what people in your life and the media tell you about alcohol.

What message do you get from parents about alcohol? How do you feel when they talk to you about alcohol?
What message do you get from peers about alcohol? How do you feel when they talk to you about alcohol?
What message do you get from siblings about alcohol? How do you feel when they talk to you about alcohol?

It’s your job to design a program for Sarasota youth. You can do anything you want to do.

What would you do?
What should the message be?

Should it be don’t drink at all until your of legal age? Should it be drink responsibly?

Who would be the spokesperson?

How would you get the word out?
   Probe: types of activities/programs they would use
Demographics

Age: ________________

Grade: o 5th  o 6th  o 7th  o 8th  o 9th  o 10th  o 11th  o 12th

Gender: o Male  o Female

Race:  o White  o Black  o Hispanic/Latino  o Pacific Islander  o Native American  o Asian  o Other:_________

1. Do any adults living with you drink?  o Yes  o No

2. Do any brothers or sisters drink?  o Yes  o No

3. Have you ever drunk alcohol (beer, wine, wine cooler, liquor) in your life, even 1 or 2 sips? [if no, skip to #5]  o Yes  o No

   How old were you when you had your first drink of alcohol (beer, wine, wine cooler, liquor) other than a few sips?

   o I have never had a drink of alcohol other than a few sips
   o Less than 9 years old
   o 9 or 10 years old
   o 11 or 12 years old

4. Have you drank alcohol (beer/wine/liquor) within the last 30 days? o Yes  o No

6. Do any adults living with you smoke?  o Yes  o No

7. Do any older brothers or sisters smoke?  o Yes  o No

8. Have you ever tried smoking a cigarette, even 1 or 2 puffs?  o Yes  o No  (If no, skip to #11)

9. How old were you when you smoked a whole cigarette for the first time?
Less than 9 years old
9 or 10 years old
11 or 12 years old
I have never smoked a whole cigarette [If never, skip to #11]

10. Have you smoked a cigarette within the last 30 days?
   o Yes o No

11. Do you think you will try cigarette smoking during the next year (12 months)?
   o I have already tried cigarette smoking
   o Yes, I think I will try cigarette smoking in the next 12 months
   o No, I don’t think I will try cigarette smoking in the next 12 months

12. Have you ever tried smokeless or "spit" tobacco (chewing tobacco/snuff)
   o Yes o No
INFORMED CONSENT FORM
Youth (under age 18)

Title: Community-Based Prevention Marketing: Building Capacity for Disease Prevention and Health Promotion (Sarasota Demonstration Project)

Principal Investigator: Robert J. McDermott, University of South Florida
Co-Project Directors: Carol Bryant, Melinda Forthofer, Kelli McCormack Brown, University of South Florida & Susan Calkins, Sarasota County Health Department

Purpose: The purpose of this research study is to identify what factors influence adolescent initiation of smoking and alcohol use. Information from this research will help guide the development of community programs to reduce smoking and alcohol use among adolescents. Your child's participation in this study will last for approximately 90 minutes. Approximately 2000 Sarasota county adolescents may be interviewed for this research study.

Procedures: Your child is invited to participate in a focus group with other adolescents their age and/or a personal interview. A focus group is comprised of 8-10 individuals discussing a series of topics under the guidance of a facilitator. Your son or daughter will be asked to talk about their thoughts, beliefs, opinions and attitudes about adolescent smoking and alcohol use, spokespersons for anti-smoking programs for adolescents and different ways of communicating with adolescents about tobacco as well as other related topics. We will record their responses, but we will separate them from any information that could specifically identify them. What we learn from what they say will help in the development of a survey for adolescents and a community program to reduce adolescent smoking and alcohol use. Results will be reported without information that could be used to specifically identify them.

Risks & Benefits: You understand that there are no anticipated risks associated with the study from your child's participation in this study. You understand that the possible benefits in participating in this study are increased knowledge of tobacco use, including risk factors and the knowledge that your opinions will help guide the development of a program for adolescents. The information from this research will be a valuable addition to current knowledge about attitudes, beliefs, knowledge and use of tobacco and alcohol by adolescents.

Confidentiality: The confidentiality of the records shall be maintained unless otherwise required by law. Data with any identifying information will be stored in a locked filing cabinet in the Prevention Research Center's research office. Data stripped of identifiers will be housed in a project office. Results will be reported without the use of specific identifiers. The information from this research will be a valuable addition to current knowledge about attitudes, beliefs, knowledge and use of tobacco by adolescents. Authorized research investigators, agents of the Department and Health and Human Services and/or the University of South Florida Institutional Review Board may inspect your records of this research project.

University of South Florida Injury Statement
In the event that you sustain an injury or illness as a result of participating in this research, please be aware that medical treatment for the injuries or illness may not be available from the University of South Florida (USF). USF does not maintain an emergency medical department nor does it provide medical treatment in all disciplines of medicine. If you become ill or sustain an injury which you believe is related to participation in this research, immediately contact one of the persons listed on page 1 of this form, and if emergency care is needed seek emergency attention from your nearest local hospital.

If injury results from your participation in research, money damages are not automatically available. Money damages are only available to the extent specified in Florida statute, 768.28. A copy of this statute is available upon request to the Division of Compliance Services, USF at (813)631-4498. This statute provides that damages are available only to the extent that negligent conduct of a University employee caused your injuries, and are limited by law. If you believe you are injured as a result of participation in this research and the negligent conduct of a University faculty member, you may notify the USF Self Insurance Programs at (813) 974-8008, who will investigate the matter.

Compensation for Participation: Your child will receive a FREE movie pass(es) for participation in this study.

Volunteering to Be Part of this Research Study: You understand that your child's participation in this study is voluntary. You understand that you may withdraw your child from the study at any time without penalty. You also understand that the investigator has the right to remove your child from the study at any time.

OVER
Questions and Contacts: If you or your child have any questions about this research study, you may contact Dr. Kelli McCormack Brown at 1-888-USF-COPH. If you or your child have any questions about your rights as a person taking part in a research study, you may contact a member of the Division of Compliance Services at the University of South Florida at (813) 631-4498.

Your Consent—By signing this form I agree that:

- I have fully read or have had read and explained to me in my native language this informed consent form describing a research project.
- I have had the opportunity to question one of the person’s in charge of this research and have received satisfactory answers.
- I understand that my child is being asked to participate in research. I understand the risks and benefits, and I freely give my consent to have him/her participate in the research project outlined in this form, under the conditions indicated in it.
- I have been given a signed copy of this informed consent form, which is mine to keep.

Signature of Parent   Printed Name of Parent     Date

Home Phone Number

Signature of Witness   Printed Name of Witness    Date

Youth Participant Consent

Ms., Mrs. or Mr. _______________ has explained the research study called Community-Based Prevention Marketing: Building Capacity for Disease Prevention and Health Promotion (Sarasota Demonstration Project) to me. I agree to be in this study. [for youth ages 7-12 it was read to them, or youth ages 13-17 they read themselves]

Signature of Participant/Youth            Printed Name of Participant/Youth   Date

Investigator Statement

I have carefully explained to the subject the nature of the above protocol. I hereby certify that to the best of my knowledge the subject signing this consent form understands the nature, demands, risks and benefits involved in participating in this study.

Signature of Investigator  Printed Name of Investigator   Date

Institutional Approval of Study and Informed Consent

This research project/study and informed consent form were reviewed and approved by the University of South Florida Institutional Review Board for the protection of human subjects. This approval is valid until the date provided below. The Board may be contacted a (813) 631-4498.
Approval Consent Form Expiration: February 18, 2000
December 3, 1999

Dear Parent/Guardian:

YMCA Triad North is participating in a survey administered by the University of South Florida to identify what factors influence adolescent initiation of smoking and alcohol use. Information from this research will help guide the development of community programs to reduce smoking and alcohol use among adolescents.

This interview poses no risk to your child. The procedures have been designed to protect your child's privacy and allow for confidential, voluntary participation.

If you agree to have your child participate in a personal interview, please complete the attached form and have your child return to the school.

Thank you for your cooperation.
## Appendix F

### Interviews and Focus Groups Conducted by Gender and Grade

<table>
<thead>
<tr>
<th></th>
<th>5th</th>
<th>6th</th>
<th>7th</th>
<th>8th</th>
<th>9th</th>
<th>10th</th>
<th>11th</th>
<th>12th</th>
<th>GED</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INTERVIEWS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* 112 Interviews Conducted</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>5</td>
<td>4</td>
<td>8</td>
<td>13</td>
<td>7</td>
<td>7</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>49</td>
</tr>
<tr>
<td>Females</td>
<td>4</td>
<td>9</td>
<td>11</td>
<td>15</td>
<td>11</td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>63</td>
</tr>
<tr>
<td>Total</td>
<td>9</td>
<td>13</td>
<td>19</td>
<td>28</td>
<td>18</td>
<td>12</td>
<td>9</td>
<td>3</td>
<td>1</td>
<td>112</td>
</tr>
<tr>
<td><strong>FOCUS GROUPS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* 22 Focus Groups Conducted</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>7</td>
<td>22</td>
<td>8</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>40</td>
</tr>
<tr>
<td>Females</td>
<td>2</td>
<td>34</td>
<td>10</td>
<td>8</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>54</td>
</tr>
<tr>
<td>Total</td>
<td>9</td>
<td>56</td>
<td>18</td>
<td>11</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>94</td>
</tr>
<tr>
<td><strong>OVERALL TOTALS</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>12</td>
<td>26</td>
<td>16</td>
<td>16</td>
<td>7</td>
<td>7</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>89</td>
</tr>
<tr>
<td>Females</td>
<td>6</td>
<td>43</td>
<td>21</td>
<td>23</td>
<td>11</td>
<td>5</td>
<td>5</td>
<td>2</td>
<td>1</td>
<td>117</td>
</tr>
<tr>
<td>Total</td>
<td>18</td>
<td>69</td>
<td>37</td>
<td>39</td>
<td>18</td>
<td>12</td>
<td>9</td>
<td>3</td>
<td>1</td>
<td>206</td>
</tr>
</tbody>
</table>
Dear Parent/Guardian:

Our school is participating in the Florida Youth Survey 2000 sponsored by the Department of Health and the Department of Children and Families. The survey will gather information about tobacco, alcohol, and other drug use and attitudes of 6th through 12th grade students. There are two versions of the survey. Your child will be asked to complete one of the two versions.

The Florida Youth Survey 2000 has been approved by state and local school officials and has the support of statewide organizations, including the Governor’s Office, the Office of Drug Control, the Department of Education, Department of Health and the Department of Children and Families.

In addition to this survey, the National Youth Risk Behavior Survey will be administered to all 6th, 8th and some 9th graders. This is the district survey to assess risk taking behavior and is administered to middle schools and high schools every other year.

Over the next several months, the University of South Florida, in cooperation with a community group, will also be doing random surveys in the middle and high schools to assess tobacco and alcohol opinions as part of a community-based prevention marketing project.

Completing these paper and pencil surveys pose no risk to your child. Survey procedures have been designed to protect your child’s privacy and allow for anonymous, voluntary participation. No student will ever be mentioned by name in a report of the results.

Please see the other side of this form for additional information regarding the Florida Youth Survey 2000. If you have further questions, please contact Sherri T. Reynolds, Supervisor, Health/Prevention Programs at 927-9000, extension 4309.

Thank you for your cooperation.

An Equal Opportunity / Affirmative Action Agency
Florida Youth Survey 2000
SURVEY FACT SHEET

Q. **How will survey results be used?**
A. The Florida Department of Health, The Florida Department of Children and Families, and local health and education agencies will use the results from the survey to help determine the extent to which children and teenagers use tobacco, alcohol, and other drugs that place their health at risk, and to develop education programs and other strategies to help prevent and/or reduce their use of tobacco, alcohol, and other drugs.

Q. **Will student participation be anonymous? Will student privacy be protected?**
A. Yes. Survey administration procedures have been designed to protect student privacy and allow for anonymous participation. Students will not put their names or other identifying information on the questionnaires.

Q. **Will certain students be surveyed again to see how their behavior changes?**
A. No. Each time the survey is conducted, a new sample of schools and students will be drawn. It will be impossible to track students who participate because no identifying information will be collected.

Q. **How was my child selected?**
A. Students were selected randomly to participate statewide. More than 175,000 students from 650 middle schools and high schools throughout Florida have been randomly selected to participate. Entire classes were selected rather than specific students.

Q. **How long will it take to fill out the questionnaire?**
A. One class period (45 minutes) is needed for completing the questionnaire.

Q. **Does the survey have statewide support?**
A. The Florida Youth Survey 2000 has been approved by state and local school officials and has the support of statewide organizations, including the Governor's Office, the Office of Drug Control, the Department of Education, Department of Health and the Department of Children and Families.
Sampling Details

Within each school containing at least 1% of the target population, the sampling was carried out as follows:

- The table below provides a summary of the participating public middle schools and proportion of the target population for each school.

### Participating Middle Schools and Proportion of 6th-8th Grade Target Population

<table>
<thead>
<tr>
<th>School</th>
<th>% Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Venice Area Middle School</td>
<td>20%</td>
</tr>
<tr>
<td>Sarasota Middle School</td>
<td>16%</td>
</tr>
<tr>
<td>McIntosh Middle School</td>
<td>16%</td>
</tr>
<tr>
<td>Booker Middle School</td>
<td>13%</td>
</tr>
<tr>
<td>Laurel Nokomis School</td>
<td>9%</td>
</tr>
<tr>
<td>Brookside Middle School</td>
<td>9%</td>
</tr>
<tr>
<td>Pine View School</td>
<td>9%</td>
</tr>
<tr>
<td>Sarasota School of Arts and Sciences</td>
<td>6%</td>
</tr>
<tr>
<td>Oak Park School</td>
<td>1%</td>
</tr>
<tr>
<td>Suncoast Innovative Studies</td>
<td>1%</td>
</tr>
</tbody>
</table>

- In order to ensure adequate statistical power for subsequent analyses, the sampling goal was 400 completed surveys per grade, approximately 30% of the population. Then, the goal was adjusted by 20% to account for anticipated levels of respondent refusal and invalid responses. Thus, the final sampling goal was 480 students per grade.
- The sample was a stratified, random sample of classrooms, with sampling of classrooms within schools proportionate to each school’s proportion of the target population. Within each school containing at least 1% of the target population, the sampling was carried out as follows:
- Classes comprised of students with extreme exceptionalities (defined as FEFP codes between 253 and 255) were excluded;
- Sampling goals for each school were determined by estimating the proportion of eligible students in each school, and calculating that proportion of the sampling goal (480 students per grade).
- FPRC staff worked with school staff to identify mutually acceptable methods of random selection. Across schools, random selection was based on class period (time of day), curricular team, or a simple random selection among all eligible classes. Among eligible classes, classes were randomly selected until the total number of students enrolled in selected classes matched or exceeded the school's sampling goal. FPRC staff made every effort to identify selection methods that would minimize disruption of school schedules but would also ensure that the sample obtained from each school was representative of that school's student population.
Survey Administration Details

✓ All survey administration team members had received security clearance through the Sarasota County School Board; therefore, teachers were not required to play any direct role in survey administration, nor were they required to remain in the classroom during survey administration.

✓ Survey administration team members explained the scope of the research project, the voluntary nature of the study, and the value of participation. Team members were available to answer students’ questions throughout survey administration. Students with reading limitations who preferred to have the survey questions read to them were assisted by survey administration team members.

✓ Members of the survey administration team completed a debriefing form following each classroom’s survey administration. The debriefing form was used to record the number of students surveyed, minimum and maximum completion times, presence of the teacher, and any other issues arising that may have influenced survey responses.

✓ Because one of the participating schools (Oak Park) included a high proportion of students with reading limitations, minimum and maximum survey completion times are calculated separately for students from Oak Park and students from other schools.
   ➢ At Oak Park, the length of time needed to complete the survey ranged from 40 to 55 minutes; among other schools, the time needed to complete the survey ranged from 24 – 60 minutes.

✓ The average minimum completion time was 16 minutes, and the average maximum completion time was 34 minutes.

✓ Teachers were present in 69% of classrooms.

✓ Intrusive or potentially biasing remarks from teachers were recorded by survey administration team members in only 5 of the 113 classes.
Data Analysis Details

Frequency distributions, cross tabulations, and logistic regression analyses were performed using the SAS statistical software. Audience segmentation analyses were performed using the Answer Tree 2.1 program produced by SPSS, Inc. The data analysis process included a thorough review of the data for consistency across responses. In some instances, students initially reported not having used tobacco or alcohol but later in the same survey reported use of those substances. In such instances, initial reports of never having used tobacco or alcohol were recoded accordingly. The main thrust of the survey data analysis is a series of statistical analyses used to identify the determinants of tobacco and alcohol behaviors. These analyses are multivariate – that is, many potential predictors of tobacco or alcohol behaviors are analyzed concurrently, which enables the identification of the factors that are best able to explain youth behaviors, after controlling or adjusting for the effects of other factors.

In formative research for prevention marketing projects, this multivariate analysis is most effectively carried out in two stages. The first stage uses logistic regression models to identify the factors that best explain youth tobacco and alcohol behaviors across the entire population under investigation. The results of this first stage of multivariate analysis identify the factors that have statistically significant associations with the target behavior. Moreover, the results provide estimates of the average effect of those significant factors across the population of youth. These results can be used to identify program intervention targets that would be most powerful across the entire population, or what might be referred to as the best “one size fits all” program intervention.

The second stage of the multivariate analysis uses a procedure known as CHAID to perform a more detailed audience segmentation analysis – an analysis of the extent to which the population under investigation is comprised of population segments which are unique with respect to the determinants of the target behavior. With this procedure, we can examine all the potential determinants of the target behavior and identify the factor that best predicts which individuals do the behavior and which individuals do not do the behavior. The sample is split into subgroups based on that factor, and the process is repeated within each subgroup for the remaining factors. This analysis results in a “tree” diagram illus-
trating the division of the sample into distinct subgroups. These results can be used to identify population subgroups for which the determinants of the target behavior may be very different and to identify the population subgroups at highest risk with respect to the target behavior.