



## Short Communication

## Butt Why? Exploring factors associated with cigarette scavenging behaviors among adult smokers enrolling in a clinical trial for smoking cessation

Ryan Lantini<sup>a,\*</sup>, Marie A. Sillice<sup>a,c</sup>, Joseph L. Fava<sup>a</sup>, Ernestine Jennings<sup>a,b</sup>, Rochelle K. Rosen<sup>a,c</sup>, Santina M. Horowitz<sup>a</sup>, Bruce M. Becker<sup>d</sup>, Beth C. Bock<sup>a,b,c</sup>

<sup>a</sup> Centers for Behavioral and Preventive Medicine, The Miriam Hospital, Providence, RI, United States

<sup>b</sup> Department of Psychiatry and Human Behavior, Alpert School of Medicine, Brown University, Providence, RI, United States

<sup>c</sup> Department of Behavioral and Social Sciences, Brown School of Public Health, Providence, RI, United States

<sup>d</sup> Department of Emergency Medicine, Rhode Island Hospital, Providence, RI, United States

## HIGHLIGHTS

- Cigarette scavenging is a smoking behavior involving shared or previously used cigarettes.
- This behavior has not yet been assessed in a general population of adult smokers.
- 31.7% of study participants were classified as cigarette scavengers.
- Significant differences were observed between scavengers and non-scavengers.
- Interventions addressing these behaviors may meet the needs of this subgroup of smokers.

## ARTICLE INFO

## Keywords:

Smoking  
Cigarette scavenging  
Nicotine dependence  
Nicotine addiction

## ABSTRACT

**Introduction:** Cigarette smoking is associated with many adverse health effects and is an important public health concern. Increased understanding of smokers' behavior is central to developing effective interventions. Cigarette scavenging, a behavior that involves smoking shared or previously used cigarettes has thus far only been shown to be prevalent among homeless or incarcerated populations. The current study examines whether cigarette scavenging is prevalent in a more general population of adult smokers enrolling in a smoking cessation clinical trial, and whether engagement in this behavior is associated with demographic or smoking-related psychosocial factors.

**Methods:** Baseline data was obtained from adult smokers (N = 227) enrolling in a randomized clinical trial for smoking cessation. Cigarette scavenging was assessed using three items: a) sharing a cigarette with a stranger; b) smoking a "found" cigarette and c) smoking a previously used cigarette "butt". Participants who endorsed engaging in at least one of these three behaviors were categorized as a scavenger.

**Results:** Approximately 32% of participants endorsed at least one cigarette scavenging behavior. A multiple logistic regression analysis found that scavengers were more likely to be: men ( $p < 0.001$ ), of younger age at smoking onset ( $p = 0.012$ ), unemployed ( $p = 0.003$ ), more likely to have used marijuana in the past 30 days ( $p = 0.005$ ), single or living alone ( $p = 0.003$ ), and to have experienced higher withdrawal symptoms during previous quit attempts ( $p = 0.044$ ) as compared to non-scavengers.

**Conclusions:** Scavenging is common among adult smokers. Interventions that address cigarette scavenging behaviors may better meet the needs of this unique smoking subgroup.

## 1. Introduction

Despite increased knowledge of the negative health consequences of smoking, an estimated 36.5 million American adults, or 15.1%, currently smoke cigarettes (Jamal et al., 2016). As a result, smoking

remains the leading cause of preventable death in the United States (USDHHS, 2014), with smoking prevalence highest among men, younger adults, those with lower levels education, lower incomes, and those with psychological comorbidity (Jamal et al., 2016).

Economic, social, and environmental changes occurring in U.S.

\* Corresponding author at: Centers for Behavioral and Preventive Medicine, The Miriam Hospital, Coro West, Suite 309, One Hoppin Street, Providence, RI 02906, United States.  
E-mail address: [RLantini@lifespan.org](mailto:RLantini@lifespan.org) (R. Lantini).

society have made it more difficult for smokers to easily satisfy their nicotine cravings. These include a growing negative sentiment directed at smokers, stigmatizing and forcing them to smoke apart from non-smokers, strict laws and workplace policies prohibiting smoking in many public spaces and the increased price of cigarettes through higher tobacco taxes places burdens on smokers with limited economic means.

One unintended consequence of increased tobacco taxes is that individuals with limited financial resources may engage in unconventional smoking behaviors to satisfy their nicotine craving. Such behaviors include smoking shared or previously used cigarettes, smoking discarded cigarettes (“butts”), and remaking cigarettes from portions of discarded cigarettes. While previous studies have used terms such as “sniping” (Tucker, Shadel, Golinelli, Mullins, & Ewing, 2015), “smoking used cigarettes” (Lantini et al., 2015) and “high-risk smoking” (Aloot, Vredevoe, & Brecht, 1993), we refer to these behaviors as “cigarette scavenging”, which more clearly describes these specific smoking behaviors. It has been suggested that engaging in these scavenging behaviors may be associated with additional health risks beyond those already posed by conventional smoking such as increased risk of toxin exposure, and/or increase risk of infectious disease transmission (e.g. Aloot et al., 1993), however, there are no extant studies showing this association.

Recent studies have suggested that engaging in these behaviors may also be associated with greater nicotine dependence (Lantini et al., 2015; Pettey, 2015; Tucker et al., 2015), and other factors previously demonstrated to be associated with greater nicotine dependence, such as lower income (Tucker et al., 2015), younger age of smoking onset (Lantini et al., 2015), and substance use (Pettey, 2015; Tucker et al., 2015). However, to our knowledge, studies examining these behaviors have only been conducted among homeless adults (Aloot et al., 1993; Chen, Nguyen, Malesker, & Morrow, 2016; Okuyemi et al., 2006), homeless youth (Tucker et al., 2015), and incarcerated populations (Lantini et al., 2015). It is unclear to what extent cigarette scavenging is prevalent among a more general population of smokers, and what factors underlie their engagement in these behaviors.

This study assesses the prevalence of cigarette scavenging in a population of adult smokers enrolling in a smoking cessation clinical trial, and explores whether scavenging is associated with certain demographic or psychosocial variables.

## 2. Method

### 2.1. Participants & procedures

Participants were 227 smokers enrolled in a randomized clinical trial offering cognitive behavioral therapy for smoking cessation plus either yoga or wellness classes. Eligible individuals were at least age 18 years of age, who smoked at least 5 cigarettes per day and were in generally good health. Individuals were excluded if they had a BMI over 40, had untreated psychiatric illness, or had medical conditions that would make participation in light to moderate exercise either difficult or medically inadvisable. Eligible individuals attended an orientation session where the study was described in greater detail and trained research staff obtained informed consent. Consented individuals were then scheduled for a return visit to receive their randomization assignment and complete baseline assessments. All baseline data were collected by research staff prior to participant randomization. Study procedures were approved by the Miriam Hospital Institutional Review Board. A Full description of study procedures has been published elsewhere (Bock et al., 2014).

### 2.2. Measures

#### 2.2.1. Demographics

Participants responded to demographic questions about their age, gender, race, ethnicity, marital and employment status, education, and

annual income.

#### 2.2.2. Smoking-related measures

Baseline surveys contained questions regarding participants smoking history, current smoking rate, nicotine dependence (FTND; Heatherton, Kozlowski, Frecker, & Fagerstrom, 1991), severity of nicotine withdrawal symptoms during previous quit attempts (Withdrawal Symptoms Questionnaire; Hughes & Hatsukami, 1986), and motivation, readiness and confidence to quit smoking assessed by 3 items using a 10-point scale from “not at all” to “extremely”. Temptation to smoke under a variety of circumstances was measured using the 9-item Smoking Situations Temptations scale (SST; Velicer, Diclemente, Rossi, & Prochaska, 1990), which assesses temptations related to habit/addiction, negative affect, and social situations.

#### 2.2.3. Psychosocial measures

Factors known to influence smoking behavior were also assessed. Depressive symptoms were assessed using the 10-item Centers for Epidemiological Studies Depression Scale (CESD-10; Andresen, Malmgren, Carter, & Patrick, 1994). Anxiety was assessed using the 20-item State-Trait Anxiety Inventory (STAI-t; Spielberger, 2005; Spielberger, Gorsuch, Lushene, Vagg, & Jacobs, 1983). Current positive affect (PA) and negative affect (NA) were measured using the 20-item Positive and Negative Affect Questionnaire (PANAS; Watson, Clark, & Tellegen, 1988). Impulsiveness was assessed using the 30-item Barratt Impulsiveness Scale (BIS-11; Patton, Stanford, & Barratt, 1995), which assesses attentional impulsivity, motor impulsivity and non-planning impulsivity. Social support was assessed using the 12-item Interpersonal Support Evaluation List (ISEL; Cohen & Hoberman, 1983).

#### 2.2.4. Cigarette scavenging behaviors (CSB)

Using the 3-item CSB instrument (Lantini et al., 2015), participants responded “yes” or “no” to each of the following items: a) “Have you ever shared a cigarette with a stranger? b) “Have you ever smoked a cigarette that you found?”, and c) “Have you ever smoked a cigarette that someone else has used (e.g., a cigarette butt)?” The three questions were examined in aggregate and also dichotomized as: (1) engaged in 1 or more behaviors, or (0) engaged in none of these behaviors. Anyone responding yes to at least one of the three questions was categorized as a scavenger.

### 2.3. Data analysis

All statistical analyses were conducted using IBM SPSS Statistics for Windows, Release 20.0.0 (IBM Corp., 2011). We first conducted a descriptive analysis of the overall demographic characteristics of the study participants. We next identified participants who were cigarette scavengers and compared that group to non-scavengers. Group comparisons were conducted using either chi-square or analysis of variance (ANOVA) tests, depending on the characteristics (categorical or continuous) of the dependent variable examined. We calculated effect sizes, Cramer's V for chi-square tests and Cohen's d for mean group differences (Cohen, 1988). Lastly, we examined which of the variables that were significant ( $p < 0.05$ ) or exhibited a trend ( $p < 0.10$ ) in the group comparisons, would emerge as significant predictors of cigarette scavenging behavior when simultaneously included within a multiple logistic regression model. Results are reported based on Wald tests with associated odds ratios and their 95% confidence intervals.

## 3. Results

### 3.1. Participant characteristics

The sample (Table 1) was 85.9% White, over half were female (55%), with a mean age of 46.2 years (range: 18 to 65; SD = 12.0). Approximately 65.6% were employed and 27.2% reported annual

Download English Version:

<https://daneshyari.com/en/article/7259534>

Download Persian Version:

<https://daneshyari.com/article/7259534>

[Daneshyari.com](https://daneshyari.com)