

# EFFECTS OF A PARTIAL SMOKING BAN ON EMPLOYEES' POST-IMPLEMENTATION PERCEPTIONS AND JOB SATISFACTION IN CAFES VS. RESTAURANTS IN CROATIA

---

**Pranić, Ljudevit; Pivac, Snježana**

*Source / Izvornik:* **Tourism & hospitality industry, 2016, 350 - 364**

**Conference paper / Rad u zborniku**

*Publication status / Verzija rada:* **Published version / Objavljena verzija rada (izdavačev PDF)**

*Permanent link / Trajna poveznica:* <https://urn.nsk.hr/urn:nbn:hr:124:205064>

*Rights / Prava:* [In copyright](#)/[Zaštićeno autorskim pravom.](#)

*Download date / Datum preuzimanja:* **2025-01-09**

*Repository / Repozitorij:*

[REFST - Repository of Economics faculty in Split](#)



UNIVERSITY OF SPLIT

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

DIGITALNI AKADEMSKI ARHIVI I REPOZITORIJI

## **EFFECTS OF A PARTIAL SMOKING BAN ON EMPLOYEES' POST-IMPLEMENTATION PERCEPTIONS AND JOB SATISFACTION IN CAFES VS. RESTAURANTS IN CROATIA**

**Ljudevit Pranić  
Snježana Pivac**

### **Abstract**

**Purpose** – While a large body of literature has sought to determine whether smoking bans help or hinder the tourism and hospitality sectors, the corpus of research literature in this area has centered on localities with a blanket ban on smoking including all hospitality workplaces. Much less is known about the effects of smoking bans in areas where bar smoking is partially allowed while smoking in enclosed restaurants is illegal. Hoping to assist in filling this void, this research empirically compares cafés and restaurants in terms of employees' attitudes, demographics, work-related variables (WRV), and job satisfaction after the introduction of a partial smoke-free legislation in Croatia.

**Methodology** – A two-page anonymous self-administered questionnaire written in Croatian was administered to 149 café and 37 restaurant employees in Croatia's second largest city (Split). Statistical methods include frequency analysis, Chi-square and Mann-Whitney U tests, and Binary logistic regression.

**Findings** – Results reveal some differences and similarities between café and restaurant employees in terms of their attitudes, demographics, WRV, and job satisfaction. Practical implications and opportunities for future research are further discussed.

**Contribution** – While Croatia has a total smoke-ban in enclosed restaurants, it allows smoking in cafés with proper ventilation (cafés with areas up to 50m<sup>2</sup>) or those with separately ventilated smoking rooms (cafés with areas greater than 50m<sup>2</sup>). Given Croatia's unique smoking legislation, this research offers important policy implications in Croatia and elsewhere by providing valuable yet underresearched insights into the effects of a partial smoking ban on café and restaurant staff.

**Keywords:** smoking ban, attitude, job satisfaction, employee, restaurant, bar

### **INTRODUCTION**

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). Only psychiatric wards in Croatia's hospitals were exempted. Bars, restaurants, and cafes were granted a six-month grace period. Thus, in May 2009 the ban was extended to all hospitality establishments. However, following the negative impacts of the 2008 Global Economic Crisis and the subsequent outcries by the hospitality sector, in September 2009 the ban on smoking in bars and cafés, but not restaurants, was partially repealed for yet another grace period until April 2010 (Croatian National Gazette, 2009, 119). Today, Croatia continues with a total smoke-ban in enclosed restaurants, however it allows smoking in

cafés/bars with proper ventilation (cafés with areas up to 50 square meters [538 sq. ft.]) or those with separately ventilated smoking rooms (cafés with areas greater than 50m<sup>2</sup>).

Previous studies in other countries and localities have consistently shown smoke-free regulations do not adversely affect economic indicators (Scollo and Lal 2008). Over 200 studies have examined the impact of smoke-free laws on the hospitality industry, however the vast majority focused on restaurant and bar revenue rather than the possible psychosocial effects, such as employee attitudes and job satisfaction (Hetland et al. 2008; Pranić and Pivac 2014; Pranić et al. 2013). Moreover, the corpus of research literature in this area has centered on localities with a blanket ban on smoking including all hospitality workplaces. Much less is known about the effects of smoking bans in areas where bar smoking is partially allowed while smoking in enclosed restaurants is illegal. Similarly, the limited published literature does not evaluate a country that relies as heavily on tourism as Croatia, where it accounts for 17.2% of the nation's GDP, 6.4% of direct employment (Croatian Ministry of Tourism, 2015), and 37% of Croatia's exports (Croatian Institute of Economics, 2015).

The lack of peer reviewed research regarding staff job satisfaction and attitudes toward smoke-free legislation in an area (1) heavily reliant on tourism and (2) having a unique smoking ban, form the basis for this study. The purpose of this study is to provide a comparison of cafés and restaurants in terms of employees' attitudes, demographics, work-related variables (WRV), and job satisfaction after the introduction of a partial smoke-free legislation in Croatia.

## **1. IMPACTS OF SMOKE-FREE LEGISLATION ON RESTAURANTS AND CAFÉS/BARS**

Previous research on the effects of smoke-free policies in the hospitality industry has identified three research themes – impacts on owners and managers, impacts on employees, and impacts on patrons (Pranić and Pivac 2014; Pranić et al. 2013). These impacts are discussed in detail in the subsequent sections.

### **1.1. Impacts on customers and owners/managers**

Fong et al. (2006) evaluated the psychological and behavioral impact of the first ever nationwide comprehensive smoking ban, implemented in the Republic of Ireland (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 (i.e., from 13% to 46%) and restaurants (i.e., from 45% to 77%). However, because of the law, 35% of smokers and 16% of quitters reported avoiding going to pubs, and 18% of smokers and 8% of quitters reported avoiding going to restaurants. In the pre-implementation study of Massachusetts adults, Biener and Siegel (1997) found that 69% of the respondents predicted no change in bar visitation, 20% indicated increased visits, and 11%

predicted decreased patronage. In terms of restaurants, 61% indicated no change in dining out, 30% predicted increases, with only 8% indicating decreases in patronage.

In the longitudinal analysis of the impact of a 2004 smoking ban on restaurant and pub revenues in Norway, Melberg and Lund (2009) used bi-monthly value added tax reports spanning the period before and after the ban implementation (1999-2007 for restaurants and 2002-2007 for pubs). They 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) used retail sales tax data from 52 months, comprising both pre-by-law and post-by-law months, in the analysis of the impact of a smoking ban on restaurants and bars in a bilingual city of Ottawa, Canada. They found no significant adverse impact of smoke-free legislation on Ottawa's restaurant and bar sales.

A ban pre-implementation survey of all restaurant, bar, café, and nightclub owners in Gothenburg, Sweden, revealed that respondents did not expect to be severely hurt by a general smoking ban applying to the entire food and beverage sector (Hammar 2004). Smoke-free establishments were less likely to expect negative economic effects compared to those that allowed smoking. Moreover, establishments with a non-smoking section were less likely to expect negative economic effects from a general smoking ban. However, in establishments with late night hours or those having a large share of smoking customers, owners were more likely to expect a decrease in revenues. In a U.S. nationwide survey of 1,300 restaurant, bar, and tavern owners, majority of restaurant owners indicated that smoke-free ordinances would not adversely impact restaurant sales (Dunham and Marlow 2000). However, bars and taverns were expected to experience negative revenue effects more than twice as often as restaurants. Additionally, while negative effects were most often expected in establishments with fewer seats allocated to non-smokers, positive or neutral impacts were most often expected in venues with greater proportion of non-smoking seating.

## **1.2. Impacts on staff**

Klein et al. (2009) examined over a 45-month period whether the type of smoking ban (i.e., comprehensive, partial, and no ban) significantly affects employment levels in free-standing bars and full-service restaurants in ten Minnesota cities. Theirs being the first published, peer-reviewed evaluation on the differential effects of the type of smoking policy on hospitality employment, they found no significant short- or long-term effect on bar and restaurant total employment. 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). Also, while post-implementation job satisfaction was higher among employees with positive pre-implementation attitudes towards the ban, employees with negative pre-implementation attitudes experienced a decrease in post-implementation satisfaction.

Using employment data from across the various U.S. counties, Adams and Cotti (2007) found that bar employment decreased in 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. Compared to bars, restaurant employment remained the same, and in areas with fewer smokers, it had even slightly increased. They also argued that the prevalence of restaurant outdoor seating might influence the policy's effect, because they found evidence of increased employment in warmer regions of the country during the cooler winter months, and in the summer in colder regions. Ellingsen et al. (2006) employed a repeated measures design to assess the level of airborne contaminants and staff urinary nicotine levels in 13 bars and restaurants in Oslo, Norway, before and after the implementation of a smoking ban. A substantial reduction of airborne nicotine and total dust was observed after the introduction of a smoking ban compared to the levels when smoking was allowed. While urinary nicotine levels were substantially lower in both smokers and non-smokers following the ban enactment, a significantly larger decrease was found in smokers compared to non-smokers, probably because the ban drove the former to smoke less.

In another study in Norway, Hetland and Aarö (2005a) found that after the ban enactment, hospitality staff benefited from the easier cleaning of premises, a better state of health, better air quality, and work clothes that did not reek of smoke. Research elsewhere further supports the link between the introduction of a total smoke-ban to improvement of respiratory symptoms among bar and restaurant staff (Eisner et al. 1998; Eagan et al. 2006; Skogstad et al. 2006), as well as the indoor air quality (Mulcahy et al. 2005; Ellingsen et al. 2006). Employees in Norway also reported fewer unpleasant incidents and better compliance in enforcing a total smoking ban compared with a previous partial ban (Hetland and Aarö 2005b).

In a study of standalone and combination bars (i.e., those connected to restaurants, hotels, etc.) 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. Positive attitudinal changes were observed between both types of bars, with greater changes among standalone bars after the ban introduction.

### **1.3. Summary**

Despite a growing amount of studies addressing the effects of smoking bans on hospitality revenues and employment levels and health among employees in the hospitality business, less attention has been given to possible psychosocial effects, such as employees' job satisfaction. Also referred to as employee satisfaction or morale, job satisfaction is one of the most extensively investigated variables in organizational research (Judge and Klinger 2008). The most-used definition of job satisfaction in organizational research is that of Locke (1976), who denoted job satisfaction as "a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences" (p. 1304). Thus, it seems plausible that factors such as allowance to smoke or exposure to cigarette smoke in one's working environment could be related to job satisfaction in a hospitality establishment. To our knowledge, no studies have directly compared job satisfaction in bars vs. restaurants in relation to the introduction

of a partial smoke-free ban. The introduction of such a ban could be linked to increases or decreases in employee job satisfaction depending on whether a hospitality venue fully (e.g., in restaurants) or partially (e.g., in bars and cafés) bans smoking.

Overall, in the evaluation of impacts of smoking bans in the hospitality industry, researchers have employed objective (e.g., data derived from sales taxes or revenues) and/or subjective (e.g., data obtained via surveys of owners, employees, and patrons of restaurants, bars and other hospitality establishments) data that were collected before and/or after the implementation of a smoking ban (Luk and Ferrence, 2005). Objective data are verifiable and therefore thought to be superior to the subjective perceptions of owners, employees, and consumers (Luk and Ferrence, 2005).

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).

That said, while a large body of literature has sought to determine whether smoking bans help or hinder the tourism and hospitality sectors, the corpus of research literature in this area has centered on localities with a blanket ban on smoking including all hospitality workplaces. Much less is known about the effects of smoking bans in areas where bar smoking is partially allowed while smoking in enclosed restaurants is illegal.

## 2. METHODOLOGY

A two-page anonymous self-administered questionnaire written in Croatian was administered to café and restaurant employees in Croatia's second largest city (Split) in Fall 2011. The sampling frame for this study comprised all staff employed in the population of Split's 210 cafés and 52 restaurants, where the list of establishments was obtained from Croatian Telecom Yellow Pages (2008).

A group of trained students personally delivered a first (baseline) paper survey and recruited café and restaurant employees (owners, managers, and assistant managers excluded) to partake in survey completion. The questionnaires were either completed on the spot or picked-up at a pre-agreed later time. Reminder visits were made five and ten days after the initial contact.

The majority of survey questions were borrowed from Biener and Siegel (1997), Brayfield and Rothe, (1951), Cameron et al. (2003), Fong et al. (2006), Hetland and Aaro (2005a), Judge et al. (2001), Kang et al. (2007), Miller and Hickling (2006), Roseman (2005), Tang et al. (2003), and Wan and Pilkington (2009), and adapted to this study's context. Since smoking ban can potentially influence drinking habits of both smoking and non-smoking patrons (Room, 2005), two Likert scale items were developed in order to examine employees' anticipated changes in patron alcohol and coffee consumption after the law's enactment.

The questionnaire was composed of three sections. The first section measured respondents' demographics (i.e., gender, education, and age), hospitality work experience, average weekly workload, smoking status, preferred café/restaurant smoking policy, café/restaurant area served, and café/restaurant seating allocation. The second section measured respondents' post-implementation perceptions of the partial smoking ban, using a 24-item five-point Likert scale anchored by 1 (strongly disagree) and 5 (strongly agree). Therein, several items were reverse-worded to reduce the danger of response bias (Churchill, 1979; Nunnally, 1978). Section three measured respondents' job satisfaction using a 5-item, five-point Likert-type job satisfaction index anchored by 1 (strongly disagree) and 5 (strongly agree; Brayfield & Rothe, 1951; Hetland & Aaro, 2005a; Judge et al., 2001). Questionnaire design followed the established survey guidelines (Fanning, 2005; Dillman, 2000) and was evaluated by two social science research experts. The subsequent pre-test of the instrument on 10 café/restaurant employees revealed only a few typos that were easily corrected.

Descriptive statistics included frequency analysis of all variables. The differences in demographics and WRV by establishment type (café vs. restaurant) were examined via a series of Chi-square ( $\chi^2$ ) tests. The differences in job satisfaction and expressed post-implementation attitudes towards the ban by establishment type were tested by the non-parametric Mann-Whitney U (M-W U) tests. Binary logistic regression was used to explore (1) the dependency of establishment type on job satisfaction and selected post-implementation attitudes, (2) the dependency of establishment type on job satisfaction and preferred café/restaurant smoking policy, and (3) the dependency of preferred café/restaurant smoking policy on post-implementation attitudes. *P*-value less than .05 was considered as the evidence of statistical significance.

### **3. RESULTS**

#### **3.1. Respondent profile**

From a sampling frame of 52 restaurants, six restaurants declined survey participation, two ceased operation, and one was undergoing renovation at the time of survey administration. The 210 cafés and the remaining 43 restaurants yielded a total of 149 and 37 usable questionnaires, respectively. A typical respondent in this study (Table 1) is described as male, under the age of 35, a high-school graduate, having over five years of hospitality work experience, working 40+ hours per week on average, and a full-time or occasional smoker. In comparison to our sample, 27 percent of Croatia's adult population (i.e., 18+) are smokers, of which 32 percent men and 22 percent women (World Health Organization, 2011).

When asked about their preferred type of café smoking policy, 51% of café respondents and 30% of restaurant respondents indicated that smoking should be allowed in all guest areas. Conversely, 70% of restaurant (R) respondents and 49% of café (C) respondents favor banning smoking completely or allowing smoking with some type of restriction (e.g., in a separately ventilated room). While at work, an overwhelming majority (89% R and 81% C) of the respondents spend most of their time indoors, as opposed to an outdoor patio (11% R and 18% C). In terms of seating

allocation, majority have an equal share of indoor and outdoor seating (42% R and 45% C), followed by venues with majority indoor (42% R and 32% C) and majority outdoor (17% R and 22% C) seating.

Table 1: **Respondent Profile and Demographics/WRV by Establishment Type**

Variable ( <i>Chi-square test p-value</i> ) dependence between: <i>Establishment type and</i>	Rest. staff		Café staff	
	#	% <sup>1</sup>	#	% <sup>1</sup>
<i>Gender (p=0,029)*</i>	<i>(N=36)</i>		<i>(N=148)</i>	
male	28	75,7	86	58,1
female	8	21,6	62	41,9
<i>Hospitality work experience in years (p=0,693)</i>	<i>(N=37)</i>		<i>(N=148)</i>	
0-5	16	43,2	62	41,9
6-10	10	27,0	48	32,4
11-15	4	10,8	20	13,5
>15	7	18,9	18	12,2
<i>Average weekly workload in hours (p=0,930)</i>	<i>(N=37)</i>		<i>(N=148)</i>	
≤ 40	12	32,4	48	32,4
41-48	16	43,2	68	45,9
≥ 49	9	24,3	32	21,6
<i>Education attained (p=0,892)</i>	<i>(N=37)</i>		<i>(N=148)</i>	
elementary school (excluded due to low expected count)	-	-	2	1,4
high school	32	86,5	125	84,5
vocational/university degree or higher	5	13,5	21	14,2
<i>Age</i>	<i>(N=37)</i>		<i>(N=149)</i>	
16-24	10	27,0	49	32,9
25-34	17	45,9	57	38,3
≥35	10	27,0	43	28,8
<i>Smoking status (p=0,538)</i>	<i>(N=36)</i>		<i>(N=146)</i>	
full-time/daily	18	48,6	75	51,4
occasional	3	8,1	20	13,7
former smoker	9	24,3	23	15,8
never smoked	6	16,2	28	19,2
<i>Preferred smoking policy (p=0,018)*</i>	<i>(N=37)</i>		<i>(N=148)</i>	
allow in all guest areas	11	29,7	76	51,4
ban in all guest areas or allow with some restrictions	26	70,2	72	48,7
<i>While at work, I spend most of my time (p=0,291)</i>	<i>(N=36)</i>		<i>(N=146)</i>	
indoors	32	88,9	119	81,5
outdoors	4	11,1	27	18,5
<i>Seating allocation (p=0,538)</i>	<i>(N=36)</i>		<i>(N=148)</i>	
majority outdoors	6	16,7	33	22,3
majority indoors	15	41,7	48	32,4
about equally outdoors and indoors	15	41,7	67	45,3

\* $p < .05$ ; <sup>1</sup> valid%



### 3.2. Differences in demographics and WRV by establishment type

In terms of differences in demographics and WRV by establishment type,  $\chi^2$   $p$  values in Table 1 reveal no significant differences in regards to age, education, hospitality work experience, average weekly workload, smoking status, area served, and seating allocation. However, significant differences were noted due to gender ( $p=.029$ ) and preferred smoking policy ( $p=.018$ ). While a vast portion of restaurant staff is men, the café sample is almost evenly divided between men and women. Interestingly, an overwhelming majority of restaurant staff favors banning smoking completely or allowing smoking with some type of restriction, whereas most café employees subscribe to allowing smoking in all guest areas.

### 3.3. Differences in job satisfaction and attitudes by establishment type

M-W U  $p$  values in Table 2 unveil five attitudinal differences in regards to venue type. Restaurant employees hold significantly stronger beliefs that it is more pleasant to visit venues with full or partial smoke ban, are significantly more supportive of the current hospitality smoking legislation, and hold significantly stronger beliefs that guests consume less alcohol in hospitality establishments following the current smoke ban. Café staff showed statistically higher degree of agreement with the following statements: "I'm frequently exposed to workplace secondhand smoke (SHS)" and "the current hospitality smoking ban should be lifted". No significant variation was noted in employee job satisfaction and the remaining 19 attitudes.

Irrespective of establishment type, the lowest level of agreement is with a statement that the current law has led to an increase in venue patronage. Respondents will not seek a smoke-free workplace in the future, they do not place importance on finding a job with a smoke-free employer, and they are not bothered by nearby smokers. Conversely, the highest level of agreement is with statements that the current law negatively affects hospitality businesses and that the smokers visit venues with full or partial smoking allowed more often since the current law's enactment. Moreover, they feel that the current legislation is unfair to smokers, that it caused job loss, that SHS is hazardous, and they are generally satisfied with their current job.

Table 2: Job Satisfaction and Attitudes by Establishment Type

V <sup>iii</sup>	Median <sup>1</sup>			V <sup>iii</sup>	Median <sup>1</sup>		
	Rest. staff	Café staff	M-W U (p-value)		Rest. staff	Café staff	M-W U (p-value)
1	5	3	.001**	13-17	4	4	.102
2	3	3	.629	18	1	1	.918
3	3	3	.504	19	1	1	.998
4	5	5	.675	20	2	4	.000***
5	1	1	.150	21	1	2	.316
6	3	3	.157	22	2	3	.222
7	5	5	.740	23	4	4	.528
8	3	3	.868	24	3	3	.089
9	4	4	.964	25	2	3	.025*

V <sup>iii</sup>	Median <sup>i</sup>			V <sup>iii</sup>	Median <sup>i</sup>		
	Rest. staff	Café staff	M-W U (p-value)		Rest. staff	Café staff	M-W U (p-value)
10	3	3	.065	26 <sup>ii</sup>	3 (MR=107)	3 (MR=87)	.027*
11	4	4	.960	27	3	3	.150
12	3	2	.033*	28	3	3	.070
				29	3	3	.222

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

<sup>i</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.

<sup>ii</sup> Medians of samples are equal, and due to significant differences in attitudes, MR=Mean Rank is calculated

<sup>iii</sup> Variables/items: 1. It is more pleasant to visit hospitality establishments (HE) 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 affects HE; 5. CL resulted in increased patronage of HE; 6. CL negatively affected staff; 7. Smokers visit HE with full or partial smoking allowed more often since the CL's enactment; 8. Non-smokers visit HE with full or partial smoking ban more often since the CL's enactment; 9. CL is unfair to smokers; 10. Smokers smoke at home more often since the CL's enactment; 11. CL caused job loss; 12. I support the CL banning smoking in HE; 13-17. Mean job satisfaction comprised of the following five items (13. I feel fairly satisfied with my present job; 14. Most days I am enthusiastic about my work; 15. Each day at work seems like it will never end; 16. I find real enjoyment in my work; 17. I consider my job to be rather unpleasant); 18. I will seek a smoke-free workplace in the future; 19. I consider it important to find a job with a smoke-free employer; 20. I'm frequently exposed to workplace SHS; 21. I'm bothered by others who smoke near me; 22. I'm concerned about the consequences of SHS on my health; 23. SHS is hazardous; 24. CL improves the quality of life; 25. The current smoking ban in HE should be lifted; 26. Patrons drink less alcohol in HE since the CL's enactment; 27. Patrons drink less coffee in HE since the CL's enactment; 28. It was very difficult to implement the CL; 29. Patrons in HE reacted very favorably to the CL.

#### 3.4. Dependency of venue type on job satisfaction, selected attitudes, and preferred smoking policy

Table 3 shows the logistic regression coefficient (B), Wald test  $p$ -value, and odds ratio for each of the predictors. Regression coefficients were estimated by iterative maximum-likelihood estimation (MLE). The analysis reveals no significant dependency of venue type on job satisfaction. In terms of selected attitudes, coefficients (B) greater than zero indicate that the odds and probability increase for restaurant staff's agreement with the following statements: 1-it is more pleasant to visit venues with full or partial smoke ban; 12-I support the current ban on smoking in hospitality establishments; 26-guests consume less alcohol in hospitality venues following the smoke ban. Negative coefficients denote lower probability of agreement among restaurant staff with the following statements: 20-I'm frequently exposed to workplace SHS; 25-the current hospitality smoking ban should be lifted. These findings corroborate the M-W U test results in Table 2. In terms of dependency of venue type on preferred smoking policy, coefficient (B) is positive and significant, suggesting a greater likelihood of restaurant staff favoring a full smoking ban or allowing smoking with some type of restriction.

**Table 3: Dependency of venue type on job satisfaction, selected attitudes, and preferred smoking policy<sup>i</sup>**

Dependent variable: Type of hospitality establishment (1-restaurants)		
Independent variables	B (Wald test <i>p</i> -value)	Exp (B) (odds ratio)
Constant	-3.856 (<0.001)	0.021***
Job satisfaction	0.321 (0.189)	1.379
V1 <sup>ii</sup>	0.397 (0.004)	1.487**
Constant	-3.422 (0.001)	0.033**
Job satisfaction	0.359 (0.141)	1.432
V12	0.315 (0.012)	1.370*
Constant	-0.081 (0.936)	0.922
Job satisfaction	0.238 (0.326)	1.269
V20	-0.647 (<0.001)	0.523***
Constant	-2.501 (0.012)	0.082*
Job satisfaction	0.539 (0.034)	1.714
V25	-0.279 (0.019)	0.757*
Constant	-3.189 (0.001)	0.041**
Job satisfaction	0.301 (0.207)	1.351
V26	0.276 (0.030)	1.318*
Constant	-3.387 (0.001)	0.034**
Job satisfaction	0.407 (0.101)	1.503
Smoking policy (1-ban or allow with restrictions)	1.051 (0.010)	2.860*

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

<sup>i</sup> Binary logistic regression models with significant parameters.

<sup>ii</sup> Variables – for detailed descriptions, please see footnote to Table 2.

### 3.5. Dependency of preferred smoking policy on attitudes

Table 4 shows the logistic regression coefficient (B), Wald test *p*-value, and odds ratio for each of the predictors. Regression coefficients were estimated by iterative maximum-likelihood estimation (MLE). Coefficients (B) greater than zero indicate that the odds and probability of favoring a full smoking ban or allowing smoking with some type of restriction increase for restaurant or café staff who exhibit higher levels of agreement with the following statements: 1-it is more pleasant to visit venues with full or partial smoke ban; 2-the current law is necessary to protect staff health; 3-the current law encourages smokers to quit; 5-the current law resulted in increased patronage; 8-non-smokers visit venues with full or partial smoking ban more often since the current law's enactment; 12-I support the current law banning smoking in hospitality venues; 18-I will seek a smoke-free workplace in the future; 19-I consider it important to find a job with a smoke-free employer; 21-I'm bothered by others who smoke near me; 22-I'm concerned about the consequences of SHS on my health; 23-SHS is hazardous; 24-the current law improves the quality of life; 29-patrons reacted very favorably to the current law.

Coefficients (B) less than zero indicate that the odds and probability of favoring a policy of permitting smoking in all guest areas increase for restaurant or café staff who exhibit higher levels of agreement with the following statements: 4-the current law negatively affects hospitality businesses; 6-the current law negatively affected staff; 9-the current law is unfair to smokers; 11-the current law caused job loss; 20-the current smoking ban should be lifted; 27-patrons drink less coffee in hospitality venues since the current law's enactment.

Table 4: **Dependency of preferred smoking policy on attitudes**<sup>i</sup>

Dependent variable: Smoking policy (1-ban or allow with restrictions)		
Independent variables	B (Wald test <i>p</i> -value)	Exp (B) (odds ratio)
Constant	-2.521 (<0.001)	0.080***
V1 <sup>ii</sup>	0.810 (<0.001)	2.249***
Constant	-1.932 (<0.001)	0.145***
V2	0.696 (<0.001)	2.006***
Constant	-0.773 (0.013)	0.462*
V3	0.307 (0.003)	1.359**
Constant	1.399 (0.007)	4.051**
V4	-0.326 (0.008)	0.722**
Constant	-0.423 (0.153)	0.655
V5	0.282 (0.042)	1.326*
Constant	1.230 (0.001)	3.422**
V6	-0.366 (0.001)	0.693**
Constant	-0.801 (0.020)	0.449*
V8	0.328 (0.003)	1.388**
Constant	3.219 (<0.001)	25.000***
V9	-0.825 (<0.001)	0.438***
Constant	2.385 (<0.001)	10.860***
V11	-0.616 (<0.001)	0.540***
Constant	-2.024 (<0.001)	0.132***
V12	0.895 (<0.001)	2.448***
Constant	-1.199 (<0.001)	0.302***
V18	0.655 (<0.001)	1.925***
Constant	-1.122 (<0.001)	0.326***
V19	0.663 (<0.001)	1.940***
Constant	-1.428 (<0.001)	0.240***
V21	0.682 (<0.001)	1.977***
Constant	-1.158 (<0.001)	0.314***
V22	0.533 (<0.001)	1.704***
Constant	-1.210 (0.007)	0.298**
V23	0.366 (0.001)	1.442**
Constant	-1.498 (<0.001)	0.224***
V24	0.533 (<0.001)	1.704***
Constant	1.101 (0.001)	3.008**
V25	-0.316 (0.001)	0.729**
Constant	0.712 (0.029)	2.039*
V27	-0.215 (0.036)	0.807*

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

<sup>i</sup> Binary logistic regression models with significant parameters.

<sup>ii</sup> Variables – for detailed descriptions, please see footnote to Table 2.

#### 4. CONCLUSION

This study empirically compared cafés and restaurants in terms of employees' demographics, work-related variables, attitudes, and job satisfaction after the introduction of a partial smoke-free legislation in Croatia. Supporters of smoking bans often argue that these laws do not harm hospitality businesses and may even raise profits. Opponents advocate that hospitality venues cater to customer smoking preferences and that these laws will hurt profits. Meanwhile, very little business research has been published on the effects of smoking laws on hospitality employees, and almost none has been directed toward the issue of how these laws may exert differential effects in areas where bar smoking is partially allowed while smoking in enclosed restaurants is illegal. Given Croatia's unique smoking legislation, it is believed that the results of this research offer important theoretical and managerial implications in Croatia and elsewhere by providing valuable yet underresearched insights into the effects of a partial smoking ban on café and restaurant staff.

While café and restaurant staff exhibit divergent views on five smoke-ban-related attitudinal statements, employee job satisfaction and the remaining attitudes do not vary significantly by establishment type. Moreover, employees' preferred smoking policy and gender varied significantly by establishment type, though there were no significant differences in regards to other demographic and WRV variables. Results also revealed that both cafés and restaurants have an equally high share of (full-time or occasional) smokers; however, in restaurants (as opposed to cafés), where there are no smoking concessions, staff is pronouncedly more supportive of a policy banning smoking completely or allowing smoking with some type of restriction. Yet, both café and restaurant staff equally believes that the current smoking law has hurt the hospitality industry and that smoke-filled work environment is not one of their concerns.

This apparent dichotomy among restaurant staff (i.e., support for smoking restrictions and disregard for the smoke-contaminated air) can perhaps be explained by their concern for job security. According to Eurostat (2016), the statistical office of the European Union, among those aged 15 to 24, Croatia has the EU's third-highest unemployment rate, behind Greece and Spain. Specifically, Croatia's youth unemployment has soared from 25 percent in 2009 to 45 percent in 2015. Thus, hospitality staff may perceive themselves as expendable, and that they can be easily replaced by others who are even more desperate for a job than they are. Consequently, they are likely to relax their expectations in terms of workplace conditions, e.g. they may put very little stock into demanding smoke-free work environment.

The current study was limited to café and restaurant employees in Croatia after the enactment of a partial-smoke ban. The data for this research were collected in Fall 2011, that is, in the midst of the global financial crisis, which in Croatia's case, is both pervasive and ongoing, with little light at the end of the tunnel on the discernible horizon. Thus, future research should query hospitality staff when Croatia's economic conditions improve and unemployment shrinks to single digits. More research is also necessary to compare the findings in this study to those in other countries and localities with a similar partial smoking ban. Similarly, hospitality owners and managers in these

countries should be queried 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.

Another potential limitation of this study lies in the number of response categories used to capture the respondent hospitality work experience and average weekly workload. While this study's question regarding the hospitality work experience includes a '0-5 years' response category, future studies should consider breaking this down further. Namely, the difference between working one month and five years in the industry and forming attitudes on smoking may be substantial. Similarly, in terms of the average weekly workload, attitudes towards smoking may differ significantly between a part-time and full-time employee. Also, future studies should consider defining what is meant by full-time and occasional smoking status.

## REFERENCES

- Adams, S. and Cotti, C.D. (2007), „The effect of smoking bans on bars and restaurants: an analysis of changes in employment“, *The B.E. Journal of Economic Analysis & Policy*, 7(1), 1-32.
- Biener, L. and Siegel, M. (1997), „Behavior intentions of the public after bans on smoking in restaurants and bars“, *American Journal of Public Health*, 87(12), 2042-2044.
- Brayfield, A.H. and Rothe, H.F. (1951), „An index of job satisfaction“, *Journal of Applied Psychology*, 35, 307-311.
- Cameron, M., Wakefield, M., Trotter, L. and Inglis, G. (2003), „Exposure to secondhand smoke at work: a survey of members of the Australian liquor, hospitality and miscellaneous workers union“, *Australian and New Zealand Journal of Public Health*, 27(5), 496-501.
- Churchill, G.A., Jr. (1979), „A paradigm for developing better measures of marketing constructs“, *Journal of Marketing Research*, 16(1), 64-73.
- Croatian Institute of Economics (2015), *Sektorske analize*, 41(4), viewed 10 February 2016, <http://www.eizg.hr/Download.ashx?FileID=45d8c300-51af-4b0b-9bb9-dc03cb64f22d>.
- Croatian Ministry of Tourism (2015), *Turizam u brojkama 2014*.
- Croatian National Gazette (2009), *Zakon o izmjenama i dopunama Zakona o ograničavanju uporabe duhanskih proizvoda (2009/119)*, viewed 3 February 2014, [http://narodne-novine.nn.hr/clanci/sluzbeni/2009\\_10\\_119\\_2932.html](http://narodne-novine.nn.hr/clanci/sluzbeni/2009_10_119_2932.html).
- Croatian National Gazette (2008), *Zakon o ograničavanju uporabe duhanskih proizvoda (2008/125)*, viewed 3 February 2014, [http://narodne-novine.nn.hr/clanci/sluzbeni/2008\\_10\\_125\\_3560.html](http://narodne-novine.nn.hr/clanci/sluzbeni/2008_10_125_3560.html).
- Croatian Telecom Yellow Pages (2008), *Yellow Pages 2008/2009 Southern Region*.
- Dillman, D. (2000), *Constructing the questionnaire: Mail and internet surveys*, John Wiley & Sons, New York.
- Dunham, J. and Marlow, M.L. (2000), „Smoking laws and their differential effects on restaurants, bars, and taverns“, *Contemporary Economic Policy*, 18(3), 326-333.
- Eagan, T.M., Hetland, J. and Aarö, L.E. (2006), „Decline in respiratory symptoms in service workers five months after a public smoking ban“, *Tobacco Control*, 15, 242-246.
- Eisner, M.D., Smith, A.K. and Blanc, P.D. (1998), „Bartenders' respiratory health after establishment of smoke-free bars and taverns“, *Journal of the American Medical Association*, 280(22), 1909-1914.
- Ellingsen, D.G., Fladseth, G., Daae, H.L., Gjolstad, M., Kjaerheim, K., Skogstad, M., Olsen, R., Thorud, S. and Molander, P. (2006), „Airborne exposure and biological monitoring of bar and restaurant workers before and after the introduction of a smoking ban“, *Journal of Environmental Monitoring*, 8, 362-368.
- Eurostat (2016), *Unemployment rate by sex and age - annual average, %*, viewed 10 February 2016, <http://appsso.eurostat.ec.europa.eu/nui/submitViewTableAction.do>.
- Fanning E. (2005), „Formatting a paper-based survey questionnaire: best practices“, *Practical Assessment, Research & Evaluation*, 10(12), 1-14.

- Fong, G.T., Hyland, A., Borland, R., Hammond, D., Hastings, G., McNeill, A., Anderson, S., Cummings, K.M., Allwright, S., Mulcahy, M., Howell, F., Clancy, L., Thompson, M.E., Connolly, G. and Driezen, P. (2006), „Reductions in tobacco smoke pollution and increases in support for smoke-free public places following the implementation of comprehensive smoke-free workplace legislation in the Republic of Ireland: findings from the ITC Ireland/UK survey“, *Tobacco Control*, 15(Suppl. III), iii51-iii58.
- Hammar, H., (2004), „Restaurant owner perceptions of the effects of a smoking ban“, *Health Policy* 70, 243-254.
- Hetland, J. and Aarö, L.E. (2005a), „Smokefree restaurants and pubs: air quality, self reported health and job satisfaction“, viewed 3 February 2014, [http://www.sirus.no/filestore/Import\\_vedlegg/SIRUSskrifter0305eng.pdf](http://www.sirus.no/filestore/Import_vedlegg/SIRUSskrifter0305eng.pdf).
- Hetland, J. and Aarö, L.E. (2005b), „Smoking habits, attitudes to and enforcement of the ban on smoking in eating and drinking establishments – a prospective panel study“, viewed 3 February 2014, [http://www.sirus.no/filestore/Import\\_vedlegg/Smoking\\_habits\\_atti\\_0305.pdf](http://www.sirus.no/filestore/Import_vedlegg/Smoking_habits_atti_0305.pdf).
- Hetland, J., Hetland, H., Mykletun, R.J., Aarö, L.E. and Matthiesen, S.B. (2008), „Employees' job satisfaction after the introduction of a total smoke-ban in bars and restaurants in Norway“, *Health Promotion International*, 23(4), 302-310.
- Judge, T.A. and Klinger, R. (2008), „Job satisfaction: subjective well-being at work. In M. Eid, & R. Larsen (Eds.), *The Science of Subjective Well-Being* (Ch. 19, pp. 393-413), Guilford Publications, New York.
- Judge, T.A., Parker, S., Colbert, A.E., Heller, D. and Ilies, R. (2001), „Job satisfaction: a cross-cultural review. In D. S. Anderson, H.K.S. Ones & C. Vieswesvaran (Eds.), *Handbook of work and organizational psychology, volume 2* (pp. 25-52), Sage Publications, London.
- Kang, S.K., Wie, S. and Smith, K. (2007), „College students' perceptions of a smoking ban in restaurants and bars“, *Journal of Foodservice Business Research*, 10(3), 57-72.
- Klein, E.G., Forster, J.L., Erickson, D.J., Lytle, L.A. and Schillo, B. (2009), „Does the type of CIA policy significantly affect bar and restaurant employment in Minnesota cities?“, *Prevention Science*, 10, 168-174.
- Locke, E.A. (1976), „The nature and causes of job satisfaction“, In M.D. Dunnette (Ed.), *Handbook of industrial and organizational psychology* (pp. 1297-1343), Rand McNally, Chicago.
- Luk, R. and Ferrence, R. (2005), „*The economic impact of smoke-free legislation on the hospitality industry*“ (Ontario Tobacco Research Unit, Special Report Series), viewed 3 February 2014, [http://www.hc-sc.gc.ca/hc-ps/alt\\_formats/hecs-sesc/pdf/pubs/tobac-tabac/2005-hospitalit/hospitalit-eng.pdf](http://www.hc-sc.gc.ca/hc-ps/alt_formats/hecs-sesc/pdf/pubs/tobac-tabac/2005-hospitalit/hospitalit-eng.pdf).
- Luk, R., Ferrence, R. and Gmel, G. (2006), „The economic impact of a smoke-free bylaw on restaurant and bar sales in Ottawa, Canada“, *Addiction*, 101, 738-745.
- Melberg, H.O. and Lund, K.E. (2009), „*Did the ban on smoking reduce the revenue in pubs and restaurants in Norway?*“, viewed 3 February 2014, [http://www.med.uio.no/helsam/forskning/nettverk/hero/publikasjoner/skriftserie/2009/2009\\_9.pdf](http://www.med.uio.no/helsam/forskning/nettverk/hero/publikasjoner/skriftserie/2009/2009_9.pdf).
- Miller, C.L. & Hickling, J.A. (2006), „Phased-in smoke-free workplace laws: reported impact on bar patronage and smoking, particularly among young adults in South Australia“, *Australian and New Zealand Journal of Public Health*, 30(4), 325-327.
- Mulcahy, M., Evans, D.S., Hammond, S.K., Repace, J.L. and Byrne, M. (2005), „Secondhand smoke exposure and risk following the Irish smoking ban: an assessment of salivary cotinine concentrations in hotel workers and air nicotine levels in bars“, *Tobacco Control*, 14, 384-388.
- Nunnally, J.C. (1978), *Psychometric theory*. (2<sup>nd</sup> ed.), McGraw-Hill, New York.
- Pranić, L. and Pivac, S. (2014), „Cafe staff job satisfaction and attitudes towards a smoking ban in Croatia“, *Acta Turistica Nova*, 8(1), 71-93.
- Pranić, L., Pivac, S. and Čolak, A. (2013), „Pre-smoke-ban café staff job satisfaction and attitudes in transition countries“, *European Journal of Tourism Research*, 6(1), 5-19.
- Room, R. (2005), „Banning smoking in taverns and restaurants – a research opportunity as well as a gain for public health“, *Addiction*, 100, 888-890.
- Roseman, M. (2005), „Consumer opinion on smoking bans and predicted impact on restaurant frequency“, *International Journal of Hospitality & Tourism Administration*, 6(4), 49-69.
- Scollo, M. and Lal, A. (2008), *Summary of Studies Assessing the Economic Impact of Smoke-Free Policies in the Hospitality Industry*, viewed 12 February 2014, <http://www.vctc.org.au/tc-res/Hospitalitysummary.pdf>.

- Skogstad, M., Kjaerheim, K., Fladseth, G., Gjolstad, M., Daae, H.L., Olsen, R., Molander, P. and Ellingsen, D.G. (2006), „Cross shift changes in lung function among bar and restaurant workers before and after implementation of a smoking ban“, *Occupational and Environmental Medicine*, 63(7), 482-487.
- Tang, H., Cowling, D.W., Lloyd, J.C., Rogers, T., Koumjian, K.L., Stevens, C.M. and Dileep, G. (2003), „Changes of attitudes and patronage behaviours in response to a smoke-free bar law“, *American Journal of Public Health*, 93(4), 611-617.
- Wan, Y.K.P. and Pilkington, P.A. (2009), „Knowledge, attitudes and experiences of Macao's casino workers with regard to second-hand smoke exposure at work“, *International Gambling Studies*, 9(3), 207-224.
- World Health Organization (2011), *NCD country profiles*, viewed 9 February 2012, [http://www.who.int/nmh/countries/hrv\\_en.pdf](http://www.who.int/nmh/countries/hrv_en.pdf).

**Ljudevit Pranić**, PhD, Assistant Professor  
University of Split  
Faculty of Economics  
Cvite Fiskovića 5, Split, Croatia  
Phone: +385 21 430 749  
E-mail: [ljudevit.pranic@efst.hr](mailto:ljudevit.pranic@efst.hr)

**Snježana Pivac**, PhD, Professor  
University of Split  
Faculty of Economics  
Cvite Fiskovića 5, Split, Croatia  
Phone: +385 21 430 645  
E-mail: [snjezana.pivac@efst.hr](mailto:snjezana.pivac@efst.hr)