



Adaptation to mandated restrictions on smoking in dining areas: results of an Internet survey

Tessa Letcher

Melissa Cameron

Lisa Trotter

Graeme Inglis

Rebecca Potter

Anita Lal

Karen Farquharson

Melanie Wakefield

Abstract

Objective

The study aimed to measure changes in dining behaviour associated with the introduction of smoking restrictions on July 1, 2001, to describe strategies adopted by smokers and non-smokers to adapt to the changes, and to describe some of the thoughts, feelings and beliefs underlying the adaptations that people make in response to the introduction of new restrictions.

Method

Data were collected in a longitudinal study with repeated measures of a total of 257 respondents before and after the introduction of the restrictions, using a questionnaire administered via the Internet. Data collection occurred on seven occasions between April 2001 and March 2002. In addition, a series of in-depth telephone interviews was conducted among a group of 31 smokers and non-smokers, who were interviewed once before and twice after the introduction of the bans.

Results

Dining patterns, dining frequency, restaurant choice and expenditure on a meal did not change among either smoking or non-smoking patrons following the introduction of the law. The majority of Victorians approved of smokefree dining legislation before its implementation, and agreement with the law increased sharply and significantly among both smokers and non-smokers immediately following the introduction of the policy, remaining at high levels for the duration of the study period.

Conclusions

These findings suggest there was rapid adaptation to and acceptance of the restrictions among both smokers and non-smokers, and are supported by evidence from other jurisdictions, both interstate and internationally, regarding the introduction of smokefree dining.

Introduction

Smokefree dining was introduced in Victoria on July 1, 2001 under the *Tobacco (Amendment) Act 2000*. The law prohibited smoking in enclosed restaurants, cafés and some take-away premises, and in the dining areas in hotels and licensed clubs. Non-dining areas within restaurants, such as bars, are also subject to the ban unless they are completely enclosed and separate from the dining area.

Concerns about economic effects of smokefree policies in hospitality venues have been commonly raised when legislation implementing bans is proposed or brought into effect (Wakefield et al. 2002). However, evidence indicates that overall restaurant business is not negatively impacted by the introduction of smoking bans (Glantz & Charlesworth 1999; Hyland, Cummings & Nauenberg 1999; Wakefield et al. 2002). Scollo et al. (in press) reviewed the quality of studies related to the economic impact of smoking restrictions in the hospitality industry and concluded that the highest quality studies reported either no effect or a positive effect on hospitality sales or employment.

The primary purpose of smoking restrictions in workplaces is to protect employees and the public from exposure to environmental tobacco smoke (ETS) (for example, see <http://www.tobaccoreforms.vic.gov.au/legislation.htm>). In addition, environmental changes influence people's smoking behaviour. Several studies indicate that the imposition of workplace smokefree policies leads to decreased cigarette consumption and reduced smoking prevalence among employees (Borland et al. 1990; Borland, Owen & Hocking 1991; Hocking et al. 1991). The extent of reductions in prevalence and consumption is related to the level of restrictions; the effect of work area bans has been shown to be lessened by smoking being permitted in common areas, for example (Farrelly, Evans & Sfekas 1999).

The objective of the current study was to describe and explain the process of adaptation to smokefree restaurant laws in smokers and non-smokers. Specific aims were to measure the changes in dining behaviour associated with the introduction of smoking restrictions, describe strategies adopted by smokers and non-smokers to adapt to the changes, and describe some of the thoughts, feelings and beliefs underlying the adaptations that people make in response to the introduction of new restrictions.

This study differs from previous research examining consumer response to the introduction of mandated restrictions on smoking in public places due to the study design and method of data collection. Unlike other studies, our design involved a cohort study with multiple follow-up points, thereby allowing a micro-

analysis of the adaptations of smokers and non-smokers to the introduction of smokefree dining legislation. No studies have previously been reported of adaptations to smoking restrictions with a design that allows examination of behavioural change in such detail. Furthermore, the study used a questionnaire administered via the Internet, and participants were recruited and prompted to complete the follow-up surveys by the use of email messages.

Method

Recruitment

Subjects aged 18 years and over were recruited from four Victorian population surveys conducted by telephone, using numbers selected randomly from the electronic telephone directory. At the end of each interview, participants were asked about the frequency of their access to email and Internet facilities. Those who said they accessed email at least monthly were asked about their willingness to participate in a future Internet survey similar to the telephone survey they had just completed. If they agreed, contact details were noted. The first population survey was conducted in November 2000 among 2000 Victorians, the second in November 2000 among 1000 Victorians, and the third among 2000 Victorians in April 2001. There were 188 smokers and 403 non-smokers recruited from these three population surveys. A fourth additional short survey was conducted in April 2001 to boost the sample of smokers willing to participate in the online survey, and 51 smokers were recruited from this survey, resulting in 642 potential participants recruited. Age and smoking status were recorded at the time of initial recruitment from the population surveys.

An email invitation was sent describing the study and asking for participation. The email contained a hyperlink to a webpage where participants were able to register their names and email addresses. Once registered, an automatic email reply was sent, confirming participation and including an unique ID number for the study. Invitations were sent on April 29, 2001, enabling participants to register and complete a baseline survey.

Thereafter, each month participants were sent an email inviting them to complete a survey using a link to the survey webpage. The chance of winning a dining voucher was offered each month as an incentive to complete each survey. The survey was available on the website for two weeks, with reminder emails and follow-up phone calls made approximately one week after the initial monthly invitation to participants who had not yet completed the month's survey.

Internet survey instrument

The questionnaire comprised a series of questions which participants could scroll through, so they were able to view all questions before answering rather than having questions on separate pages. Questions were presented in a similar manner to paper-based surveys, with check-boxes provided for responses and a button to submit the survey once it was completed. The date and time of questionnaire completion was automatically recorded. Participants were not able to resubmit a survey within the same week. Smoking status was the only mandatory question.

The survey included questions on dining behaviour for those who had dined out in Victoria during the last four weeks. Respondents were asked about the last time they had been out to dine during the last four weeks. Questions included: type of meal, dining venue, amount spent on own meal; smoking behaviour on this occasion; exposure to ETS, avoidance of smoky venues; level of agreement with legislation regarding smokefree dining; any change in dining behaviour since introduction of the law; compliance with the law; smoking status; and, for smokers, level of agreement with a number of statements related to smoking restrictions and perceptions of smoking.

The baseline survey was conducted over five weeks between April and June 2001. The follow-up surveys occurred over two weeks each time, in July, August/September, October, November/December, January and February/March.

Qualitative survey

In addition to an Internet survey, qualitative data were collected to provide in-depth information on the process of adaptation to the smokefree law. Detailed interviews were conducted with smokers and non-smokers before and after the introduction of the dining area smoking bans in order to explore the ways in which they adapted to the restrictions, and the motives, thoughts, beliefs and feelings underlying these adaptations. Thirty-one individuals were selected from population survey participants who had agreed to participate in further Internet research. These people did not participate in the Internet survey as they were unable to gain access to the survey (due to lack of access to email and/or the Internet). They were contacted and asked whether they would be willing to participate in three telephone interviews.

The sample for the qualitative study was selected to maximise the variability of the responses received. In other words, rather than attempting to get a representative sample of Victorians, our aim was to interview a variety of

Victorians, including people from urban and rural areas, men and women, smokers and non-smokers. We were particularly interested in how smokers adapted when regulations were implemented, so we oversampled smokers, making our study half smokers (rather than approximately one-fifth of the sample) and half non-smokers.

The questions for the qualitative study were chosen to complement the questions being asked in the longitudinal study, obtaining greater detail on how participants felt about the changes, the ways in which they changed their dining habits, and the way they perceived the restrictions before and after they were introduced.

Respondents were categorised as smokers or non-smokers. Tobacco smokers were defined as those who smoked daily, weekly or less than weekly. Less-than-weekly smokers were included in the smoker category as these respondents were likely to smoke in a social context. This definition is the same as that used in population survey analyses of attitudes and behaviour in relation to ETS that is reported in Chapter 8 of this volume. Baseline smoking status was selected as the variable to indicate smoking status of respondents, as few people changed their smoking status over the study period. In order to look at demographic differences in the data, age was divided into three categories: 18–29 years, 30–49 years, and 50 years old and over.

Statistical analysis

To test for the significance of relationships between variables, a number of statistical procedures were used. Categorical data were analysed using chi-square tests and logistic regression modelling techniques. In this report, details of statistical tests of significance are not usually included in the text. Where relationships between variables are reported, the probability level of significance was less than 0.05, indicating a 1 in 20 probability that the effect was caused by chance. Analyses assumed that the missing values were randomly distributed. The data were analysed using Stata version 7.

The survey data were treated as a cross-sectional panel data model, because the same group of respondents participated in each ‘wave’ of the survey. Due to missing values, some responses to particular questions were excluded from the analyses, but the data used in the analyses were substantially complete over the survey period. Data from respondents who completed a survey at baseline only and completed no surveys subsequent to this were not included in the analyses. If, in response to a question, a respondent

provided data only at baseline and no more data in the survey to that question, their response to this question was excluded from the analyses.

Missing values

For various reasons, some respondents did not answer every question each time and their non-response was treated as a 'missing' response. In many cases, a value could be attributed to this response using imputation methods. If a missing response was preceded in the time series by two identical values and followed by one response of the same value, this value was attributed to the missing response. Finally, if, in response to a particular question, a respondent returned more missing values than valid responses over the survey period, that respondent's data for that particular question was excluded from the analysis.

Further analyses were conducted to determine whether there was a pattern in the missing values and whether such a pattern could be related to respondents' smoking status at baseline. Logistic models were used to test whether the missing values could be predicted from the baseline smoking status. These analyses indicated that smokers were not more likely to have missing data than non-smokers.

The results from the July survey (conducted between July 15 and 28) were omitted from analyses of the data as many questions referred to dining behaviour in the four weeks preceding the survey. The data from July could not therefore be reliably assumed to apply only to the time after the introduction of smoking restrictions in dining areas and may reflect at least some period of time when smokefree dining laws were not in effect.

Sample

Initially, 642 emails were sent to potential participants. By the end of the final day for completing the baseline survey, 277 people were registered. Our analyses include only participants who completed a baseline survey.

The baseline survey was completed by 93% ($n=257$) of registered participants. The final sample demographics are presented in Table 1. As described above, demographic data were available for participants recruited from the population surveys, not the booster sample, for whom gender and smoking status only are known.

Table 1 presents data for age, gender and smoking status. While the proportion of smokers in the sample (36%) is greater than in the general Victorian

population (refer to Chapter 1 of this volume), the recruitment process was designed to over-represent smokers.

Table 1 Sample characteristics at baseline

Characteristics	Total %
Gender	(n=244*)
Males	42
Females	58
Age group	(n=257)
18–29	21
30–49	45
50+	33
Smoking status**	(n=256)
Tobacco smoker	36
Non-smoker	64

*Demographic data not available for all participants.

**Smoking status at baseline data collection.

Results

Public opinion

The new restrictions on smokefree dining were described to respondents (‘A law to ban smoking in dining areas such as restaurants came in on July 1, 2001’) and they were asked if they agreed or disagreed with the law, or had no strong view. In the baseline survey, respondents were told that the law had been passed by the Government and would be coming in on July 1. Responses were collapsed into two categories: Agree/No strong view (indicating support of or no opposition to the restrictions) and Disagree/Can’t say.

Among smokers, 63% agreed with or had no strong view about the impending law at baseline; this increased significantly following the introduction of the legislation to 80% in August (see Table 2). The level of agreement did not vary significantly in the subsequent periods of data collection that ended in March 2002, eight months after the introduction of the restrictions. The proportion of smokers who disagreed with the restrictions decreased, from 37% at baseline to 13% during the final survey.

Table 2 Views on law to ban smoking in dining areas by smoking status over time

Smoking status and view	Baseline %	August %	October %	Nov/Dec %	January %	Feb/Mar %
Smokers	(n=91)	(n=69)	(n=61)	(n=63)	(n=60)	(n=55)
Agree/no strong view	63	80	84	86	85	87
Disagree/can't say	37	20	16	14	15	13
Non-smokers	(n=162)	(n=139)	(n=131)	(n=126)	(n=123)	(n=122)
Agree/no strong view	93	99	98	97	99	96
Disagree/can't say	7	1	2	3	1	4

Comments from smokers in the qualitative survey concurred with these findings. For example:

I enjoy a meal without having smoke wafting over you. It's really hard because I am a smoker but I agree with a lot of the policies. I know it's getting harder and harder for the smokers to enjoy their habit but I think that's for the better.

Because when you're eating a meal you don't really want other people's smoke coming across. I think if you're going to go out for dinner you can at least not smoke. It's only like an hour or two so I think you can hold off for a little while.

Just makes it a more pleasant atmosphere ... just makes it more pleasant to go into a restaurant that's not filled with smoke and it's easier to go outside and have one.

Among non-smokers, 93% indicated agreement with the new laws before restrictions came into effect. Following the introduction of the laws, agreement was at 99% in August, a significant increase. There were no significant changes between the levels of support in August and those in subsequent survey periods. Disagreement among non-smokers decreased from 7% at baseline to 1–4% following the introduction of the laws.

Non-smokers in the qualitative survey also agreed with these findings. For example:

Well you go there feeling pretty confident you are not going to run into anyone smoking in the premises and therefore have to leave or cancel your booking or whatever.

Well I haven't been out to eat in a smoky area which is sort of nice and like you come home and you don't stink of smoke ... you can go anywhere without worrying if it's going to be smoky. It's allowed me to go out and enjoy myself.

Dining-out choices

Respondents who had dined out were asked about the type of venue where they chose to dine. Options included take-away food outlet, family-style restaurant, casual restaurant or café, traditional restaurant, hotel dining room, licensed club, or other. Responses were collapsed into two categories: casual/formal dining and hotel/pub/club dining. This divided the dining options into venues where smoking would almost definitely be prohibited from July 1, 2001 (the first category) and venues where smoking could be permitted at certain times or in certain parts. That is, hotels and pubs/clubs are more likely to have smoking areas than restaurants.

As shown in Table 3, there was little change in the type of venue selected by the sample over the period of data collection. The data for smokers indicate that, at baseline, almost two-thirds of smokers (65%) had eaten at a casual or formal dining venue during the last four weeks. This rose slightly but not significantly to 71% in August, and subsequently remained at around this level until the final survey. For non-smokers, 81% reported dining in a casual or formal eatery at baseline. This did not change significantly over the survey period.

Table 3 Type of dining place on most recent occasion during previous four weeks by smoking status over time

Smoking status and dining type	Baseline %	August %	October %	Nov/Dec %	January %	Feb/Mar %
Smokers	(n=78)	(n=58)	(n=51)	(n=56)	(n=49)	(n=44)
Casual/formal	65	71	67	70	71	70
Hotel/pub/club	35	29	33	30	29	30
Non-smokers	(n=136)	(n=118)	(n=112)	(n=113)	(n=112)	(n=110)
Casual/formal	81	86	82	81	80	79
Hotel/pub/club	19	14	18	19	20	21

There were no significant changes in choice of dining venue type for either smokers or non-smokers between the baseline survey and August, or between August and any subsequent survey period. At baseline, 35% of smokers reported having eaten in a hotel, pub or club the last time they went out to dine in the previous four weeks. This was 29% in August and remained at around 30% until the final survey. For the duration of the study around one-fifth of non-smokers reported they had dined in a hotel, pub or club the last time they went out to dine in the previous four weeks.

If smokefree dining had driven people away from completely smokefree establishments to select dining venues that offered the option to smoke, we would have expected a drift of people over time towards hotel/pub/club dining, but there was no evidence that this occurred.

Comments from smokers in the qualitative survey supported the finding that the restrictions had no effect on where they chose to dine. For example:

Because now it's a uniform thing the smoking issue has disappeared so no, it doesn't affect me.

Well I've just taken it in my stride that you're not allowed to smoke in restaurants and if you want to go to restaurants it doesn't really make any difference to me. I do smoke a packet a day but if I'm in a non-smoking area it doesn't seem to worry me ... now, especially restaurants are all non-smoking, it doesn't particularly impact on the decision of where to go or not.

Amount spent on dining

Respondents were asked about individual spending on the last occasion they went out to dine in the previous four weeks. They were asked to specify the amount they spent on their own meal and drinks on this occasion (not including money spent on other people). As presented in Table 4, the amounts fluctuated across the period of time of the survey, with no significant change in the amount spent over time among either smokers or non-smokers.

Table 4 Mean individual amount spent on dining on most recent occasion during previous four weeks by smoking status over time (A\$)

Smoking status	Baseline	August	October	Nov/Dec	January	Feb/Mar
Smokers	(n=68)	(n=47)	(n=43)	(n=42)	(n=41)	(n=36)
- amount spent	\$32.30	\$33.64	\$30.45	\$27.38	\$33.82	\$26.97
Non-smokers	(n=124)	(n=94)	(n=95)	(n=102)	(n=87)	(n=94)
- amount spent	\$26.69	\$31.69	\$25.11	\$29.69	\$26.86	\$26.92

Dining and smoking

Respondents were asked, in choosing the place where they last dined, whether they avoided going to a place because they thought that there would be too much tobacco smoke there, and whether they avoided going to a place because smoking was not allowed. Table 5 presents the results of these two questions for smokers and non-smokers, excluding those who indicated in their responses that they did not select the place at which they most recently dined out.

Table 5 Choice of dining venue based on venue smoking conditions on most recent occasion during previous four weeks, by smoking status over time

Choice of dining venue	Baseline %	August %	October %	Nov/Dec %	January %	Feb/Mar %
Avoided smoky venue						
Smokers	(n=63) 5	(n=45) 4	(n=41) 7	(n=37) 3	(n=40) 3	(n=32) 3
Non-smokers	(n=98) 37	(n=81) 28	(n=83) 29	(n=76) 26	(n=80) 26	(n=68) 34
Avoided non-smoking venue						
Smokers	(n=61) 26	(n=43) 12	(n=43) 12	(n=41) 7	(n=40) 20	(n=33) 6
Non-smokers	(n=102) 8	(n=85) 14	(n=84) 11	(n=76) 12	(n=77) 8	(n=67) 12

There was no significant change over time in the proportion of either smokers or non-smokers reporting they had avoided a venue as they expected it would have too much tobacco smoke. Only a small proportion of smokers (5% at baseline) reported at any time that they had recently avoided a dining venue as they expected it would have too much tobacco smoke. However, this was reported by over one-third of non-smokers at baseline (37%).

Comments from non-smokers in the qualitative survey regarding avoidance of smoky places concurred with these findings. For example:

You wouldn't want to go where there's heavy smoke in the air all the time and if you don't have to you just don't.

I mean I've been to the odd bar and I've found that it's really, really smoky because the ventilation is so poor so you wouldn't go back there.

Smokers agreed.

Even though I'm a smoker I don't like other people's smoke while I'm eating either. So yeah I still think that it's nice to have an atmosphere if you just want to eat, not to have a smoker there. Like I said, even though I'm a smoker I don't like other people's smoke wafting over my meal while I'm eating.

There was also no significant change over time in the proportion of either smokers or non-smokers reporting they had avoided a smokefree venue. Among smokers, 26% reported at baseline that they had avoided going to a place because smoking was not allowed. This decreased after the introduction of the restrictions to 12% in August and October, and then fluctuated, with a jump in January perhaps reflecting seasonal variation. A small percentage reported avoidance of a smokefree venue at the final survey. The change over time approached significance; however, the variation in January in the proportions reporting avoidance makes the interpretation of results difficult.

There was also fluctuation, but no significant change over time, in the proportion of non-smokers reporting avoidance of a smokefree dining venue, from 8% at baseline to 14% in August and 12% at the final survey.

Dining differently

During each survey following the introduction of smokefree dining, respondents were asked whether they had dined out differently in the last four weeks compared with before the new law was introduced (hence baseline data is not applicable for this question). The options were: ordered more take-away food instead of eating out; skipped dessert in order to get out faster; stopped eating out completely; started dining out, whereas wouldn't have bothered before; stayed longer because there was no smoke; other. Responses were coded into 'positive for patronage' (included: started dining out, whereas wouldn't have bothered before; stayed longer because there was no smoke), 'negative for patronage' (included: ordered more take-away food instead of eating out; skipped dessert in order to get out faster; stopped eating out completely), and 'no difference'. Respondents could also indicate 'other' and write a response: these were coded into the above categories. For example, responses indicating 'dined out less' were coded into negative for patronage, while responses indicating 'dined where can smoke' were coded into positive for patronage. A large number of 'other' responses referred to the fact that survey participants had not changed their dining-out patterns after the law was introduced (coded into no difference). Table 6 presents the results for this question by smoking status.

Among smokers, the majority indicated the law made no difference to their dining behaviour, ranging between 55% and 67%. A small proportion of smokers reported behaviour change beneficial to patronage (8–16%), while between 20% and 31% reported behaviour negative for patronage. Among non-smokers, 53–58% reported behaviour positive for patronage following the introduction of the new law. In addition, 39–44% of non-smokers reported that it made no difference to their dining behaviour. Only a very small percentage (2–4%) reported that the new law had a negative impact upon their patronage of dining venues.

Significance testing revealed no significant difference in dining behaviour, for either smokers or non-smokers, between August and any of the subsequent survey months. These data indicate that the vast majority of patrons (between 96% and 98% of non-smokers and 69–80% of smokers) have dined out in a manner either positive for patronage or have not changed their dining behaviour at all since the introduction of smoking restrictions in dining venues.

Table 6 Dining-out behaviour differences by smoking status over time

Dining behaviour change	August %	October %	Nov/Dec %	January %	Feb/Mar %
Smokers	(n=59)	(n=49)	(n=54)	(n=54)	(n=49)
Positive for patronage	8	16	13	15	12
No difference	61	55	67	61	63
Negative for patronage	31	29	20	24	24
Non-smokers	(n=115)	(n=111)	(n=105)	(n=103)	(n=107)
Positive for patronage	53	54	57	54	58
No difference	43	44	40	43	39
Negative for patronage	4	2	3	3	3

Due to rounding not all columns sum to 100.

Comments from smokers in the qualitative survey about the time spent dining concurred with these findings. For example:

I sneak outside to have a cigarette, but no I don't leave the restaurant earlier so I can smoke.

This was also found among non-smokers.

It just means that I've got a bigger choice. It doesn't matter where I go now I don't have to put up with smoking.

Well yes it would probably open up a wider range of places because previously one just tended to go where you knew there wasn't going to be any smoking.

I suspect I'm more open to going out for a meal now.

Compliance and choice

During each survey, respondents were asked, 'In the last four weeks, have you smoked in a dining area that was designated as "no smoking"?' The number of smokers reporting they had smoked in a non-smoking dining area was very small, between 2% and 10% (Table 7). Significantly fewer smokers reported having violated the law in October and January (2%), compared with 10% in August.

It should be noted that this question did not ask whether respondents were *aware* that the area was a non-smoking one before lighting up. In some cases, smokers may have lit up being unaware of a smoking ban. However, one might expect that over time people were more likely to be aware of the law, or to be reasonably proactive in seeking such information, such as asking staff at the venue or observing no-smoking signs, given the increasing restrictions on smoking in public places in Victoria.

Table 7 Percentage of smokers over time reporting they have smoked in a no-smoking dining area

	Baseline (n=79)	August (n=69)	October (n=61)	Nov/Dec (n=63)	January (n=60)	Feb/Mar (n=56)
Have smoked in a no-smoking dining area	8	10	2	5	2	2

Smokers' perceptions

In each survey, smokers were asked if they agreed or disagreed with four statements about their smoking. Two of the statements referred to how respondents felt about being smokers and their perception of how others felt about their smoking (Table 8), while two of the statements referred to smokers' reactions to limitations on their smoking behaviour (Table 9).

The first statement regarding feelings about being a smoker was, 'I feel like most people disapprove of my smoking'. At baseline, 56% of smokers agreed with this. This changed little over the period of the survey, with the majority of smokers consistently agreeing with the statement. The proportion of smokers

who neither agreed nor disagreed with this statement remained at around 29%. The proportion of smokers who disagreed with this statement was low, from 15% at baseline, with some fluctuation over time, to 17% disagreement at the final survey. There were no significant differences over the period of the survey, comparing baseline with August, or August compared with other survey periods.

Table 8 *Smokers' feelings about smoking behaviour over time*

Feeling	Baseline %	August %	October %	Nov/Dec %	January %	Feb/Mar %
<i>I feel like most people disapprove of my smoking</i>	(n=80)	(n=58)	(n=49)	(n=50)	(n=45)	(n=42)
Agree	56	62	63	64	56	55
Neither agree nor disagree	29	29	29	26	29	29
Disagree	15	9	8	10	16	17
<i>I think that as a smoker I am persecuted</i>	(n=82)	(n=58)	(n=49)	(n=51)	(n=45)	(n=42)
Agree	40	29	33	31	42	24
Neither agree nor disagree	34	53	37	39	29	52
Disagree	26	17	31	29	29	24

Due to rounding not all columns sum to 100.

The second statement related to feelings about being a smoker was 'I think that as a smoker I am persecuted'. At baseline, 40% of smokers indicated that they felt persecuted: this decreased to 29% in August. While this difference was not significant, there was a significant increase in January (42%) compared with August. However, in the final survey, levels of agreement were not significantly different from August, with 24% reporting that they felt persecuted as a smoker. At baseline, 26% of smokers disagreed with the statement that they were persecuted, while 34% of smokers reported no firm opinion. The variation may be associated with the New Year period bringing more pressure to quit. However, it is clear that across the study period, the majority of smokers either did not think that they were persecuted or had no strong feeling regarding this.

Smokers were also asked to indicate their level of agreement with two statements referring to their reactions to limitations on their smoking. At baseline, 38% of smokers agreed with the statement 'It is difficult for me to smoke cigarettes when and where I want to most of the time' (refer to Table 9). This increased to almost half (47%) agreeing with this in August, although

the change was not significant. Level of agreement dropped again (but not significantly) across the period of the survey, reaching 29% in the final survey. This was associated with an increase in the proportion of smokers who were ambivalent towards the statement, from 36% at baseline to 50% at the final survey. At baseline, 26% of smokers disagreed with the statement, while at the final survey, 21% disagreed. There were no significant differences between levels of agreement in August compared with any other survey months. Looking at those who disagreed with the statement or had no view either way, these results suggest that the majority of smokers (up to 84%) do not find it difficult most of the time to smoke cigarettes, or at least it is not an issue of concern for them. Given the extent of restrictions in indoor public places, this suggests that smokers have readily accepted and adapted to restrictions.

Table 9 Smokers' reactions over time to smoking restrictions

Reaction	Baseline %	August %	October %	Nov/Dec %	January %	Feb/Mar %
<i>It is difficult for me to smoke cigarettes when and where I want to most of the time</i>	(n=81)	(n=58)	(n=49)	(n=50)	(n=45)	(n=42)
Agree	38	47	41	36	40	29
Neither agree nor disagree	36	33	37	40	44	50
Disagree	26	21	22	24	16	21
<i>I do not find it inconvenient to limit my smoking to certain times and places</i>	(n=81)	(n=58)	(n=49)	(n=50)	(n=45)	(n=43)
Agree	63	71	59	60	62	51
Neither agree nor disagree	15	17	27	28	27	33
Disagree	22	12	14	12	11	16

Due to rounding not all columns sum to 100.

These findings were reflected in the comments made by smokers during the qualitative interviews regarding the strategies they used to deal with bans, for example:

I'd either just go the whole night without having one or possibly go outside. It doesn't really faze me. If I'm enjoying good friends and company I don't need to have a smoke.

If I want to go and have a cigarette I just go outside. The only person that I'm harming out there is myself.

Yep, if I wanted it I'd just go outside or I'd just wait until I was going home.

I wait until I'm outside or going home because I'm quite fine with waiting.

The majority of smokers agreed with the final statement, 'I do not find it inconvenient to limit my smoking to certain times and places': 63% at baseline, 71% in August and, with some fluctuation over time, 51% during the final survey. There were no significant changes over time in smokers' levels of agreement with this statement. At baseline, 22% of smokers indicated that they did find it inconvenient to limit their smoking to certain times and places; this fluctuated over time and was 16% at the final survey. There was an increase over time in the proportion of smokers indicating that they were ambivalent about this statement: from 15% at baseline to 33% at the final survey. It should be noted that the phrasing of this statement, containing a double negative, was problematic to some respondents. The results, however, concur with those of the previous statement, in that they suggest that the majority of smokers are able to adapt to limitations and restrictions imposed upon their smoking behaviour in a way that is convenient to themselves.

Comments made by smokers during the qualitative interviews on limiting smoking to certain times and places supported these findings. For example:

I'm a smoker but ... I don't smoke inside, I don't smoke in the car. I sort of try and abide by everyone else's feelings about it too.

... just something you've got to deal with I suppose. I'm trying to give up so it's better.

Discussion

Agreement with the smokefree dining law increased significantly among both smokers and non-smokers from the baseline measure to August 2001, and remained high for the duration of the study. This suggests rapid adaptation to and acceptance of the restrictions among both smokers and non-smokers, and is supported by evidence from other jurisdictions, both interstate and internationally, regarding the introduction of smokefree dining. In South Australia, for instance, public support for smokefree restaurant legislation was observed to increase significantly over time, both before and after introduction of the laws (Miller et al. 2002). In New York City, the majority of consumers favoured a law banning smoking in restaurants following its introduction (Hyland & Cummings 1999).

A comparison of venue choice depending on probable smoking restriction showed there was little change in the type of venue selected by the sample over the period of data collection for either smokers or non-smokers. This reflects acceptance of the policy change, as results do not indicate that people have changed dining options to venues where smoking is possible.

There was no significant change over time among either smokers or non-smokers in the choice of dining venue based on the amount of tobacco smoke they would be exposed to or the extent of smoking restrictions at the venue. We might have expected, after the legislative amendments came into effect, a decrease in the proportion of people reporting they had avoided a dining venue due to too much tobacco smoke, because people going out to dine might assume that a dining venue would be smokefree. The lack of change could be attributed to the amendments being conditional and not applying to all dining venues, so people were not quite sure what to expect. (This depends on the type of licence held by venue as well as the location of dining, for instance, whether tables are located indoor or outdoor.)

Following the introduction of restrictions on smoking in dining areas, some might have expected to see an increase in the proportion of smokers reporting that they avoided a venue because it was smokefree. That is, adaptation to the new law might have been thought to cause smokers to seek out venues where they are allowed to smoke (for example, a venue with outdoor dining or a dining area that is not substantially enclosed, where smoking is still permitted). However, there was no significant change reported by smokers in this study. There was also little change for non-smokers. While we might expect that non-smokers would not avoid a smokefree venue, if they were dining in the company of smokers, they may choose a venue with a smoking area. That is, the behaviour of non-smokers may be influenced by the group with which they are dining, even if they select the venue (they may do so with the smokers in the group in mind).

Overall, the survey data indicate that the vast majority of patrons have dined out in a manner either positive for patronage or have not changed their dining behaviour at all since the introduction of smoking restrictions in dining venues. More than 95% of non-smokers reported at each survey that they are starting to dine out, or staying longer at dining venues, or have not changed their dining habits at all. This was also true for more than 69% of smokers. These figures repudiate the concerns of some restaurateurs and venue owners regarding the economic impact of restaurant bans, and is also supported by the lack of change in spending by either smokers or non-smokers on their last dining occasion over the period of the survey. This suggests no adverse

impact upon revenue for dining establishments following the introduction of smoking restrictions in such venues, and is consistent with the experience of other jurisdictions.

Overall, the number of smokers who reported violating a smoking ban was very low. This result indicates that compliance (and hence acceptance of the restrictions) is very high among smokers. This is to be expected, given the high level of agreement with the introduction of restrictions among Victorian smokers and non-smokers both before and after the legislative amendments came into effect (see Chapter 8). These results are consistent with reports from studies in other jurisdictions that have introduced smokefree hospitality policies. National and international research has found high levels of compliance with such policies (see, for example, Chapman, Borland & Lal 2001; Hyland, Cummings & Wilson 1999; Miller et al. 2002).

Responses to the series of statements about smokers' feelings about smoking behaviour and their reactions to limitations on such behaviour suggest that smokers have adapted their smoking in line with the changes to the legislation. This has not been associated with a concurrent increase in feeling persecuted or a sense of disapproval from other people. The experience of smokers, indicated by their responses to statements concerning their feelings of perceived disapproval or persecution, is consistent with the current climate in Victoria and Australia overall regarding increasing tobacco control regulations. These include restrictions on smoking in public places, increasing restrictions on advertising, and publicity surrounding legal cases concerning compensation pay-outs to those who have suffered from active or passive smoking-related illness. It is interesting to note that there was no increase in the proportion of smokers who felt disapproval towards their smoking in the nine months following the introduction of smoking restrictions in dining areas. It might be expected that increasing levels of smoking restrictions would result in heightened awareness by smokers of social intolerance. However, the fact that this was not demonstrated by the data suggests that smokers are accepting smoking restrictions in public places as an inevitable occurrence, and that non-smokers are not becoming increasingly intolerant of smoking. Such attitudes may be attributed in part to the many years of voluntary smoking restrictions in many Victorian restaurants.

This finding is reflected in the majority of smokers either disagreeing or having no strong view about being persecuted as smokers. This is consistent with observations that both acceptance of (Hocking et al. 1991) and preference for (Wakefield, Roberts & Owen 1996) smoking bans increases after smokefree policies in workplaces are implemented.

The introduction of regulations to ban smoking in dining areas in Victoria in 2001 provided an opportunity for a prospective study of its effects. The majority of Victorians approved of smokefree dining legislation before its implementation, and agreement with the law increased significantly among both smokers and non-smokers following the introduction of the policy, remaining at high levels for the duration of the study period. Consistent with evidence from other jurisdictions, there was rapid adaptation to and acceptance of smokefree dining among both smokers and non-smokers following the introduction of the law, as well as no change in dining patterns, dining frequency, restaurant choice or expenditure on a meal among either smoking or non-smoking patrons.

Acknowledgments

We would like to thank VicHealth for funding and supporting this project.

References

- Borland R, Owen N, Hill D & Chapman S 1990. Changes in acceptance of workplace smoking bans following their implementation. *Preventive Medicine* 19: 314–22.
- Borland R, Owen N & Hocking B 1991. Changes in smoking behaviour after a total workplace smoking ban. *Australian Journal of Public Health* 15(2): 130–4.
- Chapman S, Borland R & Lal A 2001. Has the ban on smoking in New South Wales restaurants worked? A comparison of restaurants in Sydney and Melbourne. *Medical Journal of Australia* 174(10): 512–5.
- Farrelly M, Evans W & Sfekas A 1999. The impact of workplace smoking bans: results from a national survey. *Tobacco Control* 8: 272–7.
- Glantz S & Charlesworth A 1999. Tourism and hotel revenues before and after passage of smoke-free restaurant ordinances. *Journal of the American Medical Association* 281: 1911–8.
- Hocking B, Borland R, Owen N & Kemp G 1991. A total ban on workplace smoking is acceptable and effective. *Journal of Occupational Medicine* 33(2): 163–7.
- Hyland A & Cummings K 1999. Consumer response to the New York City Smoke-Free Air Act. *Journal of Public Health Management and Practice* 5(1): 28–36.
- Hyland A, Cummings K & Nauenberg E 1999. Analysis of taxable sales receipts: was New York City's Smoke-Free Air Act bad for restaurant business? *Journal of Public Health Management and Practice* 5(1): 14–21.
- Hyland A, Cummings K & Wilson M 1999. Compliance with the New York City Smoke-Free Air Act. *Journal of Public Health Management and Practice* 5(1): 43–52.
- Miller C, Wakefield M, Kriven S & Hyland A 2002. Evaluation of smoke-free dining in South Australia: support and compliance among the community and restaurateurs. *Australian and New Zealand Journal of Public Health* 26(1): 38–44.
- Scollo M, Lal A, Hyland A & Glantz S in press (2002). A review of the quality of studies on the economic effects of smoke-free policies on the hospitality industry. *Tobacco Control*.
- Wakefield M, Roberts L & Owen N 1996. Trends in prevalence and acceptance of workplace smoking bans among indoor workers in South Australia. *Tobacco Control* 5(3): 205–8.
- Wakefield M, Siahpush M, Scollo M, Lal A, Hyland A, McCaul K & Miller C 2002. The effect of a smoke-free law on restaurant business in South Australia. *Australian and New Zealand Journal of Public Health* 26(4): 375–82.