



**Socially cued smoking in bars, nightclubs
and gaming venues: a case for introducing
smokefree policies**

Lisa Trotter

Melanie Wakefield

Ron Borland

Abstract

Objective

To assess how smokers perceive the effects of smoking bans in bars, nightclubs and gaming venues on their smoking behaviour.

Design

Cross-sectional structured interview telephone survey of a random sample of smokers.

Setting

Population survey in Victoria.

Participants

The sample comprised 597 smokers and analyses were conducted on 409 smokers who reported patronising bars, nightclubs or gaming venues at least monthly.

Main outcome measures

Two outcomes studied were socially cued smoking and readiness to quit as a result of restrictions on smoking in social venues. Respondents were identified as socially cued smokers if they reported attending bars, nightclubs or gaming venues at least monthly and said that they smoked more in these venues. The potential influence of bans in social venues on readiness to quit was measured by asking respondents if they would be more or less likely to quit smoking if smoking were banned in hotels, licensed bars, gaming venues and nightclubs.

Results

Of all adult smokers, 69% attended bars, nightclubs or gaming venues at least monthly. Of these smokers, 70% reported smoking more in these settings (socially cued smokers) and 25% indicated they would be likely to quit if smoking were banned in social venues. Compared to smokers not likely to quit if there were bans, smokers likely to quit were more likely to be socially cued (OR=2.64), to be contemplating or preparing to quit (OR=2.22), to approve of bans in social venues (OR=2.44) and to be aged under 30 years

(OR=1.73). Compared with smokers not socially cued, socially cued smokers were more likely to be under the age of 30 years (OR=6.15), more likely to believe that there is a safe level of cigarette consumption (OR=2.25) and more likely to have previously made a quit attempt (OR=2.60).

Conclusions

These findings suggest that bans on smoking in bars, nightclubs and gaming venues could reduce cigarette consumption and increase quitting among smokers who frequently patronise these settings. Smoking restrictions in social venues may also reduce progression to regular smoking, since most of these smokers are young people.

Introduction

The effect of restrictions on smoking in the workplace and at home has been well documented in the literature but there has been little study of the effects of smoking policies on smoking behaviour in social settings such as bars, nightclubs and gaming venues ('social venues'). Smoking restrictions in the workplace and at home have been found to contribute to reduced consumption (Chapman et al. 1999; Owen & Borland 1997), increased intentions to quit, relapse prevention (Gilpin et al. 1999), and possibly increased cessation (Farkas et al. 1999; Biener & Nyman 1999), as well as to send a message that smoking is socially unacceptable (Borland et al. 1999). If smoking were banned in social settings, smokers may be more likely to quit and/or reduce their tobacco consumption, at least on occasions on which they visit such venues.

The literature on situational influences on smoking relapse certainly supports the notion that restrictions on smoking in venues such as bars and nightclubs may remove the social pressure to smoke that these contexts create. Social situations exert a powerful influence on smoking relapse, with around one-quarter of relapse crises occurring in settings such as bars and restaurants (Shiffman 1982; Borland 1990). Shiffman (1982) explained this as being due to exposure to other smokers – involving both direct offers of cigarettes and indirect pressure through observation of other smokers, as well as the influence of alcohol weakening willpower to avoid smoking.

Another possible consequence of restrictions on smoking in social venues is the prevention or delay of smoking uptake. A relatively new line of evidence has begun to suggest that bans in public places may reduce smoking among young people (Wakefield et al. 2000; Farkas et al. 2000). Given that the people who patronise social venues are mostly young, smoking bans in these settings might also serve to interrupt the process of progression from experimentation with smoking to long-term tobacco dependence. Although many of the factors that influence the uptake of smoking are present at a very young age and school-aged children are often targeted for intervention, the period after leaving school has been identified as a critical time for transition to regular smoking (Schofield et al. 1998; Hill & Borland 1991). The role of situational influence may be greatest early on when smoking among young people is not so influenced by addiction (Schofield et al. in press). It is possible that social venues are a significant environmental influence on promoting smoking among young people.

Recreational venues that allow smoking expose young people to contexts in which smoking may be viewed as the norm. This may encourage their

progression to more regular smoking. Several studies have found that exposure to smokers distinguished adolescents who progressed to established smoking from those who remained experimenters (Pierce et al. 1996; Choi et al. 1997). Further, the tobacco industry is actively promoting tobacco in bars and nightclubs, which may contribute to smoking uptake and relapsed quitting. A study of tobacco industry documents found that bar promotions are generally targeted at a young adult audience and characterise cigarettes as being part of a glamorous lifestyle that includes attendance at nightclubs and bars (Katz & Lavack 2002). This finding is consistent with the evidence from a recent study of tobacco promotions that found a large increase in entertainment-focused promotions – mostly bar-club and event promotions (Sepe & Glantz 2002).

Many jurisdictions in Australia, Canada, the US and other countries have legislated smoking restrictions in public places. With few exceptions, smokefree policies apply to restaurants but do not extend to bars, nightclubs or gaming venues. The potential effects of smoking restrictions in bars, nightclubs and gaming venues on smoking behaviour may be better understood by examining the behaviour, beliefs and opinions of smokers who frequently patronise these venues. This paper examines the extent to which complete restrictions on smoking in bars, clubs and gaming venues might reduce smoking, especially among those people who frequent such venues regularly.

Method

Data were drawn from a telephone survey conducted in November, 2000 in Victoria. The survey was commissioned by the Centre for Behavioural Research in Cancer and conducted by a large market research company. The sampling frame for the survey was derived from a current CD-ROM telephone directory database. The data collection occurred over a period of 10 days, including weekend days and weekday evenings. Only respondents aged 18 years and over were interviewed. A total of 417 smokers were interviewed from a random sample of 2000 Victorians, of which smokers comprised 21%. A boost random sample of 1000 Victorians was also interviewed and smokers comprised 18% of this sample (n=180). In the boost sample, having identified smoking status, only smokers were interviewed. Thus, 597 smokers were interviewed in total.

Variables

Smoking status was measured using questions developed by a national expert committee convened by the Australian Institute of Health and Welfare (1999).

‘Smokers’ were defined as those who reported current smoking either ‘daily’, ‘weekly’ or ‘less than weekly’. ‘Socially cued smokers’ were defined as smokers who go to either bars, nightclubs or gaming venues (‘social venues’) at least monthly and report that they smoke more in these venues. ‘Not socially cued smokers’ were defined as smokers who go to social venues at least monthly and do not report that they smoke more in these venues.

Smoking behaviour was described in terms of consumption (≤ 5 or > 5 cigarettes per day) and time to first cigarette for the day (first cigarette for the day ≤ 29 or > 29 minutes after waking). These variables were combined to provide an indication of nicotine dependence (Fagerstrom & Schneider 1989). Those considered to be addicted either smoked more than five cigarettes per day or smoked their first cigarette of the day less than 30 minutes after waking. Smokers were designated as being in precontemplation if they indicated that they were not planning to quit in the next six months (Prochaska, DiClemente & Norcross 1992) and those who were planning to quit in the next six months were designated as being in contemplation/preparation.

To measure the potential influence of bans in social venues on readiness to quit, respondents were asked, ‘If smoking were banned in hotels, licensed bars, gaming venues and nightclubs, would you be more or less likely to quit smoking altogether?’ with respondents able to indicate ‘more likely’, ‘less likely’ or ‘no difference’. Respondents were also asked, ‘Do you think that there is a safe number of cigarettes that you can smoke before it affects your health?’

Respondents were asked if they approved or disapproved of the government banning smoking in bars, nightclubs and gaming venues. A variable was constructed that combined responses for each of these variables into two categories: ‘approve/neither approve nor disapprove’ or ‘disapprove’. Demographic information was also collected, including age (≤ 29 or > 29), sex, and education (tertiary education ‘more’ or secondary school and lower ‘less’).

Statistical analyses

All analyses were undertaken using the statistical package SPSS Version 10.0.7. Conventional chi-square tests were used to test for associations between likelihood of quitting if bans were in place, type of smoker (socially cued or not socially cued) and the variables of interest. A significance level of 0.05 was adopted. Variables significantly related to outcome variables at the bivariate stage were included in a logistic regression analysis. A logistic

regression model was then built to examine which variables were independently related to type of smoker.

A comparison of the age and sex distribution for the survey with the Australian Bureau of Statistics population estimates for 2000 (ABS 2000) indicated that the sample was representative of the Victorian population except that women (survey 59.4% vs population 50.1%) and people aged 60 years and older (19.8% vs 12.1% population) were over-represented in the sample. The sample was weighted by age and sex according to population census data to estimate the proportion of smokers in Victoria who attend social venues monthly, smoke more in these venues, and are likely to quit if there were bans in social venues. However, weighting procedures were not used in the chi-square and logistic regression analyses.

Research questions

We sought to determine: (1) to what extent smokers who frequently patronised social venues were likely to quit smoking if there were bans in these venues; (2) the characteristics of smokers who indicated they were likely to quit if there were bans in these social venues; and (3) the characteristics of social smokers.

Results

The proportion of smokers in Victoria who attend social venues monthly was estimated to be 69.4% (95% CI: 65.5–73.2). Of this group, 70.1% (95% CI: 65.5–74.6) smoke more in social venues and 25.4% (95% CI: 21.1–29.9) are likely to quit if smoking were banned in social venues. A criterion used to select the sample for further analyses was frequency of patronage at social venues. As can be seen in Table 1, bars were visited at least monthly by 60% of smokers, nightclubs were visited at least monthly by 21% of smokers and gaming venues were visited at least monthly by 23% of smokers. The 409 (69%) smokers who reported at least monthly patronage of at least one of these venues constituted the sample for the remainder of the analyses.

Table 1 Frequency distribution of patronage at social venues (n=597)

	Bars (%)	Nightclubs (%)	Gaming venues (%)
More than weekly	13.4	2.7	2.8
At least once a week	16.6	5.4	5.4
At least once a fortnight	11.6	5.2	5.4
At least once a month	18.1	8.2	9.7
Less than once a month	25.3	24.5	31.0
Never	14.6	54.1	45.7
Don't know	.5	0	0

Table 2 shows the demographic characteristics, smoking behaviour and opinions of at least monthly and less than monthly patrons. The results show that smokers who patronised social venues at least monthly were more likely to be younger, male, have higher educational attainment and lower approval of bans than smokers who patronised social venues less than monthly.

Table 2 Characteristics of those who patronise social venues at least monthly and less than monthly

	N	At least monthly (n=409)	Less than monthly (n=188)	P
Percentage of total*	597	68.5	31.5	
Age (% <30)	594	33.5	9.0	.000***
Sex (% female)	597	49.1	69.7	.000***
Education (% less)	595	50.5	63.1	.004**
Nicotine dependence (% yes)	597	49.9	54.8	.265
Made quit attempts (% yes)	591	79.3	81.2	.588
Safe no. of cigarettes (% yes)	597	14.4	12.2	.470
Bans (% approve/neither)	579	64.7	75.8	.008**
Stage of change (precontemplation)	597	51.8	58.5	.128

*This differs from the level reported in the text because this is an unweighted figure.

** $P < .05$

*** $P < .001$

Factors associated with intention to quit smoking if social venues became smokefree were investigated (Table 3). The results show that smokers who were likely to quit if there were bans in social venues were likely to be younger,

socially cued (i.e. smoke more in social venues), express greater approval of bans and be contemplating or preparing to quit, compared to those not likely to quit if there were bans.

Table 3 Differences between those likely and not likely to quit if venues were smokefree

	N	Likely (n=100)	Not likely (n=309)	P
Percentage of total*	409	24.4	75.5	
Age (% <30)	395	47.0	29.2	.001**
Sex (% female)	398	45.0	50.7	.326
Education (% less)	397	49.0	50.5	.795
Nicotine dependence (% yes)	398	44.0	52.3	.148
Made quit attempts in the past (% yes)	394	84.8	77.3	.109
Safe no. of cigarettes (% yes)	398	19.0	12.8	.123
Socially cued smoker (yes)	398	85.0	64.8	.000***
Bans (% approve/neither)	388	79.8	58.8	.000***
Stage of change (precontemplation)	398	35.0	56.4	.000***

*This differs from the level reported in the text because this is an unweighted figure.

** $P < .05$

*** $P < .001$

Variables found to be statistically significantly associated with an increased perceived likelihood of quitting in the bivariate analyses were entered into a logistic regression analysis. Due to missing values, 386 cases were included in the analysis. Table 4 shows a model containing four variables which provide a significant fit to the data ($\chi^2=44.16$, $df=4$, $P=.000$). Compared to smokers not likely to quit in response to smoking bans, smokers likely to quit were two-and-a-half times more likely to be socially cued (i.e. to smoke more in these venues), twice as likely to be contemplating or preparing to quit, twice as likely to approve of bans in social venues and one-and-a-half times more likely to be aged under 30 years.

Since being a socially cued smoker was strongly associated with intention to quit if social venues became smokefree, further analyses were conducted to investigate the characteristics of this group. Table 5 indicates that, compared to others, socially cued smokers were younger, had a lower indication of dependence, had previously tried to quit, and believed there was a safe level of cigarette consumption.

Table 4 Logistic regression analysis: variables associated with smokers being more likely to quit if bans were in place vs not likely/no difference (n=386)

Variables	OR	95% CI	P
Socially cued smoker			
No	1.00		
Yes	2.64	1.397 – 5.000	.003**
Stage of change			
Precontemplation	1.00		
Contemplation/preparation	2.22	1.345 – 3.673	.002**
Bans in social venues			
Disapprove	1.00		
Approve/neither	2.44	1.386 – 4.298	.002**
Age			
30+ years	1.00		
<30 years	1.73	1.033 – 2.883	.037**

** P<.05

Table 5 Differences between socially cued smokers and not socially cued smokers

	N	Cued (n=287)	Not cued (n=122)	P
Percentage of total*	409	70.2	29.8	
Age (% <30)	406	42.5	12.4	.000***
Sex (% female)	409	51.2	44.3	.198
Education (% less)	408	50.3	50.8	.931
Nicotine dependence (% yes)	409	45.6	59.8	.009**
Made quit attempts in the past (% yes)	405	82.3	72.1	.020**
Safe no. of cigarettes (% yes)	409	17.1	8.2	.019**
Bans (% approve/neither)	397	64.7	64.7	.994
Stage of change (precontemplation)	409	49.8	56.6	.213
Likely to quit if bans in social venues (more)	398	30.6	12.5	.000***

* This differs from the level reported in the text because this is an unweighted figure.

** P<.05

*** P<.001

Variables found to be statistically significantly associated with membership of the socially cued smoker category in the bivariate analyses were entered into a logistic regression analysis. Due to missing values, 402 cases were included in the analysis. Table 6 shows a model containing three variables which provide a significant fit to the data ($\chi^2=54.17$, $df=3$, $P=.000$). Compared with smokers not socially cued, socially cued smokers were six times more likely to be under the age of 30 years, two times more likely to believe that there is a safe level of cigarette consumption and two and a half times more likely to have previously made a quit attempt.

Table 6 Logistic regression analysis: variables associated with being a socially cued smoker (n=402)

Variables	OR	95% CI	P
<i>Age</i>			
30+	1.00		
<30	6.15	3.316 – 11.421	.000***
<i>Past quit attempts</i>			
Never	1.00		
Made an attempt	2.60	1.468 – 4.586	.001**
<i>Safe no. of cigarettes</i>			
No	1.00		
Yes	2.25	1.064 – 4.763	.034**

** $P < .05$

*** $P < .001$

Discussion

The findings from this study suggest that the smoking behaviour of a large proportion of smokers, especially young smokers, may be influenced by the imposition of smokefree policies in bars, nightclubs and gaming venues. Overall, 69% of smokers report patronising social venues at least monthly and many of these smokers might reduce their consumption or quit smoking if bans were introduced. The majority (70%) of smokers who frequently patronise social venues report that they smoke more in these settings (socially cued smokers) and, to the extent that this is true, are likely to reduce their consumption overall if smoking were banned in social venues. Further, one-quarter of smokers who frequently patronise social venues report that they would be more likely to quit smoking altogether if smoking were banned in hotels, licensed bars, gaming venues or nightclubs.

Our estimate of possible quitting, at 25%, is higher than that reported by Philpot et al. (1999). They found that 11.5% of people interviewed while queuing for admission to bars and nightclubs said that adoption of smokefree policies in hospitality venues ‘would prompt them to quit’, but our question was not as strongly worded, so a greater level of agreement would be expected. Regardless of the exact level, a significant minority of smokers, especially socially cued and younger smokers, believed bans in these venues would help them to quit. It may be the case that smokers act differently in practice, as opposed to what they say they would do in response to smoking bans. Therefore, a priority for subsequent research enquiry would be to conduct studies to determine how much quitting is actually generated when smoking bans are implemented in such venues.

Further, smokefree policies in social venues could contribute to preventing progression to regular smoking among many young people. Socially cued smokers are six times more likely to be under the age of 30 than not socially cued smokers. Thus, the introduction of smokefree policies in bars, nightclubs and gaming venues could act as a strategy for preventing the uptake of regular smoking. This possibility has already been raised by some tobacco control advocates who refer to bars and nightclubs as ‘nicotine classrooms’ (Greg Connolly 2001, pers. comm., 2 November). Recent evidence of tobacco industry marketing which targets young people in bars and nightclubs (Katz & Lavack 2002) also supports this suggestion.

The group of socially cued smokers we identified are likely to be significant beneficiaries of smokefree policies in social venues. As a group, they are young and hold beliefs that low levels of smoking are not particularly harmful. As a result, it would seem that they think what they are doing is safe. This might be so, in relative terms, if they were not putting themselves at risk of dependence and the subsequent harmful long-term use this entails. Removing the incentive to smoke in these situations appears to be sufficient for a significant minority of this group to seriously consider quitting altogether.

The findings from this study suggest a reason for strong tobacco industry opposition to smokefree policies in these pubs, nightclubs and gaming venues. They may be concerned at the possibility that it will encourage cessation and remove a context where many young people are induced to smoke. Further research to evaluate the effects of smokefree policies in these venues on smoking behaviour is required.

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