

# Customers' Post-Implementation Attitudes towards Café Smoking Ban in a Transition Country

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The logo for 'dabar', featuring a stylized black and red graphic above the word 'dabar' in a lowercase, sans-serif font.

DIGITALNI AKADEMSKI ARHIVI I REPOZITORIJI

# **CUSTOMERS' POST-IMPLEMENTATION ATTITUDES TOWARDS CAFÉ SMOKING BAN IN A TRANSITION COUNTRY**

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**ABSTRACT:** While transition economies denote a distinct and relatively homogeneous set of countries, very little is known about the effects of smoke-free laws in the hospitality industries of these nations. Hoping to assist in filling this void, this research empirically explores the post-implementation attitudes towards the café partial smoking ban among Croatia's café patrons. Results revealed that academic and occupational characteristics were not significant in explaining different perceptions toward a smoking ban. However, respondents' frequency of café patronage, smoking status, café smoking preference, and health problems from second-hand smoke (SHS) exposure did influence how respondents viewed the smoking ban. Smokers do not consume less alcohol and coffee in cafés following the ban's enactment. Respondents appear willing to make concessions for both pro- and anti-smoking patrons, staff, and owners/managers. Theoretical and managerial implications and opportunities for future research are further discussed. **Keywords:** Second-hand smoke, smoking ban, café, attitudes, transition countries

**RESUMEN:** Mientras que las economías en transición revelan un conjunto de países distinto e relativamente homogéneo, muy poco se sabe sobre los efectos de las leyes contra el tabaco en las industrias hoteleras de estas naciones. Esperando rellenar este hueco, este estudio explora empíricamente las actitudes de los frequentadores Croatas después de la implementación de la prohibición parcial de fumar en las cafeterías. Los resultados revelan que las características académicas y ocupacionales no eran significativas para explicar las distintas percepciones relativamente a la prohibición de fumar. Sin embargo, la frecuencia con que los encuestados van a la cafetería, el estatuto de fumador, la preferencia por fumar en cafeterías, y problemas de salud que vienen de la exposición al humo (fumadores pasivos) influenciaron la manera como los encuestados han visto la prohibición de fumar. Los fumadores no consumen menos alcohol ni café en los establecimientos después de la promulgación de la prohibición de fumar. Los encuestados parecen disponibilizarse para hacer concesiones tanto para los frequentadores, empleados y dueños/gerentes como para los que son contra el tabaco. Implicaciones teóricas y de gestión y oportunidades para investigación futura serán discutidas después. **Palabras clave:** tabagismo pasivo, prohibición de fumar, café, actitudes, países en transición.

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**RESUMO:** As economias em transição constituem um conjunto de países distinto e relativamente homogêneo, e muito pouco se sabe acerca dos efeitos das leis antitabágicas nas indústrias hoteleiras destas nações. Esperando preencher este vazio, este estudo explora empiricamente as atitudes dos frequentadores Croatas após a implementação da proibição parcial de fumar nos cafés. Os resultados revelam que as características acadêmicas e ocupacionais não eram significativas para explicar as diferentes percepções relativamente à proibição de fumar. Contudo, a frequência com que os inquiridos vão ao café, o estatuto de fumador, a preferência por fumar em cafés, e problemas de saúde que advêm da exposição ao fumo (fumadores passivos) influenciaram a maneira como os inquiridos viram a proibição de fumar. Os fumadores não consomem menos álcool nem café nos estabelecimentos após a promulgação da proibição de fumar. Os inquiridos parecem dispostos a fazer concessões tanto para os frequentadores, empregados e donos/gerentes pró como antitabagistas. Implicações teóricas e de gestão e oportunidades para investigação futura serão discutidas posteriormente. **Palavras-chave:** tabagismo passivo, proibição de fumar, café, atitudes, países em transição.

## INTRODUCTION

Healthcare and tobacco research has long established that smoking is not only hazardous to smokers, but also to those exposed to second-hand smoke (SHS; also known as the environmental tobacco smoke [ETS]) in restaurants, bars, offices, and other enclosed spaces where smoking is allowed (National Cancer Institute, 1999; World Health Organization [WHO], 2008, 2011a). Moreover, ETS levels have been found to be 1.6-2.0 times higher in restaurants and 3.9-6.1 times higher in bars, as compared to office workplaces (Siegel, 1993). Armed with evidence that SHS harms the health of customers and employees, many countries and jurisdictions (among others U.S., Canada, New Zealand, Australia, Ireland, Italy, Croatia) have in the past two decades adopted legislation restricting or prohibiting smoking in workplaces and public places, such as restaurants and bars. Needless to say, in both past and present attempts to ban smoking in restaurants and bars, many hospitality owners, managers, and associations have put up resistance to a smoking ban, citing rights (as owners) to make their own decisions regarding smoking policies and fears of a decrease in patronage and the associated loss in sales and profits (Hirasuna, 2006; Roseman, 2005).

In response to the often heated debates between public health advocates and smoking ban opponents regarding the economic effects of smoking bans in bars and restaurants, over 150 studies in English language have been conducted on the subject as late as February 2008, as identified by Scollo and Lal (2008). Despite voluminous research, a closer inspection of the 150+ smoke-ban-related research articles comprehensively reviewed by Scollo and Lal reveals the following two gaps in the available research.

First, all of the peer-reviewed articles have focused on the hospitality industries in developed countries, whilst research in transition countries remains an uncharted territory. Of the 36 peer-reviewed studies, 22 (63 percent) were conducted in the U.S., followed by Australia (4), Cana-

da (3), New Zealand (3), South Africa (2), UK (1), and Italy (1). While Croatia (that is, a transition country) has long enacted legislation against tobacco sale to minors (namely, <18 year-olds), the laws are poorly enforced, as in other transition nations (Balabanova et al., 1998). For example, 71.5 percent of Croatia's elementary (that is, primary) and high (that is, secondary) school students ages 13-15 who bought cigarettes in a store were not refused purchase because of their age (Centers for Disease Control and Prevention, 2007). This example suggests that the issues of smoking prohibition and smoke-ban enforcement in Croatia and other transition countries cannot be understood simply by looking at developed and other non-transition countries (Goić and Bilić, 2008). Host population's social, economic, political, and environmental attitudes and behaviors are products of complex and long lasting past processes, and thus are difficult to change.

Second, very few research articles about consumers' attitudes toward smoking bans have been published in hospitality journals thus far (Roseman, 2005). According to attribute-value theory (Mowen and Minor, 1998), consumers make decisions based on different attributes. For instance, café patrons may be attracted by the ability to smoke, by the ability to socialize smoke-free, by price, by location. Patrons weigh up the overall value in terms of the presence and importance of each attribute. A favorable overall attitude is expected to result in repeat business. Since the type of smoke ban (namely, full or partial) and the degree of the ban's enforcement may affect the extent to which individuals appreciate certain aspects of hospitality services, over time this can have significant implications for businesses in the hospitality industry. In fact, understanding consumer choices is the key to repeat business (Yuksel and Yuksel, 2002), and it is imperative that businesses take into account consumer preferences when making decisions regarding product and service attributes (Verma et al., 2002). Indeed, updating the literature on smoking ban issues is important to the hospitality industry and hospitality owners are seeking relevant data that identifies the potential impact smoking bans will have on businesses' patronage. Needless to say, other hospitality stakeholders (that is, consumers, labor unions, and the government) must also understand what the current smoke-related trends in consumer behavior are, which consumer segments exist and how consumer behavior will develop in the future.

The lack of peer-reviewed research regarding (1) the impacts of smoke-free legislation on hospitality sectors in transition countries and (2) consumers' attitudes toward smoke-free legislation in general, form the basis for this study. The additional rationale for this study stems from the relevance and timeliness of consumer opinion regarding smoking in hospitality establishments in Croatia and other transi-

tion countries. On October 22, 2008, the Croatian Parliament passed legislation prohibiting smoking in public institutions such as hospitals, clinics, schools, nurseries, and universities, with violations punishable by fine (Croatian National Gazette, 2008). For bars, restaurants, and cafes, the ban went into effect in May 2009 following a six-month grace period. However, in September 2009 the ban on smoking in bars and cafes was partially repealed for yet another grace period until April 2010 (Croatian National Gazette, 2009). Moreover, proprietors with small establishments (namely, those up to 50 square meters [538 sq. ft.] in size) that meet very strict conditions were given the option to choose whether to allow smoking.

It is hoped that this study's results will provide consumer advocate groups, hospitality labor unions, hospitality trade associations, and the government with information that will help support or modify the current hospitality smoking policy. The main objectives of this exploratory study are to:

1. Assess the profile of Croatia's young café customers and prospective employees (that is, college students)
2. Examine respondents' post-implementation attitudes towards café smoking ordinances
3. Empirically explore whether the reported attitudes are associated with demographic/academic characteristics, former/current and future employment sector, frequency of patronage, smoking status, café smoking preference, and health problems from café SHS exposure

The rest of the paper is organized as follows; we first review the impacts of smoke-free legislation on the hospitality industry. Subsequently, the sections covering transition countries and Croatia's partial smoking ban help contextualize the current study. We then describe the methodology employed, followed by a discussion of the results and the study's conclusions and implications.

## IMPACTS OF SMOKE-FREE LEGISLATION ON THE HOSPITALITY INDUSTRY

Through a careful reading of outcome measures presented by Scollo and Lal (2008) in their seminal review of over 150 studies in the English language on the effects of smoke-free policies in the hospitality industry, three broad themes appear to emerge – impacts on owners and managers, impacts on employees, and impacts on patrons. These impacts are discussed in greater detail in the subsequent sections.

*Impacts on owners/managers and staff*

In terms of smoking ban impacts on hospitality owners and managers, in the longitudinal analysis of the impact of a 2004 smoking ban on restaurant and pub revenues in Norway, Melberg and Lund (2010) did not find any statistically significant effects on Norway's restaurant revenues. However, in pubs, a share of personal consumption revenues went down in the short-run, but in the long-run and in absolute terms revenues increased. Luk et al. (2006) found no significant adverse impact of smoke-free legislation on restaurant and bar sales in a bilingual city of Ottawa. A survey of New Zealand's bar managers showed not only a significant increase in overall support for the smoking legislation after implementation, but also an increased agreement that smoke-free laws do not affect patron numbers and venue profits (Thomson and Wilson, 2006). Alamar and Glantz (2007) found no significant differences in purchase prices between similar bars sold in smoke-free and smoking-permitted U.S. jurisdictions. In a similar study of restaurants, Alamar and Glantz (2004) showed that U.S. restaurants in smoke-free locations sold for higher prices than comparable restaurants in locations where smoking was allowed.

In terms of smoking ban impacts on hospitality staff, Klein et al. (2009) found no significant short- or long-term effect of the type of smoking ban (that is, comprehensive, partial, and no ban) on bar and restaurant total employment in free-standing bars and full-service restaurants in ten Minnesota cities. In a Norwegian panel study of employee job satisfaction before and after the smoking ban implementation, there was a slight improvement in satisfaction among employees who are non-smokers and a moderate decrease in satisfaction among employees who smoke (Hetland et al., 2008). Adams and Cotti (2007) found that bar employment decreased in U.S. communities where smoking was banned compared with those that allowed smoking. However, bar job loss was substantially more pronounced in areas with a high prevalence of smokers. They also found evidence of increased employment in warmer regions of the country during the cooler winter months, and in the summer in colder regions, thus suggesting that the prevalence of restaurant outdoor seating might influence the policy's effect. In a study of standalone and combination bars in California, Tang et al. (2004) found that employee support for a smoke-free bar law significantly increased shortly after its enactment and four years later. In the state of New York, Hyland et al. (2000) found no statistically significant change in hospitality employment levels following a ban relative to other places in their study.

*Impacts on patrons*

Kang et al. (2007) investigated college students' perceptions of smoking bans and their knowledge regarding a smoking ban in a Colorado college town three years after its implementation. While respondents strongly supported the smoke-free ordinance, no significant differences on perceptions or dining out behaviors were detected based on their smoking status. Interestingly, those who wanted to work in the hospitality industry were more vocal about and supported smoking bans more than those who wanted to work in non-hospitality sectors. Miller and Hickling (2006) measured the impact of smoke-free laws on bar patronage and smoking behavior among young adults (18-24 years) four months into Phase I of the phased-in smoking ban in South Australia. Respondents reported higher bar patronage and greater impact of the new laws on patronage, current smoking, and future likelihood of quitting.

Fong et al. (2006) evaluated the psychological and behavioral impact of the first ever nationwide comprehensive smoking ban, implemented in ROI in 2004, through a comparison of adult smokers in ROI and UK before and 8-9 months after the law. Compared with UK, where smoking had not been banned and smoking behavior remained vastly unchanged, ROI witnessed dramatic increases in smokers' post-implementation support for a total smoking ban in pubs (that is, from 13 to 46 percent) and restaurants (that is, from 45 to 77 percent). However, because of the law, 35 percent of smokers and 16 percent of quitters reported avoiding going to pubs, and 18 percent of smokers and eight percent of quitters reported avoiding going to restaurants. Roseman (2005) compared future dining behaviors among nonsmokers, former smokers, and smokers in Kentucky. They found that, if smoking was banned in restaurants, nonsmokers and former smokers were likely to eat out more, while smokers were more likely to eat out less. Similar findings were revealed in studies of Hong Kong (Lam et al., 2002) and South Australian (Wakefield et al., 1999) restaurant consumers.

Tang et al. (2003) employed three cross-sectional surveys to examine bar patrons' attitudes at three months, eight months, and 2.5 years after enactment of the 1998 smoke-free law in California. They found that, over time, California's bar patrons increasingly favored the smoke-free bar law, took seriously the health concerns regarding exposure to ETS, and complied with the law. Moreover, 2.5 years after the law's enactment, 32.3 percent of the respondents reported that they were more likely to visit bars, whereas only nine percent had the opposite opinion. In the pre-implementation study of Massachusetts adults, Biener and Siegel (1997) found that 69 percent of the respondents predicted no change in bar visitation, 20 percent indicated increased visits, and 11 percent predicted decreased patronage. In terms of restaurants, 61 percent indicated no change in dining

out, 30 percent predicted increases, with only eight percent indicating decreases in patronage. This pre-implementation finding differs from the post-implementation finding by Corsun et al. (1996), who found that most of their sampled consumers in Manhattan (New York City) did not change their eating out frequency after a ban took effect; 38 percent of smokers said they dined out less often, while 17 percent of nonsmokers reported dining out more often.

### *Summary*

The preceding short summary of peer-reviewed studies generally supports the view that when a smoking ban is uniform throughout a geographic area (city, state, province), the industry-level effects of regulation seems non-existent or even favorable in the area (Alamar and Glantz, 2007, 2004; Luk et al., 2006; Melberg and Lund, 2010; Scollo and Lal, 2008; Thomson and Wilson, 2006). However, on a firm-level, limited research suggests that the moderating effects of establishment type (that is, restaurants vs. bars), seating allocation (that is, outdoor vs. indoor), community population characteristics (that is, high vs. low smoking prevalence), and the combination thereof might influence the impact of smoking bans (Adams and Cotti, 2007; Dunham and Marlow, 2000; Hammar, 2004; Hyland et al., 2000). When it comes to employees and patrons, their attitudes and behaviors appear to be largely driven by their smoking status. Hence, non-smoking patrons are likely to frequent hospitality establishments more often after the ban's enactment, and thus offset the decreased volumes of smoking guests. Ultimately, all three groups unanimously recognize the negative effects of smoking and SHS exposure. Admittedly, some employees and patrons credit smoke-free laws for quitting smoking.

Overall, in the assessment of impacts of smoke-free legislation in the hospitality industry, researchers have employed objective (for instance, data derived from sales taxes or revenues, urinary nicotine levels) and/or subjective (for example, data obtained via surveys of owners, employees, and patrons of restaurants, bars and other hospitality establishments) data that was collected before and/or after the implementation of a smoking ban (Luk and Ferrence, 2005). Objective data cover all establishments in jurisdictions under consideration and are collected routinely by official or neutral agencies over an extensive period using consistent methods. These data are verifiable and therefore thought to be superior to the subjective perceptions of owners, employees, and consumers (Luk and Ferrence, 2005).

However, studies using objective data have been criticized for relying on community averages (as opposed to firm-level indicators) and revenues (instead of profits; Dunham and Marlow, 2000), and



for failing to account for the effect of confounding factors, such as trend, seasonal variation, the general economic conditions and other events that are unrelated to the legislation (Jones et al. 1999; Kang et al, 2007). On the other hand, subjective data, provided they come from the properly designed owner, employee or consumer surveys, can reveal data at the micro level and thus be useful in supplementing studies that use objective data (Luk and Ferrence, 2005). As expected, studies using subjective data have been criticized for relying on unverifiable perceptions that may be biased by personal attitudes toward the smoking ban.

This being said, the existing research on the impacts of smoke-free legislation has centered on hospitality industries in developed countries (for instance, Scollo and Lal, 2008), with the most commonly examined localities being those located in the U.S. (Kenkel and Wang, 2008). Meanwhile, much less is known about the impact on hospitality establishments in transition and developing countries.

## CROATIA'S SMOKING TRANSITION

The term 'countries in transition' exclusively applies to the former communist countries of Central and Eastern Europe, including the former Soviet Union (United Nations Statistics Division, 2011), that are undergoing a grueling social, political, and economic transformation from a centrally planned economy to a market-based one (Goić and Bilić, 2008). This process of transition began in the late 1980's following the fall of both the Berlin Wall and the communist system. During the decades leading to the fall of the Berlin Wall, private-sector entrepreneurship in these countries was restricted, confined, hampered, suppressed, and even illegal (Goić and Bilić, 2008). Furthermore, in 2003, adult smoking stood at 31.5 percent (47 percent men and 15 percent women) among transition nations, compared to 29 percent (38 percent men and 16 percent women) in the rest of the world (Budak et al., 2006). Moreover, the Eastern Europe and Eurasia region is the only region worldwide to have witnessed a population decrease in 1991-2002 (Heinegg et al., 2005). To this extent, from the developed country perspective, all transition countries either went or are still going through similar processes and face or have faced analogous developmental issues, and thus may be considered as relatively homogenous.

In line with several other countries, on October 22, 2008, the Croatian Parliament passed legislation prohibiting smoking in public institutions such as hospitals, clinics, schools, nurseries, and universities, with violations punishable by fine (Croatian National Gazette, 2008, 125). Bars, restaurants, and cafes were granted a six-month grace period. Thus, in May 2009, the ban was extended to all hospi-

tality establishments. However, following the negative impacts of a global economic crisis and the subsequent outcries by the hospitality sector, in September 2009 the ban on smoking in bars and cafés in Croatia was partially repealed for yet another grace period until April 2010 (Croatian National Gazette, 2009, 119). Moreover, proprietors with establishments up to 50 square meters [538 sq. ft.] in size that meet very strict conditions were given the option to choose whether to allow smoking. Two major conditions are air filtration and a ventilation system that is able to change indoor air at least 10 times per hour. As late as May 2010, almost 6,900 (45 percent) cafes and bars out of the 15,142 members of the Croatian Chamber of Trades and Crafts have been awarded permission to allocate all or part of their premises to smoking (Bratonja Martinović, 2011).

Thanks to the Mediterranean climate (that is, very hot and dry summers, and mild, wet winters) in Croatia's coastal parts, a typical café has a high or even majority proportion of outdoor seating. Moreover, for many Croats, drinking coffee or other beverages at a local café – often making a single coffee or drink last in excess of one hour – is one of Croatia's favorite pastimes, and is usually referred to by the natives as the Croatian Café/Coffee Culture. While people of all ages frequent cafés, for both university and high school students they are the most favorite outlets to socialize during days and evenings. Since coffee, tea, and alcohol consumption goes hand in hand with smoking cigarettes and other tobacco products, prior to Croatia's smoking ban in bars, restaurants, and cafes, many students were readily observed indulging in cigarettes at these places.

Findings from a physical examination of college freshmen in eight (out of 21 total) Croatian counties in the 2009-2010 academic year provide insights about the prevalence of smoking among university students, who are the focus of the present research (Croatian National Institute of Public Health, 2010). Accordingly, 42 percent of female students (25 percent regular and 17 percent occasional smokers) smoked tobacco-related products versus 39 percent of their male counterparts (24 percent regular and 15 percent occasional smokers). In comparison, 27 percent of Croatia's adult population (namely, 18+) are smokers, of which 32 percent men and 22 percent women (WHO, 2011b).

While students represent an important café customer segment, they are also current or prospective employees of cafés and other hospitality establishments (Kang et al., 2007). Therefore, it appears important to understand how smoke-free laws affect the hospitality patrons' behaviors and compliance attitudes in transition countries such as Croatia. Despite the importance of the student population for café owners and managers, very little is known about their attitudes towards the smoking ban in Croatia and other transition coun-

tries. Through an empirical assessment of college students' post-implementation attitudes toward Croatia's partial smoking ban in cafés, this article seeks to make a contribution in the needed direction.

## METHODOLOGY

This study featured a primary data collection from undergraduate business students at a large public university in southern Croatia in Fall 2011. A stratified sample comprised approximately half (450) of the total undergraduate student population (just over 900 full-time students), proportionally allocated in each of the three years (first, second, and third) and programs of study (economics, business administration [BA], and tourism) for a three-year undergraduate degree. Several instructors were asked to use approximately 10 minutes of class time for students to complete the brief questionnaire. Each instructor randomly handed out questionnaires to a pre-determined number of students in each of the nine strata (there were no refusals).

A two-page anonymous self-administered questionnaire written in Croatian was used as a survey instrument. The majority of survey questions were borrowed from Kang et al. (2007), Miller and Hickling (2006), Biener and Siegel (1997), Wan and Pilkington (2009), Fong et al. (2006), Tang et al. (2003), Roseman (2005), and Cameron et al. (2003), and adapted to this study's context. Since a smoking ban can potentially influence drinking habits of both smokers and non-smokers (Room, 2005), two Likert scale items were developed in order to examine respondents' changes in alcohol and coffee consumption after the law's enactment. Similarly, another scale item was developed to explore the potential impact of a smoking ban on Croatia's image as a tourist destination (Hearn, 2004). Since employee smoking behavior may influence customer satisfaction via inadequate service delivery (that is, mini service lapses due to staffers mysteriously and unexplainably disappearing from the floor to grab a quick smoke while guests go unattended), we also incorporated a scale item measuring respondents' perception of an overall quality of the service delivery in cafes where smoking is prohibited.

The questionnaire was composed of two sections. The first section measured respondents' demographic/academic profile, frequency of patronage, former/current and future employment sector, smoking status, café smoking preference, and health problems from café SHS exposure. The second section measured respondents' post-implementation perceptions of a café smoking ban, using a 27-item five-point Likert scale anchored by 1 (*strongly disagree*) and 5 (*strongly agree*). Several items were reverse-worded to reduce the danger of response bias (Churchill, 1979; Nunnally, 1978). Questionnaire design followed the established survey guidelines (Fanning, 2005; Dillman, 2000) and was evaluated by two so-

cial science research experts. The subsequent pre-test of the instrument on 20 students revealed only a few typos that were easily corrected.

Descriptive statistics included frequency analysis of all variables. The differences in expressed post-implementation attitudes towards a café smoking ban regarding the demographic/academic characteristics, former/current and future employment sector, frequency of patronage, smoking status, café smoking preference, and health problems from café SHS exposure were tested by the non-parametric Kruskal-Wallis (K-W) and Mann-Whitney U (M-W U) tests. The influence of demographic/academic characteristics, former/current and future employment sector, frequency of patronage, smoking status, and health problems from café SHS exposure on café smoking preference was examined via a series of Chi-square tests.  $p$ -value less than .05 was considered as the evidence of statistical significance.

The measure of internal consistency (reliability) of attitudinal items was calculated using Cronbach's alpha coefficient. The average linkage between groups clustering was applied separately for smokers and non-smokers on a set of 27 perception items in order to address their underlying structure in a smaller number of clusters. Friedman test was used to check for statistically significant degrees of respondent agreement among clusters.

## FINDINGS AND DISCUSSION

### *Respondent profile*

Of the 450 respondents, 61.2 percent were female and 38 percent male. Majority (75 percent) study BA, followed by economics and tourism (12 percent each). There were 40 percent, 31 percent, and 29 percent of students in their first, second, and third year of college, respectively. Just under one-third of the respondents (31 percent) frequent cafés 2-3 times per week, followed by 4-5 times (24.5 percent), >7 times (18.7 percent), 6-7 times (15 percent), and 0-1 times (10.7 percent). Nearly one-third (29 percent) indicated current or previous employment in a hospitality establishment (for instance, hotel, restaurant, café). Majority (78 percent) will not seek future employment in tourism and hospitality. As for respondents' smoking status, half were non-smokers, followed by regular (27.4 percent), occasional (16 percent), and former (six percent) smokers. In comparison, 27 percent of Croatia's adults (namely, 18+) are smokers (WHO, 2011b). When asked about their preferred type of café smoking policy, 40 percent of the respondents indicated that smoking should only be allowed in both outdoor and designated indoor areas, followed by designated indoor area only (20 percent), all guest areas (16 percent), outdoor area only (14 percent), full smoking ban (nine percent), and other (one percent). In regards to experiencing

or having experienced health problems from café SHS exposure, 49.1 percent answered negatively, 20.6 percent answered positively, and 30.3 percent indicated that they did not know or were not sure whether they experienced adverse consequences from SHS exposure.

**Table 1. Smoke ban perceptions and their relationship with demographics**

V <sup>i</sup>	Me <sup>ii</sup>	G <sup>iii</sup>	S <sup>iv</sup>	SY <sup>iv</sup>	FWP <sup>iv</sup>	PCE <sup>iii</sup>	FE <sup>iii</sup>	SS <sup>iv</sup>	PSP <sup>iv</sup>	HP <sup>iv</sup>
1 <sup>v</sup>	4	.356	.242	.636	.00*** <sup>0</sup>	.058	.189	.00*** <sup>N</sup>	.00*** <sup>B</sup>	.00*** <sup>Y</sup>
2	4	.284	.882	.834	.00*** <sup>0</sup>	.096	.427	.00*** <sup>N</sup>	.00*** <sup>B</sup>	.00*** <sup>Y</sup>
3	3	.640	.492	.461	.238	.332	.393	.00*** <sup>N</sup>	.018* <sup>B</sup>	.004** <sup>Y</sup>
4	4	.645	.739	.323	.014* <sup>7</sup>	.130	.040* <sup>T</sup>	.00*** <sup>C</sup>	.00*** <sup>A</sup>	.00*** <sup>N</sup>
5	2	.248	.297	.042* <sup>3</sup>	.871	.079	.213	.00*** <sup>N</sup>	.00*** <sup>B</sup>	.012* <sup>Y</sup>
6	3	.776	.292	.664	.019* <sup>7</sup>	.108	.236	.00*** <sup>C</sup>	.115	.110
7	3	.747	.990	.996	.002** <sup>7</sup>	.501	.192	.00*** <sup>C</sup>	.076	.062
8	3	.530	.962	.708	.00*** <sup>0</sup>	.912	.823	.00*** <sup>N</sup>	.00*** <sup>B</sup>	.00*** <sup>Y</sup>
9	3	.917	.656	.790	.00*** <sup>7</sup>	.006** <sup>Y</sup>	.008** <sup>T</sup>	.00*** <sup>C</sup>	.00*** <sup>A</sup>	.00*** <sup>N</sup>
10	3	.572	.838	.159	.147	.029* <sup>Y</sup>	.847	.00*** <sup>C</sup>	.066	.004** <sup>N</sup>
11	3	.057	.096	.199	.034* <sup>7</sup>	.111	.650	.003** <sup>C</sup>	.094	.116
12	3	.831	.677	.922	.00*** <sup>0</sup>	.143	.134	.00*** <sup>N</sup>	.00*** <sup>B</sup>	.00*** <sup>Y</sup>
13	3	.184	.404	.361	.019* <sup>0</sup>	.377	.037* <sup>O</sup>	.00*** <sup>N</sup>	.00*** <sup>B</sup>	.00*** <sup>Y</sup>
14	2	.076	.940	.294	.004** <sup>0</sup>	.851	.197	.00*** <sup>N</sup>	.00*** <sup>B</sup>	.00*** <sup>Y</sup>
15	4	.012* <sup>F</sup>	.473	.239	.343	.379	.401	.522	.082	.00*** <sup>Y</sup>
16	3	.695	.915	.137	.00*** <sup>0</sup>	.663	.031* <sup>O</sup>	.00*** <sup>N</sup>	.00*** <sup>B</sup>	.00*** <sup>Y</sup>
17	3	.674	.750	.786	.00*** <sup>0</sup>	.343	.100	.00*** <sup>N</sup>	.00*** <sup>B</sup>	.00*** <sup>Y</sup>
18	5	.236	.198	.074	.00*** <sup>0</sup>	.321	.137	.005** <sup>N</sup>	.00*** <sup>B</sup>	.00*** <sup>Y</sup>
19	3	.005** <sup>F</sup>	.464	.042* <sup>1</sup>	.00*** <sup>0</sup>	.418	.599	.00*** <sup>N</sup>	.00*** <sup>B</sup>	.00*** <sup>Y</sup>
20	3	.571	.471	.431	.00*** <sup>7</sup>	.011* <sup>Y</sup>	.719	.00*** <sup>C</sup>	.00*** <sup>A</sup>	.00*** <sup>N</sup>
21	2	.743	.026* <sup>T</sup>	.086	.611	.794	.258	.595	.323	.523
22	3	.021* <sup>F</sup>	.482	.573	.209	.493	.176	.236	.494	.620
23	1	.534	.861	.051	.308	.437	.695	.128	.723	.470
24	3	.005** <sup>M</sup>	.764	.035* <sup>3</sup>	.445	.002** <sup>N</sup>	.225	.00*** <sup>N</sup>	.00*** <sup>B</sup>	.00*** <sup>Y</sup>
25	3	.389	.377	.939	.009** <sup>0</sup>	.680	.912	.00*** <sup>N</sup>	.00*** <sup>B</sup>	.00*** <sup>Y</sup>
26	3	.107	.999	.657	.001** <sup>0</sup>	.220	.082	.00*** <sup>N</sup>	.00*** <sup>B</sup>	.00*** <sup>Y</sup>
27	3	.014* <sup>F</sup>	.057	.758	.00*** <sup>0</sup>	.584	.413	.388	.150	.823

<sup>i</sup>Variables (groups with the highest average ranks are in parentheses): G=gender (F=female, M=male); S=study program (T=tourism); SY=study year (1=1st year, 3=3rd year); FWP=frequency of weekly patronage (0=0-1 times, 7=>7 times); PCE=previous/current hospitality employment (Y=yes, N=no); FE=future employment (T=tourism/hosp., O=other); SS=smoking status (C=current, N=never smoked); PSP=preferred café smoking policy (B=ban, A=allow); HP=health consequences from SHS (Y=yes, N=no).

<sup>ii</sup>Because of dataset's high dispersion (coefficient of variation  $V>.30$ ), mean is not a valid measure of central tendency, and median is used instead.

### *Perceptions of a smoke ban*

Because of our dataset's high dispersion (coefficient of variation  $V > .30$ ), respondents' answers are indicated by the median level of agreement with the 27 perception items (Table 1). Accordingly, subjects reported the highest agreement with the following five statements: "It is more pleasant to visit cafés with full or partial smoke ban", "the current law is necessary to protect staff's health", "the current law negatively impacts café business", "I'm frequently exposed to other people's smoke in cafés", and "passive smoking is harmful". Participants indicated lowest degree of agreement with the statements "the current smoking ban resulted in increased café patronage", "I find it important to find a job in a non-smoking environment", "I drink less coffee in cafés since the ban's enactment", and "I drink less alcohol in cafés since the ban's enactment". Although half of the respondents were nonsmokers and most acknowledge adverse SHS effects, the majority of the sampled students do not consider it important to find a job with a smoke-free employer. This logical incongruity may perhaps be explained by Croatia having Europe's second highest unemployment rate (35.8 percent in 2011) among young adults (those under age 25, for example students), with Spain being the first (Eurostat, 2012).

### *The effects of demographics on smoke ban perceptions*

The overall 27-item scale achieved a .77 Alpha Coefficient, which is above the minimum acceptable guideline of .70 for new scales (DeVellis, 2003; Nunnally, 1978). The application of K-W and M-W U tests in order to detect the effects of respondent demographics on smoke ban perceptions indicates no significant differences in regards to study program, year of study, and previous/current/future employment sec-

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<sup>iii</sup>Mann-Whitney U (M-W U) test. <sup>iv</sup>Kruskal-Wallis (K-W) test. \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

<sup>v</sup>1. It is more pleasant to visit cafés with full or partial smoke ban; 2. Current law [CL] is necessary to protect staff health; 3. CL encourages smokers to quit; 4. CL negatively impacts café business; 5. CL resulted in increased café patronage; 6. CL negatively impacted staff; 7. I visit cafés with full or partial smoking allowed more often since the CL's enactment; 8. I visit cafés with full or partial smoking ban more often since the CL's enactment; 9. CL is unfair to smokers; 10. Smokers more often smoke at home since the CL's enactment; 11. CL brought job loss; 12. I support the CL banning smoking in cafés; 13. I will seek a smoke-free workplace in the future; 14. I consider it important to find a job with a smoke-free employer; 15. I'm frequently exposed to café SHS; 16. I'm bothered by others who smoke near me; 17. I'm concerned about the consequences of SHS on my health; 18. SHS is hazardous; 19. CL improves the quality of life; 20. The current café smoking ban should be lifted; 21. I drink alcohol less often in cafés since the CL's enactment; 22. It was difficult to implement the CL; 23. I drink coffee less often in cafés since the CL's enactment; 24. Café guests reacted very favorably to the CL; 25. Croatia's image as a tourist destination has improved since the CL's enactment; 26. Service quality has improved in those cafés where staff are not allowed to smoke; 27. Although I don't smoke, since the CL's enactment I frequent smoke-friendly cafés because of my smoking friend(s).

tor (Table 1). However, significant differences were noted due to frequency of patronage, smoking status, café smoking preference, and health problems from café SHS exposure.

For instance, those who frequent cafés 0-1 times weekly on average ( $p < 0.001$ ), favor a full ban on smoking ( $p < 0.001$ ), don't smoke ( $p < 0.001$ ), and are suffering or have suffered health consequences from SHS ( $p < 0.001$ ) – as compared to their counterparts – find it significantly more pleasant to visit cafés with full or partial smoke ban, hold significantly stronger beliefs that the current smoke-free legislation is necessary to protect staff's health, visit cafés with full or partial smoke ban significantly more often after the law's enactment, are significantly more supportive of the current café smoke-free law, find it significantly more important to seek a smoke-free employer, are significantly more concerned about the possible health consequences from SHS, hold significantly stronger beliefs that passive smoking is hazardous and that the current law improves the quality of life, hold significantly stronger conviction that Croatia's image as a tourist destination has improved since the law's enactment, and hold significantly stronger perception that service quality is higher in cafés where employees are not permitted to smoke.

Furthermore, female students – as compared to their male counterparts – are significantly more likely to cite frequent café SHS exposure, hold significantly stronger beliefs that the current law improves the quality of life, and are significantly more inclined to see the current smoking policy as hard to implement. Additionally, in contrast to male students, their non-smoking female peers have a significantly higher propensity to accompany their smoking friends to smoker-friendly cafés. Interestingly, respondents who frequent cafés 0-1 times per week consider it important to find a job with a smoke-free employer and will seek a smoke-free workplace in the future. Owners and managers of smoke-free hospitality establishments can use this finding to enhance their staff recruitment and retention strategies by emphasizing the health benefits of a smokeless work setting. For brevity, other significant results in Table 1 are not further elaborated here; however they should be interpreted in a similar fashion.

As for respondents' smoking status, the average linkage between groups clustering produced a four cluster solution for smokers and a two cluster solution for non-smokers (Table 2). A four cluster solution for smokers (Friedman test  $\chi^2$ ,  $p < 0.001$ ) showed a 7-item, 1-item, 9-item, and 10-item clusters. A two cluster solution for non-smokers (Friedman test  $\chi^2$ ,  $p < 0.001$ ) showed a 12-item and 14-item clusters.

**Table 2. Clustering output for smokers and non-smokers**

Clusters <sup>i</sup>	Mean rank
<i>Smokers</i>	
Cluster 1: (Items 4 <sup>ii</sup> , 8, 21, 23, 24, 25, 26)	1.84
Cluster 2: (Items 7)	2.08
Cluster 3: (Items 3, 9, 11, 12, 13, 14, 16, 17, 20)	2.60
Cluster 4: (Items 1, 2, 5, 6, 10, 15, 18, 19, 22, 27)	3.47
<i>Non-smokers</i>	
Cluster 5: (Items 3, 4, 6, 7, 8, 10, 13, 14, 21, 23, 24, 25, 26)	1.12
Cluster 6: (Items 1, 2, 5, 9, 11, 12, 15, 16, 17, 18, 19, 20, 22, 27)	1.88

<sup>i</sup>Friedman test  $\chi^2$ ,  $p < 0.001$

<sup>ii</sup>For detailed description, please refer to the footnote <sup>v</sup> in Table 1.

Specifically, smokers showed statistically the lowest degree of agreement with the following statements (cluster 1): “The current law negatively impacts café business”, “I visit cafés with full or partial smoke ban more often after the law’s enactment.” Similarly, smokers did not report drinking less alcohol or coffee in cafés since the ban’s enactment. In their opinion, Croatia’s image as a tourist destination did not significantly improve as a result of current smoking ordinances, and they do not feel that the service quality has substantially improved in cafés where staff smoking is prohibited.

On the other hand, smokers’ highest level of agreement was indicated for the following statements (cluster 4): “It is more pleasant to visit cafés with full or partial smoke ban”, “the current smoke-free legislation is necessary to protect staff’s health”, “the current smoking ban resulted in increased café patronage”, and “the current law negatively impacts café employees.” Similarly, smokers are often exposed to café SHS, agree that SHS is a health hazard, and perceive that the current law improves the quality of life. Additionally, smokers believe that non-smokers accompany their smoking friends to smoker-friendly cafés.

In comparison to smokers, non-smokers showed statistically the highest degree of agreement with the following statements (cluster 6): “The current café smoking ban is unfair to smokers” and “the current law brought job loss.” Non-smokers support the current café smoking ordinance, because they are often exposed to and bothered by SHS, as well as concerned about the health consequences of SHS. At the same time, they favor lifting the current ban on café smoking, and believe that the current law was hard to implement. Moreover, non-smokers tend to accompany their smoking friends to smoker-friendly cafés.

In terms of respondents’ preferred café smoking policy, significant differences were noted due to gender, year of study, frequency



of café patronage, previous/current employment, smoking status, and health problems from café SHS exposure (Table 3). There were no significant differences in regards to study program and future employment sector. While male students most often prefer banning smoking in all guest areas, female students favor allowing smoking only in cafés' outdoor and designated indoor areas. First-year students for the most part endorse permitting smoking in all guest areas, whereas second- and third-year students would ban smoking in all guest areas. Students who frequent cafés 0-1 times weekly support a full smoking ban, while frequent café visitors (those with 6 or more weekly visits) advocate smoking in all guest spaces.

Interestingly, respondents with previous or current work experience in hospitality are most often pro-smoking in all guest areas. Students with no hospitality employment experience argue for a complete smoking ban. Since 73.3 percent of those with previous/current hospitality work experience are smokers (vs. 12.5 percent of smokers in the no hospitality employment experience group), perhaps this explains their support for lifting the current partial café smoking ban. A competing explanation is that those with previous/current employment in hospitality experienced first-hand that hospitality managers and law enforcement are not willing to enforce the current café smoking ordinances. In fact, both staff and patrons can often be observed smoking not only in Croatia's smoke-free cafes, but also in restaurants, where smoking is completely banned in all food- and beverage-serving areas. Hence, this study's smokers may feel that the smoke ban that is not or cannot be enforced, ought to be repealed. In reference to respondents with no hospitality work experience who support a complete smoking ban (only 12.5 percent of smokers in this group), it may well be that they opted to work in other, non-hospitality sectors because of the hospitality industry's undesirable image and reputation (Pizam, 2012).

In terms of smoking status, non-smokers would allow only outdoor smoking. Finally, respondents who feel their health has been compromised by SHS approve of a full smoke ban. Conversely, those who do not feel threatened by SHS most often uphold smoking in all guest premises. Overall, the Table 3 output generally suggests that the observed groups with the higher proportion of smokers for the most part favor smoking in all guest areas, whereas groups with fewer smokers usually support a full smoking ban.

**Table 3. The relationship between preferred café smoking policy and selected variables**

Variables	Group with max. percentage <sup>i</sup>	$\chi^2$ <i>p</i> -value
Gender		
Male	1 (24% <sup>ii</sup> )	.002**
Female	5 (46%)	
Study program		
Economics	-	.320
Business administration	-	
Tourism	-	
Study Year		
First	2 (77%)	.038*
Second	1 (37%)	
Third	1 (37%)	
Average frequency of café patronage per week		
0-1 times	1 (14%)	.000***
2-3 times	3 (31%)	
4-5 times	3 (31%)	
6-7 times	2 (65%)	
>7 times	2 (65%)	
Previously or currently employed in tourism/hospitality		
Yes	2 (73%)	.014**
No	1 (3%)	
Future area of employment		
Tourism and hospitality	-	.541
Something other than tourism/hospitality	-	
Smoking status		
Full-time (daily) smoker	2	.000***
Occasional smoker	4	
Former smoker	2	
Non-smoker	3	
Suffering or suffered health consequences due to SHS exposure		
Yes	1 (17%)	.000***
No	2 (82%)	
Don't know / not sure	5 (33%)	

<sup>i</sup>What is your preferred café smoking policy?: 1. Ban smoking in all guest areas; 2. Allow smoking in all guest areas; 3. Allow smoking in café's outdoor area (e.g., veranda) only; 4. Allow smoking in café's designated indoor area only; 5. Allow smoking in café's outdoor and designated indoor areas only; 6. Other (this group has been excluded due to insufficient expected counts).

<sup>ii</sup>Proportion of smokers.

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .

## CONCLUSION

This study empirically profiled Croatia's young café customers and potential employees (that is, college students), and examined their post-implementation attitudes towards Croatia's café partial smoking ban. It also investigated whether the reported attitudes are associated with demographic/academic characteristics, former/current and future employment sector, frequency of patronage, smoking status, café smoking preference, and health problems from café SHS exposure. Since for café owners and managers in some countries (namely, Croatia) students are important customers and current/prospective employees, and very little is known about their attitudes towards the smoking ban in Croatia and other transition countries, it is believed that results of the current study have theoretical and managerial implications.

While academic and occupational characteristics were not significant in explaining different perceptions toward a smoking ban, respondents' frequency of café patronage, smoking status, café smoking preference, and health problems from café SHS exposure did influence how respondents viewed the smoking ban. Moreover, finding that a smoke ban did not significantly alter smokers' café behaviors (that is, no change in café alcohol and coffee consumption) is inconsistent with what was reported by previous findings (for instance, Corsun et al., 1996; Fong et al., 2006), whereby smokers said they frequented hospitality establishments less often.

Results revealed that most respondents are generally aware of the dangers of café SHS; however they favor a 'compromise' outcome instead of either of the two extremes, such as banning smoking completely or allowing smoking everywhere. That is, the majority of respondents advocate designating outdoor and/or indoor café smoking areas; therefore they appear willing to make concessions to both pro and anti-smoking patrons, staff, and owners/managers. This finding suggests that lawmakers should consider population characteristics (namely, high smoking prevalence), seating allocation (namely, high proportion of café outdoor seating), and the combination thereof when devising café smoking policies.

The current study was limited to young café consumers in Croatia. More research is necessary in order to determine if the fore-mentioned relationships exist in other transition countries and customer segments (namely, >25 year-olds). Another potential limitation of this study is that it was conducted in Croatia's coastal part where many, if not all, cafés have a high proportion of outdoor seating. It is possible that consumers in inland parts of the country – where cafés are likely to have a higher proportion of indoor seating due to more severe climate – hold different views of the current partial smoking ban. Thus, fu-

ture research should be conducted in settings with harsher year-round weather conditions and lower proportion of outdoor café seating.

More research is also necessary to determine employees' and owners'/managers' perceptions of the smoke-free ordinances, both in Croatia and other transition economies. Future studies, therefore, should focus on the hospitality staff job satisfaction by investigating the perceptions of employees who had worked before and after the implementation of smoking bans. Similarly, hospitality owners and managers should be examined to see what kind of challenges they are encountering or have encountered during the changes or to identify how they comply with the smoking regulations. Since validity is an incremental build-up of information from various studies dealing with the concept of scientific inquiry (Anastasi, 1976), future research on smoke-free legislation in cafés and other hospitality contexts will serve to enhance and empirically validate or invalidate the research instrument used in this study.

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