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# Smoking environments in transition: the experiences of recent Chinese migrants to Canada

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#### What is known about this topic

- In China, more than half of men smoke, and smoking bans have limited scope and low effectiveness.
- In Canada, smoking is increasingly denormalised, and there is comprehensive protection against second-hand smoke in indoor environments.
- With acculturation, smoking prevalence among migrants trends towards levels prevailing in the local (host) population.

## What this paper adds

- Male and female Chinese migrants have different perceptions of the prevalence and social status of smoking in Canada.
- Chinese migrants recognise that effective and widespread smoking bans make smoking difficult to perform in Canada, but believe it is tolerated in permitted places.
- Non-smoking Chinese migrants rapidly acculturate to smoke-free environments, which they interpret as respectful.

#### Abstract

International migrants experience first-hand differences between countries in terms of the social meanings, spatial regulation and prevalence of smoking. This research centred on the smoking-related perceptions, experiences and behaviours of recent migrants from China to Canada. Eight focus groups were held in Edmonton, Alberta, in July-October 2013 to explore migrants' understandings of the practices and meanings of smoking in both countries. There were 58 participants (37 non-smokers and 21 smokers), most of whom were international students. Qualitative content analysis of focus group transcripts was undertaken to identify key themes. Participants observed that smoking remains almost ubiquitous in China due to ineffective spatial restrictions and the social importance of smoking among men. By contrast, smoking bans in Canada were perceived as effective due to widespread compliance and expectations of enforcement. They were conscious that male smoking was both less prevalent and less socially valued in Canada; conversely, female smoking was perceived as more accepted in Canada than in China. There was broad agreement that smoking was tolerated in Canada, provided it occurred in appropriate places. Complying with widespread spatial restrictions brought about changes in smokers' behaviours: they smoked less often, and consumed fewer cigarettes. Because smoking was more difficult to perform, participants thought the Canadian context supported quitting. Non-smokers were enthusiastic about smoke-free environments in Canada, and had become acculturated to air that did not smell of smoke. These findings affirm the importance of comprehensive smoking bans, backed by enforcement, in contributing to the denormalisation of smoking and the protection of non-smokers.

**Keywords:** Canada, China, migration, second-hand smoke, smoking, tobacco control

## Introduction

Smoking is a global health epidemic, but levels of exposure and risk are not equally distributed

between countries. In high-income countries (HICs), tobacco control policies are typically well-advanced, with most or all indoor workplaces and public places required to be smoke-free. By contrast, in low- and middle-income countries (LMICs), policy responses to the tobacco epidemic are often limited, and include few effective restrictions on where smoking can occur (WHO 2011, Eriksen *et al.* 2012). From a social perspective, smoking is increasingly stigmatised in HICs, which contributes to its declining prevalence and denormalisation, particularly among more privileged groups (Collins & Procter 2011, Pearce *et al.* 2012). However, in LMICs, it is often still regarded as normal and socially acceptable, especially for men (Abdullah *et al.* 2012, Ng *et al.* 2014). It follows that the global burden of disease associated with smoking, including via exposure to second-hand smoke (SHS), is shifting to LMICs (WHO 2009).

This research centres on the People's Republic of China and Canada, as examples of middle-income countries and HICs respectively. In China, 52.9% of men smoke (Li et al. 2011), due in part to a cultural belief that smoking is an appropriate and effective way for men to establish and maintain social and business connections (Mao et al. 2013). In addition, the custom of gifting cigarettes is strongly associated with masculine identities and practices (Hu et al. 2012). By contrast, there is low social approval of female smoking in China, and only 2.4% of women smoke, leading to an overall adult smoking prevalence of 28.1% (Li et al. 2011). China is a party to the WHO Framework Convention on Tobacco Control, Article 8 of which requires that all indoor workplaces and public places be made smoke-free. However, it has achieved only modest progress towards this goal. National guidelines updated in 2011 state that 28 types of public space should be smoke-free - but these rules lack formal legal status. In addition, the rules do not apply to most workplaces (China Ministry of Health 2011).

In contrast to the Chinese context, comprehensive bans on indoor smoking apply throughout Canada, and restrictions are extending to outdoor public spaces (Kaufman *et al.* 2010, Baillie *et al.* 2011). Other tobacco control policies that are well-advanced in Canada include high taxes on tobacco products, graphical health warnings on packets, and restrictions on advertising and point-of-sale display (Non-Smokers' Rights Association 2014). In addition, smoking is increasingly denormalised (Hammond *et al.* 2006) and stigmatised (Bell *et al.* 2010). Overall smoking prevalence among adults is 16.1%, including 18.4% of men and 13.9% of women (Health Canada 2013). This modest gender difference is broadly typical of HICs (Thun *et al.* 2012).

Chinese citizens are currently the second largest group of immigrants to Canada, with almost 65,000

admitted in 2012 (including 33,000 permanent residents and 25,000 international students) (Citizenship and Immigration Canada 2013). These migrants experience first-hand stark differences that exist between these two countries in terms of the sociocultural and policy environments around smoking. Their perceptions of - and responses to - these differences may be shaped by a variety of factors, including gender, smoking status and level of acculturation. In this context, acculturation refers to the extent to which individual migrants' values and behaviours shift from those that prevail in their country of origin, to those that are dominant in their destination country (Berry 1997). Predictors of acculturation include length of residence in the destination country, language ability and higher socioeconomic status (Barry 2001, Kuo & Roysircar 2004).

Acculturation to unhealthy norms in HICs (e.g. around diet) is often invoked to explain why migrants' health generally declines with length of time from settlement (Nolan 2012). However, this decline is also associated with non-behavioural factors, including low income and educational levels, and barriers to accessing healthcare (Bruce Newbold & Danforth 2003, Singh Setia et al. 2011). With regard to smoking, the effects of acculturation can be complex. For migrants from LMICs to HICs, it is associated with declines in smoking among men, but increases among women (Shelley et al. 2004, Maxwell et al. 2005, Tong et al. 2008). Thus, acculturation tends to diminish large gender differences in smoking prevalence among migrant groups; such convergence brings both male and female smoking rates closer to those prevailing in the local population. Widespread and effective smoking bans in HICs may mediate acculturation effects, in that they reduce smoking opportunities for everyone - including, e.g., less acculturated male migrants (Tong et al. 2008). Recent qualitative research in England found that male Bangladeshi smokers perceived that smoking bans reduced the social acceptability of smoking in public, to which they adjusted by reducing their consumption of cigarettes (Highet et al. 2011).

The purpose of this research was to consider how migrants experience the transition from China, where smoking is socially acceptable and relatively unregulated, to Canada, where smoking is increasingly denormalised and subject to widespread spatial restrictions. It had two objectives: (i) to document how Chinese migrants perceive and experience smoking-related environments in China and Canada; and (ii) to explore how Chinese migrants' smoking-related behaviours change after their arrival in Canada. It was also attentive to the ways in which migrants' perceptions, experiences and behaviours are influenced by gender and smoking status – factors that are enmeshed in the Chinese context.

## Methods

A qualitative descriptive approach was adopted to consider Chinese migrants' transition to the spatial rules and social norms around smoking in Canada. Qualitative description seeks to provide rich accounts of participants' opinions and experiences, as expressed in their own words, and often utilises focus groups (Neergaard et al. 2009). Focus groups are valuable for stimulating interactions among participants, including incremental discussions that may produce detailed accounts of shared experiences and beliefs (Stewart et al. 2007). Moreover, they have been used in diverse contexts to examine the social and experiential dimensions of smoking and tobacco control (Baillie et al. 2011, Highet et al. 2011, Hu et al. 2012). For this research, focus groups with migrants were conducted in Edmonton, Alberta (population: 835,000) in July-October 2013. Groups were stratified by participants' current smoking status so as to encourage open discussion, and facilitate comparison between smokers' and non-smokers' perspectives.

Those eligible to be involved in this study were adults (aged 18+ years) originally from China, currently living in Edmonton, and resident in Canada for less than 3 years. A 3-year cut-off has been used in previous research into the health of recent migrants (Rubalcava *et al.* 2008), and was adopted to ensure that participants were likely to be conscious of the differences between Canada and China regarding smoking and its regulation. In other words, we sought participants who were unlikely to be strongly acculturated to Canadian norms.

#### Procedures

Ethics approval for this study was obtained from the Research Ethics Board at the University of Alberta. Recruitment occurred via posters displayed on the researchers' home campus, at an immigrant service centre in Edmonton's Chinatown neighbourhood, and on two online platforms (Weibo/'Chinese Twitter' and a website for the Chinese community in Edmonton). Posters outlined the purpose of the study, eligibility requirements, contact details for the lead researcher and the incentive for participation (a \$20 gift card). This information was written in three languages – traditional Chinese, simplified Chinese and English. When potential participants made contact, they were asked to clarify their current smoking status (determined by whether or not they had smoked in the last 30 days), to enable the stratification of focus groups.

At the outset of each focus group, the lead researcher briefly reviewed the purpose of the study, explaining that participation was voluntary and confidential, and that conversations could occur in Mandarin, Cantonese and/or English. Participants were then asked to give informed written consent, and to complete a short questionnaire covering their demographic characteristics, smoking behaviours and immigration status. Discussions then took place, following a question guide organised into two broad sections, covering smoking bans and social norms around smoking respectively (see Table 1). The guide differed only slightly between groups, with participants in smoking groups asked additional questions about their behaviours. Questions were open-ended in character, and encouraged reflection on both China and Canada.

All focus group discussions were audio recorded and transcribed in Chinese (one participant chose to speak in Cantonese, and all others in Mandarin). The transcripts were then translated into English by the lead researcher. Qualitative content analysis (Forman & Damschroder 2008) was then undertaken. First, specific codes were identified on an inductive basis. Three transcripts were randomly selected for independent coding by the researchers, who then met to compare their findings, and collaboratively develop a single coding structure. This structure was

Table 1 Core questions in focus groups

Chinese approach?

Smoking bans	Social norms
Thinking about Canada, and Edmonton in particular, what are the main rules about smoking? How do these rules compare to those where you were from in China? Do smokers' behaviours change after coming to Canada from China? How do they feel about this? How do non-smokers feel? Do you agree with the existing smoking bans in Canada? Do you think most people comply with smoking bans in Canada? How about in China? Which approach to regulating smoking do you feel is better – the Canadian approach or the	How is the social acceptance and tolerance of smoking in China? What do local people in Edmonton think about smoking and smokers? How do they express their views? Do you agree with the social attitudes towards smoking in Edmonton? After coming to Canada, have your attitudes towards smoking changed? Is it hard to adjust to the social environment around smoking in Canada?

then applied to the coding of all transcripts. Second, codes were categorised according to which of the study's over-arching interests they addressed (perceptions, experiences or behaviours) and the geographical context under discussion (Canada or China). Third, key themes were identified in the categorised data.

## **Findings**

Eight focus groups were conducted: five with nonsmokers and three with smokers. Of the 59 individuals who had agreed to participate, 58 did so, including 27 females (3 of whom were smokers) and 31 males (18 of whom were smokers). This gender difference in smoking prevalence (11.1% of women vs. 58.1% of men) broadly paralleled that found in China. Of the 37 non-smokers, 5 reported previous smoking. The majority of participants (48, 82.7%) were international students (see Table 2). This was likely due in part to recruitment efforts on campus. In addition, international students are generally short-term migrants, and thus most would be eligible to participate by virtue of being in Canada for less than 3 years. By contrast, many permanent residents would not be eligible. The large proportion of international students contributed to the youthful profile of participants, with 37 (63.8%) aged 18-25 years, and only 2 (3.4%) aged over 40 years.

Three key themes were identified in participants' discussions of smoking-related norms and restrictions. The first centred on perceptions of differences between China and Edmonton in terms of the scope and effectiveness of smoking bans, the prevalence of smoking and its social meanings and status. The second concerned smokers' behaviours, and how these changed after moving to Canada. The third encompassed participants' emotional and sensory experiences. We examine each theme in turn below.

## Perceptions

Smoking bans, smoking prevalence and social acceptance To explore participants' perceptions of the scope and enforcement of smoking bans, they were first asked about where smoking is banned in both countries. With respect to the Chinese context, they noted that while bans were in place for various environments, they were ineffective due to widespread non-compliance:

[In China] there are a lot of no-smoking signs, but no one will comply with them. (Non-smoker, Male, FG2)

That smoking is not allowed in all public spaces has been claimed in China for years but this has never really come true. The rules have been active for years without comprehensive outcomes. (Non-smoker, Female, FG3)

By contrast, smoking bans in Canada were perceived as effective, in part because of expectations of social and regulatory enforcement:

Even if you see someone smoking in smoke-free spaces [in China], you do not have the rights to stop him. Here, smokers behave themselves in the first place. Additionally, if you see people breaking the rules, you dare to say. (Non-smoker, Female, FG3)

[In Canada] if you live in a smoke-free environment but you smoke, you will be fined, punished or even kicked out. This is never going to happen in China. (Smoker, Male, FG8)

Participants generally recognised that the overall smoking prevalence was lower in Canada than in China, and perceived that this contributed to a social environment that was less accepting of smoking:

I think non-smoking is normal here [in Canada]. Most people hate it. Yes, I think most people oppose smoking here. (Smoker, Male, FG4)

In China, smokers account for the larger group. At most times, non-smokers are those who will be isolated and criticised. Here, smokers are in a small group who are criticised. (Non-smoker, Male, FG5)

However, the idea that smokers were a small and isolated group in Canada was complicated by female smoking being more prevalent than in China. The higher visibility of female smoking in Canada was interpreted as evidence of social acceptance:

I feel that there are a lot of women who smoke here and the proportion is higher [than in China]. Sometimes, when I go to the supermarket and walk past a business building, I

 Table 2 Focus group participant characteristics

	Gender		Smoking s	status	Immigration sta	atus	
Number of participants	Female	Male	Smoker	Non-smoker	Student visa	Working visa	Permanent resident
58	27	31	21	37	48	3	7

see many women chatting and smoking, which looks like very fancy. (Non-smoker, Female, FG1)

In China, girls who smoke are considered bad kids with bad academic performance. Here, on my way to school, there are pretty girls smoking ladies' cigarettes in one hand with the other hand holding coffee, talking with each other. That's very beautiful and I'm thinking maybe sometimes I can try. (Non-smoker, Female, FG2)

After I came here, I was also shocked by the rates of girls' smoking. From this respect, smoking is more accepted and tolerated here. (Non-smoker, Female, FG3)

Smoking participants also emphasised that smoking was accepted as a legitimate personal choice in Canada, provided it was performed in permitted places. As such, those who complied with smoking bans did not experience intolerance or stigmatisation:

Even though I do not see anyone breaking the bans, I think the tolerance here is pretty high. If you want to smoke, just go to somewhere smoking is allowed. (Smoker, Male, FG2)

The rules here are strict; however, as long as you smoke in certain places, the tolerance is high. (Smoker, Female, FG6)

Do you want to say that smokers are 'heresy'? I do not feel that. I think it is a place respecting personal choice and freedom here. As long as I do not influence others, that is my own business. (Smoker, Male, FG8)

Reflecting further on issues of social acceptance, a number of participants perceived that smoking was common across the socioeconomic spectrum in China, while in Canada it was more strongly associated with lower status groups. For example, it was noted that in China, smoking was common 'from leaders and managers to ordinary staff' (Non-Smoker, Male, FG1) and that 'bosses in companies and even national leaders smoke when they are in a meeting' (Smoker, Male, FG4). By contrast, smoking in Canada was seen to be linked to lower socioeconomic status and counter-cultural styles:

Those with high SES really seldom smoke. Those smokers I have seen before were all dressed in a weird way and less educated. (Non-Smoker, Female, FG3)

I think educational level matters in the decisions on smoking. Students who smoke here [on campus] are mostly undergraduates and they dress like 'that kind of person'. (Non-Smoker, Male, FG7)

#### Smoking as social practice

Participants emphasised that the normality and acceptance of smoking in China was linked to its status as a valued social practice. Specifically, when men meet for business or social purposes, there are strong expectations that cigarettes will be exchanged, and that members of the group will smoke together. In this context, declining offers of cigarettes is considered impolite, and not smoking may compromise social inclusion. There was a widely shared view that smoking encouraged social closeness, which was highly valued (see Table 3).

By contrast, participants did not experience social pressures to smoke, or accept cigarettes, in Canada. Instead, smoking was framed as a matter of individual choice. This made both maintaining a non-smoking status, and quitting smoking, considerably easier:

Here nobody will push you [to smoke] and they are straightforward ... you can just speak out yes or no. (Non-smoker, Male, FG5)

If [someone] wants to quit smoking in China and others offer him cigarettes, he will not turn them down; if he is

Table 3 Perceptions	s of social value of	smoking in China
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Cigarettes as gifts	Social inclusion and smoking	Social pressure on non-smokers
Even though there is no one in your family smoking, people still give you cigarettes as gifts. Because cigarettes have been labelled as gifts. (Smoker, Female, FG4)	During the short break for a cigarette, people can talk with each other. Additionally, in China, it is relationship first then law If everyone agrees smoking is beneficial for their relationships with each other, then law could do nothing. (Non-smoker, Male, FG5)	Sometimes maybe you do not even like smoking or you hate smoking strongly, but if you do not smoke, you will feel so hard to get involved in this circle. Gradually you will be chased out of the circle and there will be a lot of harms if you are an outsider. (Smoker, Male, FG4)
In China, the cigarette is a tool for socialising and showing your kindness When you get together with your friends and classmates, offering others cigarettes makes you look polite. (Smoker, Male, FG4)	Smoking influences whether you can get close to others or not For example, if 10 people hang out together and 3 of them need to go outside for smoking, they will talk about some deeper and closer topics. That is quite normal and it is the truth. (Smoker, Male, FG8)	If people offer you cigarettes and you do not take it, the distance between you and them will be extended. If you take it, you two get closer. If you don't, people will say like 'Look at him! He is so good at pretending!' (Non-smoker, Male, FG6)

here, there is no one offering cigarettes to him, he will quit naturally. There is no one pushing you to smoke here, while there are indeed a lot of people forcing you to smoke in China. (Non-smoker, Female, FG3)

#### Mutual respect

For non-smoking participants, moving to Canada offered respite from both regular SHS exposure in public places, and the social pressure to smoke in China. They appreciated that non-smokers were respected in Canada, and that smokers generally complied with smoking bans. As such, they perceived that the interests of non-smokers and smokers were appropriately balanced in Canada:

In Canada, I feel respected; while in China, I feel ignored. (Non-smoker, Female, FG3)

The environment here is more comfortable for me. Smokers and non-smokers respect each other ... In China, I always think that I am the side being bullied. I have to tolerate smoking time and time again. Here I feel I am respected. (Non-smoker, Female, FG3)

There are rules here protecting the rights of non-smokers, which keep the harmony between non-smokers and smokers. In China, non-smokers are imposed upon to take second-hand smoke. (Non-smoker, Male, FG7)

Smokers held more ambivalent views on the restrictions on smoking in Canada. They agreed that smoking bans protected non-smokers, while reducing opportunities to smoke:

I think smoking rules here are good for non-smokers. However, for smokers, it'll be inconvenient. Smoking is not allowed in many places and their freedom to smoke may be influenced. If you break the rules here, there will be problems. (Smoker, Male, FG7)

- Male 1: I think smoking bans here respect those non-smokers and they are not bad and protect the health of most people.
- Male 2: Also, they protect myself. These bans make me smoke less, because you know, you cannot smoke indoors. (Smokers, FG8)

## **Behaviours**

## Changes in smoking sites

Participants were very aware that while smoking was almost ubiquitous in China, it was stringently restricted in Canada. This necessitated changes in the behaviours of smoking participants:

After I came here, the most impressive thing is that smoking is not allowed in restaurants. When I was in China, I got used to eating and smoking in the restaurants. (Smoker, Male, FG4)

Smoking is not allowed in bars and you have to go out if you want to smoke. You can smoke at home as long as your roommate does not complain or you two smoke together. (Smoker, Female, FG6)

You have to go to certain places if you want to smoke. You cannot smoke wherever you want, which makes smoking more complicated. (Smoker, Male, FG4)

Canada was distinguished from China not only by the extent of smoking bans but also by widespread compliance. Participants emphasised that smokers almost always adhered to spatial restrictions in Canada. Moreover, they were aware of the possibility of non-compliant behaviour being met with enforcement. Several participants who were post-secondary students noted the consequences of illicit smoking inside residence buildings:

I have two friends who used to smoke inside the residence with the windows open; however, there was one day that it was so cold that they had to keep their windows closed. Later on ... there were many policemen knocking at the door ... After this case, they did not dare to smoke indoors anymore. (Non-smoker, Male, FG1)

I used to smoke in the hallway of my apartment on campus. Once two Residence Assistants were hiding somewhere and witnessing me smoking and then caught me on the scene. I was almost kicked out due to that incident. (Smoker, Male, FG8)

#### Reducing and quitting smoking

As a consequence of effective spatial restrictions, smokers' behaviours changed after they moved to Canada, in that they smoked less often, and consumed fewer cigarettes. Several other factors also contributed to these changes, including the lower social value of smoking, higher tobacco prices and prolonged cold weather during Edmonton winters. Because smoking was more difficult to perform, participants thought the Canadian context supported quitting – and two had quit since arriving. Table 4 illustrates the range of comments made on these topics.

Sustaining smoking in the Chinese immigrant community Smoking participants emphasised their preferences for Chinese cigarettes, and their general dislike of Canadian brands for reasons of higher cost and inferior taste and smell. Several indicated that they would rather quit smoking than buy Canadian cigarettes. However, this was not necessary due to supplies of cigarettes from China that helped to sustain smoking behaviours within the immigrant community. These supplies depended on visitors and migrants from China bringing cigarettes into Canada Table 4 Changing smoking behaviours in Canada

Reducing smoking	Quitting smoking
<ul> <li>There will be definitely less [smoking] than before In the winter, only when I am extremely eager to smoke, I go outside. You cannot make it to smoke whenever you want, for it is too cold in the winter. (Smoker, Male, FG4)</li> <li>It is too cold for too long in the winter. You will not want to go outside. Gradually you will smoke less. (Smoker, Male, FG4)</li> <li>I smoke less after I came here. There were people offering cigarettes to others when you hang out in China, but people do not do that here. (Smoker, Female, FG5)</li> </ul>	Less than 1 month after I arrived here, I quit smoking, since I lived in a smoke-free apartment and every time I wanted to smoke, I had to go outside. It was inconvenient. (Non-smoker, Male, FG1) Because there are so many places here where smoking is not allowed, and the price of cigarettes here is very expensive, like \$8 for one pack, I gradually quit. (Non-smoker, Female, FG1) Now I have got used to it that when I eat meals I cannot smoke. However, I do not see the necessity of quitting as well. (Smoker, Male, FG8)

– for their own use, for use as gifts for friends and associates, or to supply a local market for re-sale:

[When moving to Canada], the guy who picked me up at Toronto airport ... asked me to bring one carton of cigarettes for him. I also asked him why he did not buy cigarettes here, he said the price was really high. (Non-smoker, Female, FG5)

- Male 3: There are Chinese cigarettes for sale on [Chinese community website].
- Male 1: Yes, people doing this business have friends bringing them cigarettes from China.
- Male 2: When there are [customs] rules, people develop strategies to avoid them. I have a friend who brings 10 cartons each time.
- Male 3: ...for now, the supply of Chinese cigarettes here is running well. If I want to buy some Chinese cigarettes, I know where to get them. (FG8, Smokers)

#### Emotional and sensory experiences

#### Differences in everyday environments

Non-smoking participants emphasised stark differences in their experiences – and enjoyment – of everyday environments. Many recounted negative emotional experiences in China due to smoking remaining largely unrestricted in practice. By contrast, smoking bans in Canada were widespread and effective, which greatly increased their sense of comfort. Several smokers stated that they also appreciated smoke-free public places in Canada. However, other smokers indicated that stricter restrictions on smoking were a source of frustration (see Table 5).

Adding to non-smokers' frustrations in China was their limited ability to contest exposure to SHS, even in settings where smoking bans were supposed to be in effect:

- Male 1: Sometimes you just feel so hard that you want to speak out [about smoking].
- Female 1: Yes, but it will be embarrassing to stop others smoking.
- Female 2: You just feel suppressed and angry but you do not dare to speak out. (Non-smokers, FG2)

The environment in China is a little bit dangerous. As a girl, at most times you do not dare to challenge others alone. I don't think most people will challenge others in China, including challenging their friends. (Non-smoker, Female, FG3)

#### SHS exposure and smell

Many non-smokers reported that after some time in Canada, they became acculturated to smoke-free environments. This change often became apparent during return visits to China, when they were aware of – and disturbed by – exposure to SHS:

I did not take smoking seriously and was not that sensitive to cigarettes when I was in China ... Yet when I went back to China from here, I found smoking really annoying. (Non-smoker, Female, FG1)

My tolerance for smoking decreased after I came to Canada ... Maybe it is due to the better air quality here that when I came back to China, I could easily smell cigarettes. (Non-smoker, Female, FG2)

After living here for a while, I became very sensitive to the smells of cigarettes, which got more and more unbearable for me ... My tolerance for smoking is decreasing. (Non-smoker, Female, FG3)

## Discussion

Participants in this study highlighted stark differences between China and Canada in terms of the meanings and practices of smoking. With regard to the Chinese Table 5 Emotional experiences of everyday environments

Non-smokers	Smokers
In China I strongly hate people smoking on trains. It is miserable for us non-smokers. However, the smokers will be enjoying it and I will be outraged. (Non-smoker, Female, FG3) When I was in China, my husband and I worked in a university. In my department, 90% of male teachers were smokers. At weekly meetings, smokers smoked with non-smoking female teachers presentthe smell of cigarettes was always around the room. I was really miserable at that time and my husband and I often had a fight on this issue. (Non-smoker, Female, FG3)	<ul> <li>In China, people got together in closed rooms and smoked, which was very miserable. (Smoker, Male, FG4)</li> <li>I know the environment here will be better for me. But emotionally, I am more comfortable and free in China. (Smoker, Male, FG4)</li> <li>You know, [in China] we were innocent victims exposed to second-hand smoke. (Smoker, Male, FG8)</li> </ul>
In Canada It is like heaven here. In China you can smell cigarettes everywhere. (Non-smoker, Female, FG2) It is more comfortable here, definitely while in China there is nowhere for you to escape to. I have got accustomed to rules here and it'll be hard for me to adjust back in China. (Non-smoker, Female, FG3)	I think it is better here Here I can hardly smell cigarettes, which is good. (Smoker, Male, FG4) I hope smoking will be allowed indoors in the winter, such as on the stairs. Then we will feel better in winter. (Smoker, Male, FG4) If I want to smoke at this moment and I happen to be in a place where smoking is not allowed, I will be very irritated. (Smoker, Male, FG4)

context, they emphasised that smoking is very much ingrained in everyday life, and continues to occur in many indoor workplaces and public places. The nearubiquity of smoking (and consequent SHS exposure) was attributed to two related factors: ineffective spatial restrictions and the social importance of smoking among men.

While smoking bans exist for many public places in China, participants explained that these are routinely disregarded without consequences: authorities do not respond to non-compliance, while non-smokers do not 'dare' to attempt informal enforcement. Smoking role models (e.g. 'bosses' and 'leaders') contribute to the normality of this situation. Moreover, the social value of smoking to men (see Mao *et al.* 2013) encourages them to disregard smoke-free rules. This situation is in stark contrast to the *social cost* often attached to smoking in HICs, especially in relatively privileged contexts (Stuber *et al.* 2008, Pearce *et al.* 2012). It is also markedly different from the context for *female* smoking in China – which is both uncommon and stigmatised.

Participants' perceptions of the social status and prevalence of smoking in Canada were varied. Male participants were conscious that smokers are a minority in Canada, and can be subject to criticism. By contrast, female participants emphasised that they often see women smoking and socialising together in outdoor areas in Edmonton – a visibility they interpreted as 'acceptance'. These opposing perspectives indicate the value of understanding acculturation in gendered

ways: smoking in HICs may appear to be denormalised to male migrants from LMICs, but commonplace to their female counterparts. Such contrasts likely contribute to the tendency for gender differences in migrants' smoking prevalence to decline with length of residence in HICs (see Tong *et al.* 2008).

These differences aside, participants were in broad agreement that smoking was accepted and tolerated in Canada, *provided* it occurred in appropriate places. Smoking participants did not report feeling stigmatised, which they attributed to their (general) compliance with rules around where smoking could occur. While compliance could be 'annoying', particularly during winter, it ensured tolerance for smoking as a 'personal choice'. Non-smoking participants made a similar point, contending that effective smoking bans in Canada create a situation of 'respect' and 'harmony' between themselves and smokers.

The notion that smoking is socially acceptable as long as spatial rules are followed could be interpreted as reflecting participants' low awareness of the stigmatisation of smoking in HICs, and thus limited acculturation. Put another way, it may indicate the enduring influence of pro-tobacco beliefs and attitudes formed in China (see Ma *et al.* 2010). Conversely, it may be interpreted as consistent with understandings of 'considerate smoking' in HICs – defined as smoking that does not adversely affect non-smokers (Tan 2013). Moreover, framing smoking as a 'personal choice' is in one sense a clear departure from the Chinese context, where it can be a *social expectation* for men (Mao *et al.* 2013). Both smoking and non-smoking participants appreciated that in the Canadian environment, they are not constantly offered cigarettes, and men can choose *not* to smoke without adverse consequences. This finding underlines the importance of emerging efforts to challenge the practice of gifting cigarettes in China (see Ding & Hovell 2012). Culturally specific campaigns targeting this practice, and more general beliefs about the social value of smoking, may also be appropriate in HICs that receive substantial numbers of Chinese migrants.

Participants' transition to living in Canada entailed important changes in smoking behaviours. Smokers emphasised that smoking bans with comprehensive spatial coverage - backed by widespread compliance and potential enforcement - restricted smoking opportunities. This made smoking inconvenient and, consistent with previous studies (e.g. Fichtenberg & Glantz 2002), necessitated reductions in consumption. This effect, combined with other contextual changes (e.g. fewer smoking partners, less gifting of cigarettes and higher prices for tobacco products), had encouraged two participants to quit. This effect would likely have been stronger but for the local availability of Chinese brands of cigarettes, which were preferred by many smoking participants. Comments on this availability suggest that specific measures be required in Canada to target the illicit importation of cigarettes from China (where they are available at much lower cost).

The strongest evidence of acculturation in the focus group discussions came in non-smokers' enthusiastic acceptance of smoke-free environments in Canada. They welcomed the normality of non-smoking in public places, which stood in stark contrast to China – where there was 'nowhere ... to escape' from smoke. In particular, they appreciated not constantly *smelling* smoke – a point that serves to underscore the importance of olfactory experience in debates over the place of smoking in society (Tan 2013). Non-smokers were conscious that they had become accustomed to this 'respectful' environment, particularly when (re)exposed to SHS during return visits to China.

Our study enabled rich and detailed discussion of the perceptions and experiences of recent Chinese migrants to Canada. All participants were current residents of Edmonton, Alberta – and their knowledge of the Canadian context may have been limited, at least in part, to that city. However, smoking restrictions in Edmonton are broadly typical of those in effect elsewhere in Canada, and as such the findings reported here should be transferable to other Canadian centres. International comparisons may also be valid, in that Canada is one of a group of HICs in which smoking (and SHS exposure) is increasingly denormalised and spatially restricted.

Students made up a high proportion of our participants, and in some respects their experiences differ from those of other migrants as was clear in our data (e.g. accounts of living in smoke-free university residences). Difficulty in recruiting a representative 'mix' of recent migrants was a limitation of this study. This said, post-secondary students are an important group in the tobacco control context, given challenges around smoking initiation and relatively high smoking prevalence, as well as targeting by the tobacco industry (Hammond *et al.* 2005). Moreover, future research could examine whether those students who return to China are willing and/or able to advocate for more effective tobacco control policies after living in a HIC.

This study affirms that smoking bans, when enforced, are effective in eliminating SHS exposure, reducing smoking frequency and encouraging quitting (see Procter-Scherdtel & Collins 2013). Although in China, 'smoke-free rules are merely for display', in Canada, enforcement is expected (and occasionally experienced), which ensures that compliance is the norm. Transitioning to the Canadian context brought about rapid changes in the smoking behaviours of recent Chinese migrants, which did not appear to depend on individuals' level of acculturation. This said, acculturation to smoke-free air also occurs, particularly among non-smoking migrants, for whom it comes to be valued as an indicator of 'respect' and a key to more positive and healthful lives.

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#### **Conflict of interest**

None.

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