

**Hookah Purchase Journey: Online Hookah User Survey  
0910-0810**

**Supporting Statement: Part B**

**B. STATISTICAL METHODS**

**1. Respondent Universe and Sampling Methods**

The one-time actual burden figures are listed in Part A.

The primary outcome of this study will be based on a non-random sample of 3,000 hookah smokers in the United States. The study is a cross-sectional design, and participants will be recruited from an active research panel of thousands of pre-recruited people from across the U.S., which allows a steady sample flow for research projects. Samples are not acquired by invite-based resources or by email invitations. All completes obtained are based on natural traffic on the panel website; respondents are paid an incentive in exchange for survey participation, creating a high level of cooperation. To take a survey, respondents would login to the panel website to see available surveys on their dashboard. The information given respondents at this point is neutral, providing a link to the screener and consent for an online survey, an estimate of the time required, and the amount of compensation for completion.

Clicking on the link takes subjects to the screener and consent; those who are successfully screened and consented receive a second link to the questionnaire, while those who do not qualify are terminated for this particular study.

The screening criteria are based on age (over 18 years), U.S. residency, smoking status (hookah smoker), and having themselves purchased hookah tobacco/herbal shisha in the last 12 months. Screened subjects will be asked to name their gender and state of residency; survey respondents will be asked standard demographic questions.

**Sampling Methods**

Recruitment and screening of participants will take place based on natural traffic on the panel website. Eligible participants will self-identify, via the screener, as having smoked hookah and purchased hookah tobacco/herbal shisha in the past twelve months. Only participants aged 18+ who reside in the U.S. will be included in the study. Participants who indicate they do not smoke hookah and/or have not themselves purchased hookah tobacco/herbal shisha will be excluded from the study. Researchers will not turn away participants from the screening process, but participants will be denied access to the survey if they do not qualify, based on the screening criteria.

Other demographic questions contained in the screener (e.g., gender, state of residence) will not be used as inclusion/exclusion criteria, but these data will be included in the final data set for analysis purposes, as will data from questions on education, ethnicity, employment and income that are included at the end of the questionnaire.

Hookah use status inclusion and exclusion criteria are:

- Adults (18 years of age and older) who indicate in the screener that they satisfy the criteria of having smoked hookah in the last 12 months and purchased hookah tobacco/herbal shisha in the past 12 months will qualify for study participation.

### Sample Size

Because the people being recruited for the study have a positive relationship with the panel (50-60% historical cooperation rate), it is expected that a high percentage of those who receive the invitation at the panel's website will want to be screened. That said, the relatively low incidence of at-home hookah users among the US adult population means that, to get 3,000 completes, many more people will need to be recruited than if the study were for more common products. It's not expected that the hookah study will have a high yield rate, we project about 100,000 panel members will be screened to get 3,000 qualified subjects. However, the exact yield rate will not be known until the study is in the field.

## **2. Procedures for the Collection of Information**

Qualified participants will be entered into a web-based survey (Attachment C) where they will answer questions about their hookah smoking habits and purchase history. There will be two categories of questions.

- Hookah purchases for in-home use, including:
  - frequency of purchase, cost per unit and annual expenditures for tobacco/herbal shisha, charcoal, additives and hookah pipes/replacement parts
  - Channels of trade in which these products were purchased, allocated by percentage of total annual expenditures per channel: chain convenience, independent convenience, specialty tobacco stores, online, restaurant/bar/lounge (for in-home use), mass, drug, grocery and other
- Hookah purchases and usage when smoking in a hookah lounge, including monthly expenditures for first and second rounds of smoking (as a single smoker and in a group); use of tobacco versus herbal shisha; and use of regular versus quick-light charcoal

At the end of the survey, they will be asked to answer demographic questions pertaining to level of education, employment status, ethnicity and income category.

### ***Unusual Problems Requiring Specialized Sampling Procedures***

No specialized sampling procedures are involved.

### ***Use of Periodic Data Collection Cycles to Reduce Burden***

This is a one-time survey data collection effort.

### 3. **Methods to Maximize Response Rates**

As described above, the consumer panel that will be used for this study enjoys an unusually high cooperation rate of 50-60% among its members, meaning that more than half of those who regularly visit the panels website will want to be screened for any research opportunity that is posted there.

In addition, when members join the panel, they have the option of having a point-based or monetary-based incentive system. Incentive distribution include a variety of gift options on the subcontractor's website, from gift cards, magazines, to donations. The monetary value of this incentive system is estimated at approximately \$6.00. Respondents must complete the survey in order to get the incentive.

Finally, because participants can complete the questionnaire on their own time and on their own devices, study participation will be more convenient and participants will be more apt to complete the survey. This also permits participants to complete the survey in private. Providing the participant with a methodology that improves privacy makes reporting of potentially embarrassing or stigmatizing behaviors (e.g., hookah use) less threatening and enhances response validity and response rates.

### 4. **Test of Procedures or Methods**

The primary contractor, SmartAnalyst, and their subcontractor, Rabin research, will conduct rigorous internal testing of the electronic survey instruments prior to their fielding. Trained researchers will review the screeners and questionnaire to verify that instrument skip patterns are functioning properly, delivery of campaign media materials is working properly, and that all survey questions are worded correctly and are in accordance with the instrument approved by OMB.

### 5. **Individuals Consulted in Statistical Consultation and Information Collection**

The following individuals inside the agency have been consulted on the design of the survey development:

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The following individuals outside of the agency have been consulted on questionnaire development.

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