Abstract:

Cigarette smoking is the leading cause of death due to cancer in the United States. Recently, electronic- or e-cigarettes have become popular alternatives to traditional cigarettes, especially among younger smokers who may perceive e-cigarettes as being safer than cigarettes. The health consequences of e-cigarette use are not well understood, and there are concerns that e-cigarettes may delay smoking cessation. At present, the U.S. Food and Drug Administration (FDA) does not regulate e-cigarettes, but is in the process of developing regulations under the Family Smoking Prevention and Tobacco Control Act (FSPTCA) for those e-cigarettes that are not marketed as therapeutic devices. Most e-cigarette marketing appears to use unsubstantiated health claims even if they avoid direct therapeutic claims. The goal of the proposed study is to help increase the FDA’s regulatory authority over e-cigarettes so as to counter misleading marketing. The main objective is to demonstrate that e-cigarettes are marketed to encourage consumer perceptions that e-cigarettes are safer alternatives to cigarettes. Evidence of such marketing is likely to trigger the FSPTCA modified risk provisions (21 U.S.C. §387k), under which products are prohibited to be marketed as modified risk products unless scientific evidence is provided to support that they reduce the risk of tobacco related disease in tobacco users and benefit public health as a whole. Two aims are proposed to attain the research objective. For Aim 1, we will conduct 12 focus groups with young adult (18-35 years old) current daily cigarette smokers (N = 72). We will qualitatively assess smokers’ perceptions of real e-cigarette ads and develop measures, including explicit and implicit attitude measures, which will be used to pursue the second aim. For Aim 2, we will conduct a laboratory-based experimental study with young adult cigarette smokers (N = 400). Half the participants will be randomly assigned to the experimental condition and exposed to real e-cigarette ads. The other half will be assigned to the control condition and exposed to control images. Post-exposure, all participants will be assessed on explicit and implicit measures of attitudes toward e-cigarettes as safer alternatives to cigarettes, and on measures of susceptibility to future e-cigarette use. This aim will test the hypothesis that the relationship between e-cigarette ad exposure and e-cigarette use susceptibility is mediated by explicit and implicit attitudes toward e-cigarettes as safer cigarette alternatives. Guided by the dual process theories, this is likely to be the first research to scientifically demonstrate the association of e-cigarette advertising with attitudes toward e-cigarettes and with e-cigarette use susceptibility.