

Impact of Flavors in Tobacco Products: An Experimental Market Analysis
Byrne, Sahara
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Abstract:

The 2009 Family Smoking Prevention and Tobacco Control Act gives the FDA broad regulatory authority over the manufacture, distribution and marketing of tobacco products to improve public health, which includes limiting the use of flavors in tobacco products. We are currently conducting tobacco regulatory research supported by an R01 grant titled “Constitutional Compliance, Credibility, and FDA Regulated Cigarette Warning Labels.” Under this grant, we are conducting randomized controlled experiments in a mobile lab to test hypotheses derived from communication theory about how to design warning messages that achieve maximum effectiveness. We are requesting an administrative supplement to expand on the parent grant’s design and use the parent grant’s infrastructure to conduct research into the impact of flavors on the attractiveness and use of tobacco products (FOA PA-14-320). The over-arching goal of the parent grant and the proposed administrative supplement is to conduct social science research to inform FDA tobacco regulatory actions. The administrative supplement will support research that cost-effectively and synergistically expands the parent grant’s research objectives and scope to address topics identified in the FOA about the impact of flavors in tobacco products.

Specific Aim 1 is to estimate the impact of flavors on attractiveness and use in experimental markets where adult low-SES tobacco users will make choices between cigarettes, smokeless tobacco (ST), little cigars and cigarillos, and e-cigarettes. To accomplish Aim 1, we will use the parent grant’s sample recruitment methods and mobile lab to conduct discrete choice experiments (DCEs) with adult low-SES tobacco users. DCEs are an established and widely used method in econometrics and marketing research which have been shown to provide valid information about consumer preferences and product use. DCEs are conducted by asking individuals to make purchase decisions under multiple scenarios where the products stay the same but the products’ characteristics, such as flavors, vary. An important contribution of our approach will be to conduct DCEs among under-studied and vulnerable sub-populations we are able to reach using the mobile lab.

Specific Aim 2 is to cross-validate the experimental market analysis through analysis of secondary data on consumer purchases and retailer sales of cigarettes, ST, little cigars and cigarillos, and e-cigarettes in actual markets. To accomplish Aim 2, we will analyze secondary data (already on-hand) from the Nielsen Consumer Panel and Nielsen retailer scanner data. We will use these data to estimate econometric models of household purchases and retailer sales in observational markets. The models will parallel the models estimated with the experimental market data. To cross-validate, we will use the estimated model parameters from the DCEs to predict consumer product choices under market conditions that correspond to the observational markets. We will also estimate a joint model that combines the use of observational and experimental tobacco market data.