



ELSEVIER

Available online at www.sciencedirect.com

ScienceDirect

journal homepage: www.elsevier.com/locate/vhri

Smoking Behavior among Jordanians: Physical, Psychological, Social, and Economic Reasons

Nadia J. Sweis, PhD*

Department of Business Administration, King Talal School of Business Technology, Princess Sumaya University for Technology, Amman, Jordan

ABSTRACT

Objectives: To highlight the physical, psychological, social, and economic reasons related to sex differences in smoking behaviors in Jordan. **Methods:** A cross-sectional questionnaire-based survey was conducted among Jordanian adult smokers. **Results:** Sex was a significant predictor of physical reasons related to smoking; when controlling for other factors ($t_{765} = 5.027$; $P < 0.001$), women were more affected by physical factors than were men. In addition, work status was a significant predictor of physical reasons ($t_{765} = -2.563$; $P = 0.011$), as was the price of cigarettes ($t_{765} = 2.224$; $P = 0.026$). Age was a significant predictor of psychological reasons ($t_{765} = -3.092$; $P = 0.002$): younger individuals were more likely to state psychological factors as their reason for smoking than were older individuals. Conversely, sex was a significant predictor ($t_{765} = 2.798$; $P = 0.005$) of social reasons for smoking, with more men than women reporting

social motivations. **Conclusions:** Women were more likely to smoke for physical factors that are positively correlated with the price of cigarettes, rendering them less responsive to an increase in the price of cigarettes. Conversely, men were more likely to smoke for social reasons that are negatively correlated with the price of cigarettes; thus, men are more responsive to an increase in the price of cigarettes. Future public policies aiming to combat smoking in Jordan should consider sex differences in smoking behavior because one policy may not necessarily fit all.

Keywords: economics, Jordan, price of cigarettes, sex differences, smoking.

© 2018 Published by Elsevier Inc. on behalf of International Society for Pharmacoeconomics and Outcomes Research (ISPOR).

Introduction

Tobacco use is on the rise in developing countries despite several steps being taken to achieve a tobacco-free environment. The World Health Organization estimates that approximately 6 million people die from tobacco-related illnesses annually. If the current trends continue, tobacco will be responsible for more than 8 million premature deaths annually by 2030. Approximately 80% of these deaths will be in low- and middle-income countries [1].

Jordan, a developing country that has one of the smallest economies in the Middle East [2], had a 42.2% overall prevalence of tobacco use for those 15 years and older in 2011. The prevalence of smoking among males was estimated to be 55.9%, whereas that for females was estimated to be 23.7%. The overall prevalence of cigarette smoking was 35.2%, whereas the prevalence of waterpipe smoking was 15.2%. The demand for cigarettes in Jordan was inelastic, and the overall price elasticity was estimated to be -0.6 . Women were found to be less responsive to the price of cigarettes than were men in Jordan. The demand price elasticity for cigarettes was estimated at -0.01 and -0.81 for women and men, respectively [3].

International studies about the relative price responsiveness of women compared with men have differed in their findings. In 1994, Townsend et al. [4] found that women in Britain in the late 1980s and early 1990s were more responsive to increases in the price of tobacco than were men. Nevertheless, many other studies in the literature found men to be more responsive to the increase in the price of cigarettes [5–7]. In 2016, Francis [8] indicated that increasing the price of tobacco, alcohol, or illicit drugs will cause their consumption to drop; nevertheless, this responsiveness to price varies somewhat across sex, race, and other demographic categories. Potential demographic differences in the response to public policies exist, and these must be appropriately addressed [8].

Because the responsiveness to an increase in the price of cigarettes varies by sex, factors other than price that affect smoking behaviors of both men and women must be further investigated before implementing a policy that targets smoking behavior. In a recent study by Cawley et al. [9], the demand for cigarettes tended to be less price-elastic among those who smoke for weight loss, controlling for factors other than price and quantity of smoking. This conclusion was derived from an economic model of body weight and smoking. The empirical

Conflicts of interest: The author has no competing interests to declare.

* Address correspondence to: Nadia J. Sweis, Department of Business Administration, King Talal Faculty for Business and Technology, Princess Sumaya University for Technology, P.O. Box 1438, Al Jubaiha, Amman 11941, Jordan.

E-mail: sweisnadia@gmail.com.

2212-1099\$36.00 – see front matter © 2018 Published by Elsevier Inc. on behalf of International Society for Pharmacoeconomics and Outcomes Research (ISPOR).

<https://doi.org/10.1016/j.vhri.2017.09.003>

evidence showed the degree to which the demand for cigarettes is derived from the demand for weight loss. Moreover, women appear to be more affected than men by the desire to smoke for weight control and by the perception that smoking may control negative moods. According to the 2004 Surgeon General's report [10], women have been extensively targeted in tobacco marketing, and tobacco companies have produced brands specifically for women both in the United States and in other countries; consequently, smoking among females is expected to double between 2005 and 2025 [11].

Given the aforementioned context, action must be taken regarding women's tobacco use. Therefore, determining the factors other than price that affect the smoking behavior of both men and women will support policymakers in tailoring policies to combat smoking. Despite the many research studies on the socioeconomic differences in smoking behavior and how different socioeconomic groups respond to price increases in cigarettes, it is believed that increasing cigarette taxes and hence increasing prices might not result in the same effect in all groups.

Research on the economics of tobacco use in Jordan confirmed what previous studies have found: women are less responsive to an increase in the prices of cigarettes than are men [3,12]. Nevertheless, the reasons behind this phenomenon have not been largely investigated. Thus, this study was aimed at determining the factors that may potentially explain the lack of responsiveness to price changes among Jordanian women who smoke cigarettes.

Methods

Study Design

This was a cross-sectional questionnaire-based study involving adult smokers in Jordan. The questionnaire was distributed in the city of Amman, the capital of Jordan, among individuals who smoked cigarettes in 2016. To ensure that the targeted sample smoked cigarettes, the respondents were interviewed at cafes where tobacco was served. Verbal consent was obtained from the respondents who were 18 years or older and who were current cigarette smokers.

Questionnaire Development and Validation

A pretested survey containing questions on demographic, physical, social, psychological, and economic factors affecting smoking behaviors was obtained and adapted from a study conducted by Naquin and Gilbert [13]. The questionnaire was developed with consideration to previous research results from a review of the literature and qualitative interviews of factors other than price that might affect smoking behavior. The instrument was tested for face validity, content validity, and internal consistency. The survey showed very good face and content validity and had good reliability (Cronbach α of 0.85).

The final version of the questionnaire consisted of 7 questions on sex, age, educational level, work status, and price of cigarettes per pack, and 13 questions on why the respondent smokes.

The individual reasons for smoking were grouped into four categories: physical reasons, psychological reasons, social reasons, and economic reasons.

Physical reasons: I crave cigarettes if I do not smoke; I get a buzz when I smoke; I find smoking pleasurable; I enjoy the taste of cigarettes; smoking helps me control my weight.

Psychological reasons: Smoking relaxes me; smoking helps me focus and concentrate better; smoking makes me feel less stressed.

Social reasons: I am around smokers often; since others in my family smoke, it is easy to see myself as a smoker too; I smoke to fit in with other people; I like the image of a smoker.

Economic reasons: The price per pack of cigarettes.

Sample Size and Sampling

Cluster and multistage stratified sampling techniques were used in this study. Given a desired margin of error of 0.03, a 95% confidence interval, and a previous judgment value of 0.5, the sample size for the study was estimated to be 784 smokers. Given the average response rate of 95.5% in previous studies, we targeted 827 smokers to guarantee the participation of at least 784 smokers.

The total population in Jordan was estimated at 10 million in 2015 [14], of whom 4.1 million resided in Amman. The estimated number of individuals who smoked cigarettes in Amman was 1.7 million according to the 42% prevalence of cigarette smoking estimated by Sweis and Chaloupka [3]. Using the table presented by Krejcie and Morgan [15] in 1970, the sample size from a population of 10 million is estimated to be 784, which is consistent with the aforementioned calculations.

Statistical Analysis

The data were analyzed using the Statistical Package for the Social Sciences (SPSS) version 22 (IBM, Chicago, IL USA). Frequencies and percentages, means, χ^2 tests, and regression analyses were used to compare subgroups of dichotomous variables. The critical level was set at 0.05.

Results

Demographic and Outcome Data

The response rate was 92.5%. Approximately 53.4% of the respondents were women, of whom 47.7% were between 18 and 24 years old, 42.3% were unemployed, and 69.1% had a bachelor's degree. Conversely, 50.7% of the male respondents were between 18 and 24 years old, 92.8% were employed, and 66.6% had a bachelor's degree, as presented in Table 1.

The reasons why men and women smoke are also presented in Table 1. Approximately 52% of women smoke because it makes them feel less stressed, whereas 67.5% of men smoke because smoking helps them focus and concentrate better.

Factors Affecting Sex Differences in Smoking Behavior

While controlling for other variables, different types of analyses were performed to determine whether the sex differences were significant.

Test of binary significance between sex and individual motivations

χ^2 tests were performed to determine whether there were sex differences for individual motivation factors. Tables 2 and 3 present the significant differences between the sexes. Two physical factors were significantly different between men and women. Men were significantly more likely to report cravings (c^2 [1, N = 765] = 193.309; $P < 0.001$) (40.9% reported craving compared with 1.4% of women). In addition, 15.3% of women reported weight loss as a motivation to smoke compared with 4.2% of men (c^2 [1, N = 765] = 25.089; $P < 0.001$). For social motivations, being around smokers and having family who smoked significantly differed between men and women. Men were more likely to report both social motivations compared with women (being around a smoker c^2 [1, N = 765] = 4.960; $P = 0.026$;

Download English Version:

<https://daneshyari.com/en/article/7389618>

Download Persian Version:

<https://daneshyari.com/article/7389618>

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