Risk perception and moralization among smokers in the USA and Denmark: A qualitative approach

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Objectives. The present research explored the role that culture plays in smokers' description of their risk perceptions and experiences as targets of moralization.

Methods. We conducted in-depth qualitative interviews with 15 smokers each from Denmark (a smoking-lenient culture) and the USA (a smoking-prohibitive culture).

Results. Smokers said they were well aware of the risks of smoking yet minimized the risks of active and passive smoking; Danes were particularly likely to minimize these risks. Smokers also described many experiences as targets of moralization and accepted some elements of moralized attitudes although overall Danes more strongly rejected moralized opinions. Smokers described adjusting to moralization by changing when and where but not how much they smoked.

Conclusion. It is important to consider cultural influences on moralization and risk perception of smoking.

Because risk perception is one important precursor to behaviour change (e.g., Weinstein, 2000), considerable research has focused on the extent to which smokers realistically perceive the risks they take (e.g., Romer & Jamieson, 2001). Smokers do acknowledge some risks; smokers for example typically think that their own risk of contracting smoking-related illnesses is greater than that of non-smokers (e.g., McKenna, Warburton, & Winwood, 1993; Strecher, Kreuter, & Kobrin, 1995). However, smokers perceive these risks to be less serious than non-smokers perceive them to be (e.g., Slovic, 2001; Weinstein, Marcus, & Moser, 2005). Smokers also tend to think they are personally less at risk than smokers in general (e.g., Lee, 1989) and think that their brand of tobacco is less dangerous and has less tar than the brands of other smokers (Segerstrom, McCarthy, Caskey, Gross, & Jarvik, 1993). Thus, smokers are not completely insensitive to the risks that they undertake by smoking. Still, smokers engage in a consistent pattern of risk minimization which leads them to conclude that although smoking is not exactly good for their health, it is also not that bad.

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Although we know much about the risk beliefs of smokers, we know little about how people come to believe that they are personally at risk and what role cultural messages play. One important cultural factor is *moralization*, which is the individual and cultural process by which preferences are converted into values (Rozin, 1997). Simply put, a behaviour is moralized when it is considered a moral act and inherently bad as opposed to just a personal choice or preference. Moralization is important because *values* as opposed to *preferences* are more durable, more central to the self, and more internalized (Rozin, 1997). Values also invoke more intense emotional reactions, including disgust (Rozin, 1997). Furthermore, values are more likely to receive institutional and legal support and more likely to be transmitted from parents to children (Rozin, Markwith, & Stoess, 1997). Of note, once a behaviour such as smoking has become moralized the behaviour is viewed as a moral transgression and the smoker as morally reprehensible. The perceived violation of a moral code is similar to, yet distinct from, social norms (e.g., social denormalization of smokers) which refer to views of smoking more broadly as an abnormal and undesirable practice without referring to the moral nature of the behaviour (e.g., Hammond, Fong, Zanna, Thrasher, & Borland, 2006).

Many behaviours can move from a neutral state of individual choice to a state of moralized entity (see discussion of moralized behaviours across time and cultures in Brandt & Rozin, 1997) and cigarette smoking is one behaviour which has become highly moralized in the USA in the last 30–40 years (Brandt, 1998; Rozin & Singh, 1999). In addition to stigma and moral disapproval, moralized behaviours often involve perceived harm to oneself (e.g., drug use is morally wrong in part because it harms the user) as well as innocent victims. Causing harm to oneself might be seen as immoral but could be acceptable in an individualistic society. However, causing harm to others is typically viewed as immoral and gives license to override individual rights in the interest of preventing bystanders from becoming victims. The identification of innocent victims also heightens the interest of the State in controlling behaviours that were previously seen as outside its purview and 'unleashes moral fervour for redress and justice' (Brandt, 1998, p. 172). Thus, perception of harm to others provides a basis for moralized action.

Perceptions of harm to others might also increase as a given behaviour becomes moralized. Societies that value autonomy and individualism, such as the USA and Denmark, will not easily thwart individual choices, even if those choices are health-related. Therefore, significant justification is typically required for prohibitions and limitations of smoking rights. One justification is that smoking harms not only smokers but also non-smokers. So although individuals might express contempt or disgust for smoking and smokers, individuals as well as societal institutions are more comfortable relying on epidemiological data about health risks to non-smokers to support smoking restrictions and stigmatization of smokers (see Katz, 1997, for a discussion of secular morality). Thus, perceptions of smoking danger (to the smoker and to others) support moralized action and moralized action in turn promotes further public discourse about the dangers of smoking (via health promotion campaigns, anti-smoking efforts in schools, public smoking prohibitions, funding for smoking research, etc.). One would expect that greater moralization is associated with greater perception of risk (to the smoker and non-smoker) in a given culture and conversely that less moralization is associated with greater scepticism and rejection of the risks of the moralized entity. The link between smoking moralization and risk perception has not previously been examined.

To further explore the effects of culture, it is useful to compare cultures that differ in smoking attitudes. Historically, USA cultural values have emphasized independence, autonomy, and the right to take risks if one so pleases. Prior to the 1970s, cigarette smoking was considered an acceptable voluntary health risk (Brandt, 1998). This perspective changed fundamentally when the health risks of passive smoking were laid out in a series of Surgeon General's reports in the 1980s and 1990s. Despite the relatively weak data supporting the dangers of second-hand smoke, these reports created an effective anti-cigarette movement based on the premise that no one has the right to impose health risks on others (Brandt, 1998). In Denmark, cigarette smoking has also historically been viewed as a private matter, but one that is best controlled by limiting active smoking (for example, via high tobacco taxes and restrictions on tobacco advertising) as opposed to limiting passive smoking (for example, via restrictions on public smoking) (see Albæk, 2004, for a review). Denmark has been slow to adopt smoking bans compared to other European countries (Joossens & Raw, 2006). In August 2007, a Danish national smoking law banned smoking in public settings such as bars, restaurants, schools, work settings, and other public places. However, smoking rooms are still allowed in these settings, and bars smaller than $40\,\mathrm{m}^2$ are exempt (Danish Cancer Society, 2009a). Smoking prevalence is somewhat greater in Denmark than in the USA; in 2008 28% of adult Danes (Danish Cancer Society, 2009b) and 21% of adult Americans smoked (Centers for Disease Control and Prevention, 2009).

The difference in attitudes towards smoking in the USA and Denmark was shown in a survey study of young adults (Helweg-Larsen & Nielsen, 2009). In contrast to American smokers, Danish smokers did not perceive that their personal lung cancer risk was increased the more cigarettes they smoked. Furthermore, Danes believed to a greater extent than Americans that smoking is a private matter (an attitude contradictory to a moralized view of smoking), that doctors exaggerate the dangers of smoking, and that smoking does not make others uncomfortable. In sum, the cross-cultural differences showed that Danish smokers, compared to American smokers, were more likely to minimize their personal risks of smoking and held less moralized attitudes towards smoking. These results described data collected over 10 years ago (prior to the proliferation of smoking restrictions) and concerned only young adults. Furthermore, although a survey study can capture many useful aspects of people's attitudes, a qualitative interview study affords people the opportunity to fully describe their attitudes and how they conceptualize and make sense of their smoking behaviour.

In this qualitative interview study, we examined Danish and American smokers' descriptions of (a) perceived risk of smoking (risk to self and others) and risk minimization, (b) moralization and reactions to being the targets of moralization, and (c) descriptions of risk-reducing behaviours, including limiting smoking around certain people or situations. We were interested in how participants experienced and discussed these elements and how participants found them to be related.

Method

Participants

From each country, 15 smokers participated. Requirements for participation included being 18 years of age or older, being a native of the country, smoking everyday and considering oneself a smoker, having smoked cigarettes for the last 2 years or longer, and having no personal cancer history. The interviews were conducted during Spring

and Summer 2008. Participants were recruited by various methods including personal contact, snowball sampling, word of mouth in various workplaces, and through newspaper advertising. Because of this sampling strategy, we do not know how many participants might have received the information but declined to participate.

All participants began smoking in their teens and currently smoked 6–30 cigarettes per day (USA: $M = 14.89$, $SD = 6.78$; DK: $M = 14.93$, $SD = 6.25$). The gender composition was similar (USA: 5 men, 10 women; DK: 6 men, 9 women) and all participants were Caucasian. Participants held a variety of occupations such as (for the USA sample) college students, social worker, medical billing agent, police officer, waitress, and IT worker and (for the Danish sample) graphic designer, receptionist, journalist, social worker, product manager, bookkeeper, and engineer. There were more college students in the USA sample (4 vs. none in the Danish sample). Not surprisingly the American sample ($M = 32.07$, $SD = 14.23$, range 18–62) was on average somewhat younger than the Danish sample ($M = 49.27$, $SD = 10.24$, range 39–57), $t(28) = -3.80$, $p = .001$. Below 'Danish/Denmark' and 'American/USA' are used as shorthand for the location of the two samples and do not imply generalizability to all Danes and Americans.

Interview schedule

The interviews lasted 45–60 min and followed a semi-structured format with open-ended questions that allowed the interviewers to explore the topics in necessary depth. No strict question order was followed so as to allow for a more naturally flowing discussion, which covered all the questions in the interview schedule. Particular care was taken to establish rapport with the participants while avoiding judgmental or moralizing reactions that might affect the quality of the participants' responses. All three authors conducted interviews (individually) and the interviews were reviewed along the way to make sure interviewers did not differ in their interview approach or practices. The questions included in the interview schedule examined participants' general thoughts on moralization, risk perception, and smoking behaviours. Moralization was investigated by asking participants how society today views smoking, how such views have changed over time, what it feels like to be a smoker in today's society, and what personal experiences they have had with negative and positive attitudes towards smoking. They were also asked about the source of the moralizing messages (such as family, friends, physicians, employers, or the media). Risk perceptions included both health-related risks for themselves (e.g., 'Do you think it is dangerous for you to smoke?'), for the typical smoker, and for non-smokers (probing for rules regarding smoking near children in particular). Participants were also asked to mention any health-related benefits or costs as well as social benefits or costs they experienced from smoking. Similar questions were asked about the costs and benefits that the *typical smoker* experiences. Finally, questions were asked regarding current smoking behaviour ('How much and where do you smoke?', 'How long have you been smoking?'), current interest in quitting, the places and situations in which participants avoided smoking or had reduced their smoking, and demographic information.

Procedure

Interviews were conducted in the participant's native language. Participants were interviewed in a private and quiet space such as the participant's home or an office or other space set aside for interviewing. Participants received incentives of the same

appropriate worth (USA: $20 gift card; DK: 100 DKK gift card and a USB flash drive). Upon arrival, the interviewer went over the informed consent form, and answered any questions before the participants signed the informed consent form. Once the interview was finished, the interviewer debriefed the participant and provided a debriefing sheet which contained the principal investigator's contact information and information about smoking cessation resources.

All interviews were audio recorded. USA interviews were transcribed aided by Dragon Naturally Speaking speech recognition software and then manually checked for accuracy. Danish interviews were first transcribed by a professional transcription service, and then translated by the first author, a native Danish speaker. All interviews were coded using MaxQDA, a qualitative data analysis software package that assists in storing, organizing, and managing interview data.

Coding and analysis followed thematic analysis methodology as outlined by Braun and Clarke (2006). Thematic analysis is a flexible, qualitative analytic method frequently used in psychology. The analysis used an essentialist/realistic epistemology, in which it is assumed that there is a straightforward relationship between language and meaning/experience and that participants can articulate their experiences in meaningful ways. The inductive process of identifying the codes and themes was partly formed by the interview questions, which were based on the existing literature. As recommend by Braun and Clark, we undertook six phases of analysis. Briefly, we first familiarized ourselves with the data by translating and transcribing the interviews and then reading and rereading them. We noted initial ideas and thoughts. In the second step, we generated initial codes pertaining to topics such as disapproval, stigma, sources of risk information, sources of disapproval, health effects of smoking, etc. Each code was described (in a brief memo) so that we were able to consistently code excerpts that addressed the same issue. As we coded each interview, these initial codes were continually formed and changed based on joint discussions in laboratory meetings. In addition, individual cases were compared and contrasted, and unusual cases were examined. The third step involved searching for themes and combining the codes into potential themes, such as moralization, conceptualization of risks, and health concerns about smoking. During the fourth step, these themes were reviewed by examining all the codes and themes collectively. In the fifth step, the themes were further defined and named. In the last step, the most compelling extracts from the interviews were used to describe the themes and how these themes were related to the research questions as well as the existing literature. Given the descriptive nature and the small samples we report general trends with words such as *most*, *many*, *several*, or *few* as opposed to possibly misleading exact numbers.

Results

Risk perception

Based on the interview responses and prior research, risk perception responses were divided into several categories, including smokers' perception of personal risk (and minimization of their personal risk), risk to the typical smoker, and risk to non-smokers.

Personal risk

Participants generally acknowledged the personal dangers of smoking. One participant said, 'I know that I am harming my health by smoking and I have never considered

myself unintelligent. So I know that if I am harming my health then that has consequences … ' (Danish participant 3, male, age 40). While Danes tended to vaguely acknowledge the health risks of their smoking, Americans tended to express concern about very specific dangers of smoking and easily and quickly recalled numerous illnesses related to smoking. For example, after being asked about the health dangers of his own smoking, one Danish smoker responded, 'If you draw attention to something like smoking, then I know that it is associated with a certain risk … and it can cause certain illnesses' (Danish participant 2, male, age 39). In contrast, American smokers were much more explicit in their descriptions of personal risk. One American participant speaking about the dangers of smoking said, 'It's bad for your health, you're going to have another heart attack, [it's] bad for your lungs, [and] you're going to get cancer' (American participant 13, male, age 56). Many Americans mentioned multiple specific health risks related to smoking, such as emphysema, cancer, and heart disease.

Risk minimization

Although smokers acknowledged that smoking was dangerous, they simultaneously minimized that risk. In both countries, comments emerged that were similar to those discussed by Oakes, Chapman, Borland, Balmford, and Trotter (2004); thus we use their terms here for the first four categories: 'sceptic' beliefs (being sceptical about public health information related to smoking), 'bulletproof' beliefs (thinking that one is exempt from the negative consequences), 'worth it' beliefs (thinking that overall smoking is worth it), 'jungle' beliefs (arguing that it is a dangerous world and anything can happen), and 'risk delay' beliefs (beliefs that harm will occur at a later time). As described below, cross-cultural differences were very apparent in the three first categories in which Danes were much more likely than Americans to be sceptical about the harms of smoking, think that they were personally invulnerable to the risks of smoking, and think that it was worth it to smoke.

Risk minimization that fell into the first category, 'sceptic' beliefs, generally involved a belief that public information about the health risks of smoking is not accurate or not true. For example, one participant said when referring to public warnings about the dangers of smoking: 'They are saying that the smoking is going to cause me to have another heart attack. Do I believe it? No' (American participant 14, female, age 62). When asked if she was concerned about the health risks of smoking, another participant explained, 'But I think about it like this: yes yes yes yes I know it is dangerous but it can't be *that* dangerous' (Danish participant 11, female, age 67). The second type of risk minimization, 'bulletproof' beliefs, referred to the belief among smokers that some other factor made them personally less vulnerable to the dangers of smoking than other smokers. A smoker in the Danish sample explained that despite the risks of smoking, 'I still think that if I eat a healthy and varied diet and I exercise, then I think that that is more important than it is to quit smoking' (Danish participant 13, female, age 41). Another smoker believed that her positive attitudes made her less vulnerable to the health risks of smoking: 'I am of the opinion that if you enjoy [smoking] and accept it then it probably harms your health differently than if you smoke with a guilty conscience' (Danish participant 6, female, age 59). A third category of risk minimization was 'worth it' beliefs, which involved the attitude that although smoking leads to health problems, the benefits of smoking make it worth the risks.

The fourth category, 'jungle' beliefs (e.g., 'it is a jungle out there'), included beliefs that life is dangerous in many ways and smoking is only one such danger. As one Danish smoker put it, 'I know someone who smoked for 3 years and died of it. I know a passive smoker who died of it. I can go down the street now and get run over. Life is one big risk' (Danish participant 9, female, age 57). Finally, participants described 'risk delay' beliefs. Several smokers mentioned the health risks of smoking as being a concern in the future, but not something to be worried about at present. One smoker described her belief that,

> There's a lot of bad things that could come from [smoking], but it's something that will happen gradually and that's something I see if, if it does happen from that it will happen in the future or in the long-term. It's not something that can impact me right away and maybe that's why … why I don't care as much about it right now (American participant 3, female, 22 years).

Smokers who exhibited this 'risk delay' belief said that they were aware of the health risks of their behaviours, but ignored them for now because they were only likely to occur at a later time (at which time they might be motivated to quit).

Risk to the typical smoker

Most Danes and Americans acknowledged risk to the average smoker. According to one participant, ' … generally speaking it is just bad for you to smoke. Everyone knows that' (Danish participant 1, male, age 47). Similarly to personal risk perception, Danes gave only vague answers to questions regarding risk to the typical smoker. Danes also said that one needed to smoke a large amount of cigarettes over a long period of time before negative health effects were likely to occur. One Danish participant was asked if he thought that it was dangerous to smoke and responded broadly with uncertainty: 'Possibly. If you have smoked 40 cigarettes every day it probably affects your voice or causes coughing or something. Probably no doubt about that' (Danish participant 5, male, age 58). In contrast, American smokers tended to give very specific lists of the dangers of smoking. When asked about risks to the typical smoker, one participant replied, 'Diseases as far as smoking … I think lung cancer, COPD, heart disease … there is a lot of emphysema – a lot of problems with smoking' (American participant 9, female, age 34).

Risk to non-smokers

Danish and American smokers were similar in their descriptions of the unpleasantness or inconvenience of second-hand smoke. However, smokers from the USA and Denmark differed in how harmful they believed second-hand smoke to be. On the one hand, an American smoker explained, 'I think it all pretty much centers around the health risks. It's not something that's personal. I mean, you're not only doing it, you are sharing your second-hand smoke with other people' (American participant 4, female, age 50), clearly recognizing the risk passive smoke is posing for others. On the other hand, a Danish participant, although in agreement with the idea that second-hand smoke is unpleasant for non-smokers, perceived the health risk created by passive smoking as overstated.

> I can't help but feel that it is exaggerated that passive smoking is cancer-causing. I can easily see that it is uncomfortable and irritating and that they have to wash their clothes. Some people almost have difficulty breathing and that I can completely understand. But I do not feel that I'm killing the people around me. I have to admit I just don't feel that way (Danish participant 8, female, age 50).

Furthermore, Danes were more likely to put the responsibility on the non-smokers to avoid smokers, whereas Americans put the responsibility on themselves to not expose non-smokers to smoke. One Dane said about avoiding smoking around pregnant women:

> I have obeyed the rules … so they should stay away if they cannot handle the smoke. I think there must be a mutual acceptance with these agreements … if there is a woman present who is pregnant; she has chosen to be among those of us who smoke. So it is actually her decision as to whether she wants to accept the smoke (Danish participant 5, male, age 58).

Danish smokers generally held the view that, due to restrictions that prohibit smoking in many workplaces and restaurants, non-smokers are no longer forced to be exposed to the dangers of smoke. Therefore, non-smokers can simply choose to not associate with smokers if they think it is dangerous.

Both groups were sensitive to avoiding exposing children to smoke due to a child's perceived innocence and purity and the fact that children do not have a choice in their exposure to passive smoke. However, Danish smokers were more likely to allow smoking in the home even if children were present and expected children to leave a smoky room if it bothered them.

In sum, both Danish and American smokers stated that they were well aware of the risks of smoking, but minimized the risk to others and especially themselves. Smokers in both countries acknowledged that passive smoke might be uncomfortable and agreed that children should not be exposed to passive smoke. However, there were important cross-cultural differences in these patterns. Specifically, Danes vaguely acknowledged that tobacco could harm them or others whereas Americans named specific consequences and illnesses that could result. Danes also engaged in more risk minimization and were more likely than Americans to think that they were personally invulnerable to the risks of smoking, to be sceptical about the harms of smoking, and to believe that, all things considered, it was worth it to smoke. Finally, Danes were more likely to minimize the risk of passive smoke and believed that it was up to non-smokers to avoid smokers if they found the smoke unpleasant or dangerous.

Moralization

Disapproval/stigmatization and disgust

All 30 participants were readily able to describe how smoking is stigmatized in society and provide details about instances in which they personally experienced disapproval and stigmatization due to their smoking. As one participant explained,

> If you look broadly at the population you see that [smoking] is socially unacceptable. It is just un-trendy in many circumstances and in many people's eyes … It is just not cool any longer and if you smoke and people do not really know you then they might put you in a group with people who do not have control over the situation, who are not clever or smart, or are not so well educated … (Danish participant 15, male, age 40).

Other participants echoed these same views of smokers as being 'uncool', 'low status', 'bad', 'uneducated', 'improper', 'looking stupid', and appearing to be 'addicted' or 'out of control'. Furthermore, smokers in both countries often felt bullied by frequent lecturing, commenting, or snickering by non-smokers. They also described how aggressive non-smokers have become when expressing their views about smoking. For example, one Danish participant said:

> It has become okay for nonsmokers to express their opinion about smoking. In my world there is a difference between having an opinion about *smoking* and having an opinion about *smokers*. But it is like non-smokers have gotten wind in their sails and free access to be on the border of … rude actually. (Danish participant 13, female, age 41).

Many described society's attitudes towards smokers as a 'witch hunt' or 'smear campaign' and described their position in society as 'shunned', 'ostracized', 'judged', 'harassed', 'picked on', and 'singled out'. One participant said society's treatment of smoking was like the pillory (i.e., used as a means for exposing smokers to public scorn or ridicule). Another participant said, 'We're the enemy. We're the bad guy' (American participant 5, male, age 20). Still another smoker pointed out the patriarchal aspect of moralization:

> I think it is irritating with all the people who interfere in it and all the self-righteous people. Because no one can help me quit smoking. And you get treated like a child which I do not like and especially not as I'm nearing retirement. … It is a witch hunt. There is no respect for the individual and you are not allowed to make any decisions. For me it leads to a contrarian attitude (Danish participant 9, female, age 57).

One participant pointed out that smoking is a behaviour on par with other current moral/social sins such as racism or homophobia.

In terms of feelings of disgust regarding their own smoking, some Danes and Americans said that smoke and smoking were 'disgusting', 'stinky', 'smelly', 'dirty', 'gross', 'unclean', or 'nasty'. Descriptions of disgust were often connected to negative feelings held by society or to personal embarrassment. One American smoker said, 'All the restaurants, bars, things like that, they don't want smokers now. I mean, smoking, it's nasty, it's dirty. I can definitely see why people don't want to be around smokers' (American participant 8, female, age 33). Another participant said, 'I don't even like to really do it [smoke] in public because I don't really want people to know that I smoke because it's disgusting' (American participant 2, female, age 20). No cross-cultural differences appeared in the patterns of disapproval, stigmatization, or disgust.

Reactions to moralization

Danes and Americans all had strong reactions to the moralization they experienced and interestingly many reported simultaneously accepting and rejecting elements of moralization. As one smoker said after describing both agreeing and disagreeing with elements of moralized attitudes: 'That's why I'm a conflicted smoker' (American participant 15, male, age 40). A Danish smoker said about avoiding smoking around children:

> I think people have overreacted. Get out – just because you are pregnant or you have a little baby in the house … I'm not blowing smoke on him. He's 10 m away from me, you know. It is almost like it has become hysterical conditions. And I still feel that it is. But I have bowed my head because I cannot argue against it (Danish Participant 14, female, age 39).

However, more Danes than Americans seemed to be conflicted about moralized attitudes mostly because Danes rejected moralized attitudes more frequently and passionately than did Americans (as described below).

In terms of *acceptance of moralization*, smokers mentioned a variety of factors that influenced their acceptance of moralized attitudes towards smoking. The most common reason was to concede that smoking was disgusting. In fact, many smokers reported taking steps to avoiding smelling like smoke (using mouth spray, washing clothes/hair more frequently, airing out rooms, etc.). In addition, some smokers referred to their own

smoking as 'dumb', 'embarrassing', 'foolish', 'silly', 'low class', 'improper', 'egotistical', and 'self-centred', and said they thought that smoking just looked stupid and uncool. Thus, some smokers agreed with the moralized opinions of non-smokers.

Some smokers also mentioned that it was positive that society was moving towards limiting smoking in public places, including bars, restaurants, and the workplace. For example, one Dane agreed with the smoking restrictions, saying, ' … it is fair to demand your rights [to a non-smoking environment] so that you can walk around in our society without being polluted by other people's cigarettes' (Danish participant 7, female, age 40). More Danes spoke about smoking restrictions than Americans, likely because the restrictions were relatively recently instituted in Denmark than in the USA and involved national laws prohibiting smoking in many bars, restaurants, public spaces, and workplaces.

In terms of *rejection of moralization*, Danish and American smokers shared many reasons to reject moralized attitudes towards their smoking. This included beliefs that smoking is not as risky as others make it seem, that people should not be imposing their moralized opinions on smokers, and that continued efforts to characterize smoking as dangerous (by friends, family, strangers, and the media) was both irritating, unnecessary, and disrespectful to the choice they had knowingly made to smoke. One American smoker said about a friend complaining about his smoking outside, 'I mean, I thought it was pretty disrespectful and I think that America's attitude, generally, allows this sort of entitlement on the part of the non-smoker. Every one of them is supposed to be a militant crusader for common sense' (American Participant 6, male, 25 years old).

A common theme among the Danes (but not among the Americans) was to reject the moralized attitudes and to react with anger and opposition. Danes were also more likely to talk about having a right to smoke if they choose to and rejected the idea that others have a right to verbalize their moralized attitudes. For example, a Danish smoker asserted, 'If I want a cigarette I will smoke a cigarette. If I smoke a cigarette somewhere and then follow the rules … I become angry if a non-smoker goes over to a smoking area and complains about the smoke' (Danish participant 5, male, 58 years). Thus, many Danish participants felt that they were already considerate smokers and, in addition, the new smoking rules meant that non-smokers were no longer exposed to smoke against their will. As 'considerate rule-followers', moralized attitudes from society and individuals were seen by Danes as particularly unjustified and wrong.

Danes were also more likely to comment on the undesirable aspects of a society that moralizes. One Dane said:

> It is okay to shoot down smokers because they have suddenly become bad. I can become a bit scared of this form of mentality. Because then what is next? When I see an overweight big woman standing at the bakery and looking in is it then okay to walk over to her and say: Fatso! – it is not a good idea that you are standing here. … It has become really acceptable to publicly point fingers and then I feel like saying [to the moralizers]: What about yourself, what do you do which is not okay for your health? Because that's the way it is. None of us are perfect … too little exercise, too much food, some do not eat enough vegetables and so on. That's what I'm most afraid of – where does it stop? (Danish participant 13, female, age 41).

Another smoker said after describing the poor care smokers were likely to receive in the health care system:

> That's why I decided many years ago that if I were ever admitted to the hospital I would say I was a non-smoker. 'It is your own fault' – that tone bothers me. People really have to soon find someone else to scold (Danish participant 11, female, age 67).

In sum, Danes and Americans were similar in their experiences with disapproval and stigmatization and described a society that considers smoking and particularly smokers as bad, low class, undesirable individuals that are treated as immoral social outcasts. Smokers in both countries accepted some elements of moralized attitudes, particularly that smoking is disgusting, uncool, and stupid, and that it is acceptable to make laws or rules limiting smoking. Both Danes and Americans described feeling conflicted about smoking and simultaneously accepted and rejected some moralized attitudes. However, several cross-cultural differences were notable. Danes strongly rejected moralized opinions because they felt that second-hand smoke is not that risky and because social norms as well as laws already prevent non-smokers from being exposed unwillingly to smoke. Danes also more frequently mentioned the undesirability of a moralizing society.

Smoking behaviours and beliefs about risk and moralization

How did smokers describe their smoking behaviours in light of their understanding of risk and moralization? Very few smokers indicated they had a specific plan to quit smoking and we therefore focused on descriptions of participants' limiting smoking in certain places or around certain people.

With respect to risk perception, smokers overwhelmingly acknowledged yet minimized the risk of smoking (as described above). Thus, smokers acknowledged that health might be a concern but stated that the danger was not a sufficiently motivating reason to quit. Some smokers said that they really ought to quit due to health problems but again this was not sufficiently motivating to actually begin the process of quitting. Smokers did say that they avoided smoking around children because of the health concerns of passive smoke but otherwise they did not mention limiting smoking because of concerns for their own or other people's welfare. Most reasons cited for limiting smoking were due to general considerateness of others, specific requests from others, or actual rules prohibiting smoking in certain locations. Thus, overall participants rarely made an explicit link between risk perception and limiting smoking.

With respect to moralization, most participants tended to limit their smoking in specific locations or around specific individuals in order to avoid experiencing moralized attitudes. For example, one college student said,

> Here I feel like I need to smoke close to my dorm or where I live. I can't walk around campus smoking because God, who would see me? I mean, I feel like a lot of people I know that don't know I smoke would probably judge me differently (American participant 7, female, age 19).

Similarly, according to another smoker, 'Some places I don't even take out my cigarettes because I do not want to show that I am a smoker because I think it is embarrassing to be a smoker' (Danish participant 14, female, age 39). Thus, both Danes and Americans were careful to anticipate specific situations or people who would disapprove and then not smoke in those circumstances. American participants described specific individuals (e.g., parents, children, specific friends) around whom they avoided smoking whereas Danes described general situations in which they avoided smoking (e.g., not smoking while walking in public because it is not proper). Danes also expended quite a bit of energy trying to figure out the new changing landscape of anti-smoking social norms. A few smokers who strongly rejected moralized attitudes said that moralization almost made them want to smoke more; because strong rejection of moralization was a more

frequent theme among the Danes, this type of comment was also more common among the Danes. Smokers did not describe reducing the total number of cigarettes smoked as a result of moralization. Most said that they simply moved the location of their cigarette smoking and smoked the same number of cigarettes everyday, whereas others stated that smoking regulations, but not the moralized attitudes/stigma, reduced their cigarette consumption.

Discussion

The comparison of Danish and American smokers revealed both differences and similarities in the way individuals in the two groups perceived the risks of smoking and the moralized attitudes associated with smoking. Both Danes and Americans acknowledged the personal risk of smoking, although Danes described the risks very generally whereas Americans listed specific illnesses caused by smoking. Both groups agreed that other individuals – children in particular – should not be involuntarily exposed to second-hand smoke, although Danes were more likely to describe it as acceptable to smoke in the home and around children. Participants in both samples minimized smoking risk, but it was a more frequent theme among Danes to see less risk in their own smoking and in the passive smoking of those around them. Participants from both countries reported many experiences with moralization, describing several instances in which they felt they were treated as morally inferior people because of their smoking. The two groups differed in their reactions to the moralized attitudes: Danes were more likely to strongly reject moralization on the basis that it was unfounded and unjust. Danes reasoned that passive smoking is not that harmful and people are already protected from unwilling exposure to cigarette smoke due to smoking restrictions (using the recent smoking laws as evidence of limited exposure to non-smokers). Americans reacted to moralization with ambivalence, agreeing with some, and rejecting other sentiments. Lastly, American and Danish participants reported similar effects of moralization on their smoking behaviour. Smokers described adjusting to moralization by changing when and where but not how much they smoked.

The risk minimization evident in this study is in line with a large body of research showing that individuals assess smoking risk in ways that differ from expert assessments (e.g., Hay, Shuk, Cruz, & Ostroff, 2005), and that smokers make use of a variety of techniques to delay, minimize, or deny those risks (Oakes *et al.*, 2004), especially in social contexts which strongly pressure smokers to quit (Gough, Fry, Grogan, & Conner, 2009). The fact that Danish smokers minimized risk more vigorously is also consistent with previous research which found that Danes, compared to Americans, considered smoking to be less dangerous and did not think the risks increased with the number of cigarettes they smoked (Helweg-Larsen & Nielsen, 2009). Clearly, perceptions of smoking risk are influenced by culture (Helweg-Larsen & Stancioff, 2008).

All participants could readily describe instances of moralization, although American participants generally described the source as family and friends whereas Danish participants generally described their family and friends as accepting of their smoking. Both Danish and American participants reacted with ambivalence to being targets of moralization in that they both accepted and rejected aspects of the moralized attitudes. The most significant difference with regards to moralization was

that Danes rejected moralization more than Americans, arguing that the disapproval and stigmatization to which they were subjected were unfair and disrespectful of their individual right to smoke. This is similar to Greek smokers' rejection of smoking restrictions and moralized attitudes compared to the relative acceptance of those attitudes by smokers from the UK (Louka, Maguire, Evans, & Worrell, 2006). Notably in the present study, moralization expressed in the form of disgust was not rejected but accepted in most cases by smokers in the two groups. This finding helps illuminate the way in which the moralization process takes place. As Rozin (1999) suggests, in a society that follows the moral code of autonomy as most Western cultures do, disgust alone does not justify severe moral censoring; if the disgusting behaviour is also harmful to other individuals, it can rightfully be deemed immoral. In this case, Danish participants felt entitled to contest the moralized opinions they received because they considered the risks of passive smoking negligible, whereas American participants generally reported a greater concern for the risks associated with passive smoking. Thus, risk perception and moralization of smoking go hand-in-hand culturally and individually.

Experiences with moralization did not appear to be associated with reduced cigarette consumption; in fact, some smokers said that it almost made them want to smoke more. Participants from both countries did limit smoking to avoid being targets of moralization. Limiting smoking near certain people or places allowed smokers to avoid unwelcome moralized attitudes. The question of how moralization might encourage or discourage smokers to quit can be examined by asking former smokers and assessing what role moralized attitudes played in their decision to quit and subsequent success in quitting. In one review of 30 studies on the motivations of smokers to quit, the second most frequently stated category (after health concerns) was social concerns: a broad category including social pressure, effects on others, responsibility to others, etc. (McCaul *et al.*, 2006). Future research should examine how being the target of moralization serves as a motivation or a deterrent to smoking cessation.

This study was not without limitations. Because of the non-representative nature of the sample, these findings cannot be generalized to all smokers, or to smokers in either of the countries where the interviews took place. Furthermore, although the interview methodology is a powerful tool for in-depth examination of the content of thoughts and attitudes, it cannot capture connections that the participants are not themselves aware of or willing to admit in an interview (e.g., a link between moralization and quitting intentions). This research should be supplemented with survey research (preferably using representative sampling) and experimental research. For example, a recent study found that disgust, one of the components of moralization, affected individuals' moral judgments: participants whose disgust levels were higher tended to express more morally loaded sentiments (Schnall, Haidt, Clore, & Jordan, 2009). Manipulating moralization of smoking would allow for an examination of its consequences on smoking-related behaviours and attitudes.

The results from this study showed that participants limited smoking around certain people or places so as to avoid moralization. More research is needed to fully examine moralization and its consequences. Some research suggests that moralization might contribute to less smoking. For example, a study in Norway showed that social norms for smoking restrictions in private homes increased after public smoking laws were passed, most likely because with less exposure to smoke in public areas non-smokers become less tolerant of smoke in non-public areas (Nyborg & Rege, 2003). That is,

smoking laws (one consequence of moralization) might lead to further reductions of active and passive smoking. Furthermore, smoking rates are lower in USA states in which public opinion towards smoking is negative (Kim & Shanahan, 2003) and negative attitudes towards smoking predicted intentions to quit and abstinence 8 months later (Hammond *et al.*, 2006). On the other hand, heightening moralization as a route to reduced smoking may come at a cost. Leicher (1997) proposes that developing highly demanding social norms about health (what he calls 'life-style correctness') could lead to the polarization of society and deeper class divisiveness. Chapman and Freeman (2008) call for greater attention to the effects of moralization such as discrimination against smokers or delayed medical help seeking among smokers due to shame or fear of further stigmatization. Similarly, Bayer and Stuber (2006) warn in their review of the historical understanding of smoking that increasing the stigmatization of smokers could put them at a greater health risk in much the same way that HIV/AIDS stigma has fostered, rather than stalled, the spread of the disease. Overall, avoiding moralization in smoking interventions might make interventions more effective (Botelho & Fiscella, 2005). As many societies move towards a more moralizing stance on smoking, it is important to understand what factors, health-related or otherwise, influence smoking values, attitudes, and policies.

Acknowledgements

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