

POST-PRINT

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Abstract

Since the 1980s, it has been widely accepted that nicotine is an addictive drug. While discussions of smoking inevitably lead smokers to reflect on their addiction, smokers' perceptions of nicotine addiction specifically are rarely studied. Smokers' understandings of nicotine addiction are increasingly relevant in light of the emergence of electronic cigarettes and other cessation aids containing nicotine, and their potential use as long-term replacements for cigarettes. This article is based on a thematic discourse analysis of interviews with 29 smokers from a large metropolitan city in Australia. We explore how smokers negotiate the concept of nicotine addiction in relation to themselves and other smokers, and how this influences their views of smoking cessation methods. Starting with the image of a nicotine addict, we show how participants accept or distance themselves from this image by re-framing the source of their addiction as habit-addicted, rather than nicotine-addicted. We also discuss the function of 'habit talk' as a way of contextualising their addiction, and report on how notions of addiction shape participants' views of cessation methods. Finally, we discuss the implications of these findings for future research and for health professionals working with smokers.

Keywords: Nicotine addiction, smoking, smoking cessation, qualitative, lay perceptions

Nicotine was declared addictive by the US Surgeon General (1988). However, the validity and utility of the concept of 'nicotine addiction' has been contested since the mid-1960s. Those with vested interests in these debates, including pharmaceutical companies, the discipline of psychiatry and the tobacco industry, have influenced the conceptualization and terminological conventions associated with addiction to tobacco smoking (Hirshbein 2014).

Despite moves towards medicalizing tobacco use through diagnostic labels and the prescription of cessation medications, such as nicotine-replacement therapy (NRT), smoking still remains largely incongruent with dominant notions of addiction (Morphett et al. Forthcoming; Bell and Keane (2012) suggest this is because while smokers are dependent on regular nicotine administration to avoid withdrawal symptoms, they live normal and productive lives and only face (short-term) physical and psychological effects in the process of stopping smoking. The legal status of tobacco as a consumer good that can be purchased at any general retailer with minimal restrictions also sets it apart from most other addictive substances which are generally prohibited (e.g. cocaine, heroin) or strictly controlled (e.g. morphine, pethidine). While alcohol is also readily available legally in Australia, excessive consumption frequently causes severe disruption to everyday life and thus differs from the 'normality' with which more severely dependent smokers can maintain in their everyday responsibilities associated with work and family.

The limited research on lay conceptualizations of nicotine addiction tends to focus on adolescent views and the implications for deterrence of smoking uptake (e.g. O'Loughlin et al. 2002; Johnson et al. 2003; Bottorff et al. 2004; Amos et al. 2006; Haines et al. 2009). Adolescent smokers describe nicotine addiction as a lack of personal control that signifies weakness (Bottorff et al. 2004), and also view addiction as a continuum, in which full-fledged dependence is needing to smoke so that one can function properly (Johnson et al. 2003).

Without denying that adolescents represent an important 'at risk' group, the disproportionate focus on their perspectives has been at the expense of exploring adult smokers' perspectives on addiction, which may differ. The few studies specifically focusing on adult smokers' understandings of nicotine addiction have reported a discrepancy between objective measures of tobacco dependence and smokers' views about whether they are addicted (Parry et al. 2001); that smokers identify as addicted but only see certain cigarettes as satisfying their addiction (Bancroft et al. 2003); and that both habit and addiction are equally endorsed as reasons for being unable to quit (Wiltshire et al. 2003; Hughes 2009). To our knowledge, none have contributed a discursive perspective on adult smokers' perspectives on nicotine addiction.

Also missing from this literature is an examination of perceptions of nicotine addiction specifically, not simply addiction to smoking. This is particularly pertinent in light of increased debate around long-term nicotine maintenance as an option for addressing cigarette smoking (National Institute for Health and Care Excellence 2013) and the emergence of electronic cigarettes (e-cigarettes) – devices that allow inhalation of nicotine and satisfaction of nicotine addiction without most of the toxicants found in cigarette smoke. How smokers understand nicotine addiction may have implications for uptake and use of e-cigarettes as cessation aids or long-term alternatives to cigarette smoking. This analysis focuses on the ways in which participants negotiated the concept of nicotine addiction in relation to themselves and other smokers, and the implications for the use of various cessation methods (including NRT and e-cigarettes).

Method

Sample

Semi-structured interviews were conducted by KM with 30 daily smokers aged 18 years or over from a large metropolitan Australian city between October 2012 and July 2013. One participant was excluded from this analysis because they had stopped smoking. Table 1 shows participant demographics. The recruitment strategy was periodically adjusted to obtain maximum diversity in relation to age, gender, education, and socioeconomic status. Advertising took place via community centers and notice boards, a university mailing list, a seniors' database, and an online-classified site. Participants were provided with a gift voucher in appreciation for their time. The Human Research Ethics Committee of the University of Queensland approved the study (2009001022).

Table 1. Demographics of daily smokers.

Participant ID	Age	Gender	Highest level of education	Cigarettes per day
S101	24	Woman	University	1–10
S102	19	Man	Technical	1–10
S103	32	Woman	University	1–10
S104	43	Woman	University	11–20
S105	32	Man	Less than high school	11–20
S106	18	Man	University	1–10
S107	24	Man	University	1–10
S108	24	Man	University	11–20
S109	23	Woman	Less than high school	11–20
S110	20	Woman	Technical	1–10
S111	30	Man	University	1–10
S113	28	Man	Technical	11–20
S114	35	Man	High school	11–20
S115	34	Woman	Technical	1–10
S116	21	Woman	University	1–10
S117	32	Woman	High school	31 or more
S118	26	Man	Less than high school	11–20
S119	22	Woman	High school	11–20
S120	58	Woman	University	11–20
S121	63	Man	High school	21–30
S122	31	Man	University	11–20

Participant ID	Age	Gender	Highest level of education	Cigarettes per day
S123	56	Woman	Technical	21–30
S124	48	Man	Technical	31 or more
S125	56	Woman	Technical	21–30
S126	40	Woman	Less than high school	31 or more
S127	42	Man	Technical	31 or more
S128	38	Man	Technical	1–10
S129	57	Woman	University	11–20
S130	48	Man	Technical	(Missing)

Interviews

Participants completed demographic and smoking history questions prior to the interview. Interview questions covered smoking history; perceptions of control, responsibility, and addiction; methods for quitting; and neurobiological understandings of nicotine addiction. Participant attitudes towards quitting methods (Morphett et al. 2015) and questions about neurobiological explanations for addiction (final part of the interview) are reported elsewhere (Morphett et al. 2016). These latter interview questions were excluded from this analysis as they involved prompting discussion about the biological basis of nicotine addiction. Interviews were recorded and transcribed verbatim, ranging in length from 25 to 80 min.

Analysis

The first author conducted a thematic discourse analysis (Braun & Clarke 2006), with a focus on the discursive implications (Wood & Kroger 2000) of smokers' accounts. After a process of familiarization, each interview was individually coded (line by line) for any talk relating to smoking, addiction and quitting. Coding in this early stage was inductive and largely descriptive. Separate Microsoft Word documents were created for each code, then each document was reviewed separately to check for consistency within and across codes.

During this process of refinement, and in discussion with the other authors, the focus of the analysis shifted to smokers' negotiations of their own and others' addiction to nicotine. We attended to the multiple and contradictory ways in which smokers talked about addiction in relation to themselves and others, and the discursive effects of these ways of talking. Accordingly, we did not classify participants as 'addicted', or 'not addicted', but rather focused on how participants framed their smoking in relation to the concept of addiction. We were also interested in participants' identity work in relation to concepts of addiction – e.g. how they distanced themselves from, or accepted, an addicted identity. We do not define identity as a static and measurable construct, but rather as something that is accomplished through discourse and in interactions (Davies & HarrÉ 1990).

Results: conceptualizing addiction

Participants cited the following as indicators of nicotine addiction: experiencing cravings, physically needing to smoke, experiencing withdrawal symptoms when abstaining from smoking, and needing to have cigarettes around all the time. Nicotine addiction was described as a physical dependence that was largely inevitable after prolonged periods of exposure, with only a minority suggesting that they were addicted after their first cigarette. Some explained the process by which someone becomes addicted to nicotine as a result of habit or peer pressure; others described it in biological terms with references to the brain, the body or genetics (e.g. 'The nicotine controls your brain' S111).

However, participants' accounts of addiction showed that nicotine was perceived as only one aspect of addiction to smoking tobacco. Indeed, participants conceptualized addiction as a continuum. At one end of the continuum, were 'social' or 'chipper' smokers who were in no sense addicted to smoking (or nicotine), and instead completely in control and able to stop smoking at any time without difficulty. At the other end of the spectrum were heavily addicted smokers (described in detail below), who were seen to be addicted to all aspects of smoking (including nicotine), with limited capacity to control their smoking. In regards to their own addiction, most participants acknowledged that they were addicted to smoking in some way, thereby positioning themselves somewhere in the middle of this continuum. Over the course of this analysis, it became clear that participants' accounts oriented around the image of a smoker heavily addicted to nicotine (those at the extreme end of the spectrum). However, and as we will show, participants also applied the concept of addiction to themselves in three ways: accepting addiction, distancing themselves from addiction, or contextualizing addiction.

We begin this analysis by exploring the image of an addict – an unfavorable identity position that participants evoked in their interviews. This is followed by a discussion of how participants negotiated the concept of addiction in relation to themselves (labeled as acceptance, distance, and contextualizing). We close by considering how participants viewed NRT and e-cigarettes in light of these concepts of addiction.

The image of an addict

The extreme case of a heavily addicted smoker was often portrayed through the use of descriptive imagery to depict an addict as someone who 'rolls out of bed and has a cigarette', 'lights up within minutes of waking up', someone with 'yellow fingers who is heard hacking [coughing] away', or someone who 'sacrifices food for cigarettes'. In these references, an addict is positioned as visibly lacking control over their physical need to smoke.

Some participants suggested that an addict is someone who only quits in the face of serious health problems, or conversely is someone who continues to smoke despite developing a smoking-related illness: 'I know you see a lot of people with those holes in their throats and they're smoking through them and it's just disgusting and it's terrible how addicted they are' (S103). Addiction to nicotine was often constructed as both disgusting and unfortunate and compared with other drug addictions (a 'horrible addiction, just as bad as alcohol or heroin', S103).

Participants cited withdrawal symptoms that included feeling: irritable, uneasy, cranky, shaky, stressed, annoyed, anxious, uptight, cheeky, bitchy attitude, pissed off, coughing, and experiencing headaches. The inability to control these symptoms (e.g. moods or emotions) was seen as a sign of weakness and addiction. Many also described the notion of 'physically needing to smoke' or only smoking to abate withdrawal symptoms, of which the addict has no control over. This was seen as

distinct from 'wanting' or 'enjoying' a cigarette. For instance, S124 described someone who is addicted to nicotine as 'somebody [who] was scrabbling all over the floor to pick up cigarette butts'. This desperation was also echoed in S119's account, who juxtaposed smoking for physical need with smoking for pleasure:

Another thing you can tell people are addicted is when they are not enjoying having cigarettes or when people just – you see people on work breaks and they smoke it in about 30 seconds. You are like, it's not really enjoying, it is just addiction. (S119)

Another (less commonly cited) feature of an addict was low socio-economic position, particularly receiving government welfare payments. This added a class dimension to the image of an addict as someone who smoked despite being unable to afford it:

Looking at people particularly in those groups that don't have income and stuff. But most of them are heavily addicted to smoking. So they might sacrifice whatever they get on their pension. The first thing they're going to buy is cigarettes (S129)

Buying cigarettes before food was cited as an indicator of addiction that signified a lack of control over life (e.g. sacrificing food for cigarettes) and public behavior (e.g. picking cigarette butts off the floor). This implies that 'wealthy' smokers do not experience addiction in the same way because they do not need to forgo other purchases to afford cigarettes (see: Baker et al. 2012).

Participants applied these indicators to their own smoking to position themselves on the nicotine-addiction continuum, as described below.

Accepting a nicotine addiction

To highlight the diversity in how participants negotiated their nicotine addiction, we will work our way from participants' more tentative agreement that they are addicted ('I guess I am a little bit addicted') to those who respond with more certainty about their addiction ('I'm severely addicted to nicotine').

When asked directly about whether they considered themselves addicted to nicotine many participants responded with uncertainty:

Maybe a little. I can't say no because I'm smoking and we know it's addictive. So I guess I am a little bit addicted. (S107)

These responses commonly involved instances of hedging, a rhetorical strategy used to weaken claims (Wood & Kroger 2000), as evidenced by the use of the phrases: 'maybe', 'I guess', 'I don't know', and 'I think so'. Participants used hedging to distance themselves from accepting they were nicotine-addicted. Another example of how participants tentatively accepted a nicotine addiction is described below:

I really don't know. I wish not, I would like to think that I'm not. I think I'm more addicted to the fact of having something in my hand of doing the gesture and usually when I have my first smoke in the day or after a week of no smoking, I have the first smoke I think it tastes bad, so it's not like when I have the first drag of my cigarette. So I don't know. I'm probably addicted to nicotine because I've been smoking for a while. (S110)

Although S110 attempts to resist the (unfavorable) label of nicotine addiction by emphasizing the importance of the gesture as the potential source of their addiction, they eventually concede and accept they are nicotine-addicted. This was echoed by S127 who, in replying to the question about whether they consider themselves addicted to nicotine, responded, 'yeah, unfortunately'.

The more extreme instances of acceptance of nicotine addiction involved other rhetorical cues that point to the discomfort involved in taking up this position. When asked about whether she considers herself addicted to nicotine, S126 responds:

Interviewee: Oh God yeah, absolutely. Without a doubt. Without. A. Doubt. [laughs] Did you get that?

Facilitator: So a definite yes?

[...]

Facilitator: What makes you think you're addicted? What are the signs [unclear]?

Interviewee: The fact that I urge them every half an hour. The fact that it's the first thing I think about when I wake up. It's the fact that I can't imagine my life without them at this point in time. Yeah, that's basically it. They pretty much rule my life in the way that if I'm going to run out of cigarettes and it's 8:00 o'clock at night, I will get in the car and drive to a service station to buy them. So that I'm not waking up at 6:00 o'clock in the morning and not having them. To me that's an issue because it's causing consequences to my normal lifestyle that normally wouldn't be there. So that addiction causes me to get in the car and go out when if it was anything else I'd go without. You know if it was a loaf of bread I'd go without and I'd do crackers the next day or something for the kids. (S126)

In taking up an addicted position, S126 uses repetition (e.g. 'without a doubt' and 'the fact that') to emphasize the reality of her addiction. The presence of laughter is also interesting. Laughter has been identified as enabling people to talk about sensitive topics (Robinson 2009) and an indicator of 'troubles-talk' (Jefferson 1984) – it suggests rhetorical discomfort in acknowledging an addiction. S126 describes cigarettes as yielding power over her, and suggests that addiction 'causes' her to go to extreme measures to access cigarettes. This way of talking (a cause and effect discourse) diminishes the speaker's control over their smoking.

Several other participants similarly described the lengths they would go for cigarettes. Emphasizing their physical need to smoke and to have cigarettes within reach ('I've got to have them' S124) legitimized their addiction, along with withdrawal symptoms. For instance, participants described experiencing anxiety, stress and irritability when stopping smoking. S124 described himself as 'a bear with a sore head'. S115 recounted a quit attempt during which the severity of the withdrawal

symptoms led her husband (an 'ex-drug addict' who agreed the withdrawals from cigarettes were 'worse') to buy cigarettes to get her 'back to normal'.

In addition, nicotine addiction was also explained in bodily, or biological terms:

I think it's [addiction to nicotine] pretty much 100% biological, the addiction, and I trust that. Without wanting to sound like a self-fulfilling prophesy, I trust biology enough to say I'm completely addicted to nicotine. (S102)

S102 acknowledges the deterministic nature of biological explanations for addiction ('a self-fulfilling prophesy'), which absolves personal responsibility and protects the speaker's identity at the expense of their agency.

One of the more extreme examples of acceptance was offered by a woman in response to questioning about her reasons for smoking:

I'm severely addicted to nicotine. [laughs] I have a fair few problems with depression and anxiety and things like that. I have found at times that I have tried to quit that those things come to a point where I can't handle them at all so it is a coping mechanism for me. But a lot of it has to do with having started so early and having that as being part of my identity. I identify myself as a smoker and when I try to quit it's that sort of – I feel like I lost my best friend kind of feeling. So ultimately I would prefer not to smell disgusting and have an expensive, dirty habit that's not good for my health but I have no plans to quit in the immediate future. (S117)

S117's acceptance of a 'severe' nicotine addiction is paired with laughter – again suggesting the discomfort associated with this position. She goes on to contextualize her addiction within existing pathology ('problems with depression and anxiety'), which serves to explain her difficulty in quitting smoking. An interesting feature in this account is that she initially explains her smoking as an addiction and then goes on to reposition smoking as a habit. This, paired with the disclosure of a smoker identity, and the meanings attached to this identity, demonstrates her attempt to reclaim agency in her continued smoking and move away from deterministic explanations.

Distancing the self from nicotine addiction

When asked about whether they considered themselves addicted to nicotine, several challenged this by suggesting that their own addiction was based on the visual, psychological, experiential, or habitual aspects of smoking:

Facilitator: Do you consider yourself addicted to nicotine?

Interviewee: b No, the nicotine, no.

Facilitator: And why not?

Interviewee: I would think that I am more addicted to the sensation of going, the smoke, you know like smoking isn't just about the nicotine rush, but rather the feeling of the smoke going down your throat, your lungs, and exhaling it. Yeah, I think I'm more addicted to that sensation. (S108)

S108 claims their addiction is to the sensation of smoking, not the nicotine. This participant later highlighted how he did not experience any physical withdrawal symptoms on previous cold turkey quit attempts. He concluded that the lack of physical symptoms was evidence that 'my body has probably grown immune to the nicotine or something'.

Two other participants compared physical and psychological reasons for smoking to distance themselves from a physical addiction: 'not so much a physical [...] but a mental thing' (S116); 'physically [addicted] probably not very much, but psychologically [addicted] definitely' (S104). Others did so by framing their addiction as habit-based:

No. I don't consider myself addicted to nicotine. I'm thinking about addiction in like a really heavy sense. Mildly addicted perhaps, but again I think my addiction's mostly habit based. If I don't have a cigarette it's actually not a feeling of physical need for one so much as a feeling of depriving myself of this habit or of this thing that I consider special. (S103)

It isn't the nicotine for me, I don't think. I think it's just the habit of the process of – say I just like smoking. When I originally bought the electrical cigarettes, I bought them with no nicotine in. I don't mind having them, depending on what day I feel. Some days I'll smoke them, some days I'll smoke my pipe which has nicotine in it. Because I haven't given up for a long time, it's sort of a Catch 22 of is it the nicotine? You know, what do you miss sort of thing? (S114)

S114 reported using e-cigarettes as an alternative to smoking because it fulfilled the habit of smoking, which he later described as 'doing something with your hands or whatever'. His e-cigarette use, often without nicotine, provided sufficient evidence for him to question the legitimacy of nicotine addiction as the reason for his continued smoking. Several others described their failed experiences with NRT or e-cigarettes as evidence for why they are not addicted to nicotine:

Well, I'm addicted to smoking, but I don't know about nicotine. I'm addicted to smoking. Take the nicotine out of the cigarette, I wouldn't know. I'm addicted to smoking. I've tried the patch and it doesn't seem to make any difference. I've tried that nicotine electronic thing that doesn't work. So it's not nicotine I'm addicted to, it's smoking. So there's got to be two different ways of looking at that. I don't know. [...] I tried the electronic cigarette. It didn't work. It didn't feel as though I was having a cigarette. So I don't know if – I wasn't replacing the nicotine. I wasn't replacing – I wasn't enjoying the cigarette. There's my problem. I love my cigarette. (S124)

S124 orients to the enjoyment (or love) of smoking as the source of his addiction. Nicotine is seen as a redundant aspect of cigarettes, he claims he would not notice if the nicotine was removed from cigarettes. Indeed, enjoyment of cigarettes was often mobilized to resist an addiction, while a lack of enjoyment for cigarettes was a potential sign of addiction.

As an exception, S111 resisted addiction entirely – nicotine or otherwise:

Facilitator: So do you consider yourself addicted to nicotine?

Interviewee: No, I wouldn't say that.

Facilitator: Why so?

Interviewee: Because, as I'm saying, I can control myself. It's not like – I haven't had really that urge that, I want to go and smoke, I want to go and smoke, or something like that. I haven't had really those goose bumps, I'll say, with smoking. (S111)

Although many participants spoke about the ways in which they controlled their smoking, S111 mobilized the concept of control to reject addiction completely. In a subsequent part of his interview, he described a lack of withdrawal symptoms and the ability to go long periods without smoking during religious festivals as evidence for why he is not addicted. For him, quitting smoking only required individual determination, and therefore NRT was irrelevant.

Contextualizing addiction: situating smoking as a habit

Participants used the term 'habit' often to explain their continued smoking. The following extract illustrates one way in which habit and addiction were combined in responding to a question about reasons for smoking:

Addiction. I suspect I'm multiple layers of addictions. Obviously the physiological addiction to nicotine but also the habituation to the actual habit of smoking. During the day I don't smoke very much when I'm at work. But it punctuates my working day. In the evening I tend to smoke more which seems to be about topping up nicotine levels, almost as a storage ready for the next day. (S120)

In describing the image of an addict as someone who smokes within minutes of waking up, S120 points to the notion that smoking at certain times of the day may be used as an indicator of the type of addiction that cigarette serves: nicotine (topping up nicotine levels at night) or habit (punctuating her work day).

Asking participants about whether they considered smoking a habit allowed participants to situate their smoking within their daily lives. Smoking was framed as a social practice that was associated with particular activities, times of the day, situations and emotions. Smoking, then, can be understood within a 'bundle' of other practices (Blue et al. 2016):

Definitely, I 100 per cent think it's [smoking] a habit, I think that's how you become addicted. You become addicted to the habit, it's like a routine. Like as I say we've got, I like to get ready or whatever and then I have a smoke and then brush my teeth. Then I come back and

then I'll have my breakfast and it's like after a meal I'll go for a smoke. You know it's just what I do. Or if I'm on my break in work or whatever, I'll just go out. (S101)

S101 frames her smoking as a response to her routine, not a biological or physical need to smoke. Beyond a routine, smoking was also a part of participants' lifestyles or identities. This had direct implications for quitting. Some viewed quitting as a loss of self and were unsure what they would do with themselves upon quitting:

Facilitator: And why do you think you became addicted to nicotine?

Interviewee: Just over a long – just over the long years, it turned into a lifestyle for me you know what I mean? It was part of who I was at one stage of my life and I don't know. I've just always had a packet there so it was just a part of my lifestyle. Then after a while – yeah, I can't imagine life without cigarettes at times. That's one of the first questions I ask people when they give up cigarettes what's it like, what's it like, with or without a cigarette you know. (S127)

Several other participants spoke about the difficulty of imagining their life without cigarettes because smoking was so ingrained in their identity and life. Related to this, participants often used passive language to talk about their smoking: smoking was commonly described as a 'natural reaction', an 'unconscious thing', 'entirely mindless', or something that they do 'automatically'. These terms were also used in recounting previous quit attempts that had failed, or in imagining a future quit attempt:

Facilitator: What makes you think you could give up?

Interviewee: I do a 12 hour shift, I might not get a smoke for 12 hours. I manage that, so there's no reason I couldn't continue through. I just never tried. It's a habit. Sometimes I buy smokes without realizing. You go to the bank and get your money, buy your pack of smokes and you realize – didn't even realize I stopped to buy them. It's not a thought. (S113)

Framing smoking as unconscious and habitual allows speakers to minimize their own agency and control over their smoking, thereby positioning their behavior (e.g. buying cigarettes) outside of rational thought. Quitting smoking, then, is framed as a function of changing one's habits and consciously focusing on not smoking. For instance, S119 suggested that their method to quit smoking would be 'probably just a habit change'. The suggestion that quitting smoking is as simple as changing one's habits has implications for the relevance of NRT or e-cigarettes.

NRT, e-cigarettes and concepts of addiction

We found that explaining someone's continued smoking as a result of nicotine addiction meant that NRT was positioned as most appropriate for cessation. This is consistent with the image of an addict as someone who is powerless in the face of their nicotine addiction and hence requires medical treatment. However, nicotine addiction was sometimes viewed as the easiest part of the addiction to break.

I'm in two minds about it. People who are obviously addicted to the nicotine not just the habit side of it yes, it [NRT] can be easier for them, it can be a nicer transition for them. (S103)

Other participants suggested that NRT could help deal with withdrawal symptoms and enable more control over managing the habit of smoking:

Well, it [NRT] certainly has its place, because a fair part of addiction – as I was saying before – is in the ritual, the habit. If you're trying to fight two fights at once – you're trying to fight the battle to stop yourself going [exhales] and lifting that cigarette to your mouth or going to the place and lighting that cigarette as well as fighting the addiction to nicotine, then that's two fights on your hands. If you want to separate those battles, then that should be an option that you have. (S122)

Here, NRT is positioned as helping smokers to more effectively fight their addiction to the habit of smoking by dealing with the nicotine addiction separately. However, there seemed to be no consistent relationship between how people conceptualized their addiction and their views about nicotine replacement. For instance, some rejected the usefulness of NRT because their addiction was seen as only habit-based. To illustrate, S108 emphasized the sensation of smoking as the source of their addiction and was therefore not interested in NRT but was interested in nicotine-free e-cigarettes. Indeed, several viewed NRT as unhelpful for quitting because it doesn't address the habitual aspects of smoking, suggesting that NRT oversimplifies quitting:

It's [smoking] definitely a habit. It's, even in – when you're talking about habits it's not just, if you're using something like a patch which is giving you nicotine it's not replacing the actual habit of orally putting it in your mouth, drawing on it whatever. So that side of it isn't addressed through what is available on the market to deal with it. That in itself is a habit. So I know there's e-cigarettes and things like that. But you're not taking in the more destructive elements of smoking. But that really hasn't been addressed. That's something that smokers are hooked into too is actually the lighting up. (S129)

S129 describes the limits of NRT by emphasizing the strong habitual and experiential nature of smoking. Although she suggests e-cigarettes are helpful in fulfilling the habit and gesture of smoking, she also points out their deficiencies in not providing an exact replication of the smoking experience (cannot be lit), which reduced their attractiveness as a smoking replacement. This again illustrates smokers' competing and complex views around the utility of NRT and e-cigarettes for quitting.

Discussion

Based on our analysis of interviews with Australian smokers, we found participants viewed addiction on a continuum, similar to research among adolescent smokers (Johnson et al. 2003 J). At one end, were 'social' or 'chipper' smokers who were in no sense addicted to smoking (or nicotine), while at the other end, were heavily addicted smokers who were addicted to all aspects of smoking, particularly nicotine. Most participants acknowledged that they are addicted to some aspect of smoking (positioning themselves somewhere in the middle of the continuum).

Nicotine addiction was sometimes viewed as a more serious or 'real' form of addiction. Some participants sought to distance themselves from nicotine addiction, by explaining their own smoking as (primarily) due to a habit/psychological addiction. The stigma associated with illicit drug addiction (Lloyd 2013), and tobacco use in Australia (Wigginton et al. Forthcoming), may explain the discomfort associated with acknowledging they were addicted to nicotine. These views may contribute to the enduring popularity of the cold turkey method of quitting as using cessation aids seems to require accepting one's smoking involves nicotine addiction.

We found no distinct age or gender differences in participants' acceptance of nicotine addiction, despite population-level analyses suggesting a strong age gradient in the use of cessation assistance (Zhu et al. 2000). In addition, consistent with previous work (Gillies & Willig 1997; Amos et al. 2006), we found that NRT was viewed as most appropriate for smokers with a nicotine addiction, as opposed to an addiction characterized by habitual smoking. However, some suggested that NRT could also help them manage the habit of smoking. For some, failed experiences with NRT or e-cigarettes were cited as evidence that that nicotine addiction was not the primary aspect of their addiction to cigarettes. However, failure to quit with e-cigarettes, which are designed to simulate the habitual and behavioral aspects of smoking, was not similarly interpreted as evidence against a habit-based addiction.

There may be reluctance to 'switch' to e-cigarettes or NRT as it is seen by some as simply 'replacing one habit (or addiction) with another' (Etter & Perneger 2001). However, it should be noted that the transition between smoking and alternative nicotine products, including e-cigarettes, is not necessarily smooth given the distinct differences between these products and participants varied notions of their own source/s of addiction and what aspects are important parts of the smoking ritual. For example, a participant viewed e-cigarettes as an inadequate replacement because they viewed the need to 'light up' as an integral to the experience of smoking.

Therefore, our results suggest that the assumption that smoking is driven only by nicotine addiction is overly simplistic and implies that considering the context of smoking as a social practice is necessary to understanding why smokers continue to smoke despite the availability of alternative less harmful nicotine products. Transitioning to an alternative nicotine product, such as e-cigarettes, involves not only adjusting to differences in nicotine delivery (Strasser et al. 2016) but also differences in how the product, and its associated rituals (e.g. charging batteries instead of lighting cigarettes), fit within the smoker's daily life (Etter & Perneger 2001). Indeed, our analysis illustrated how smoking is deeply entangled with smokers' daily lives and routines (Blue et al. 2016).

Without attempting to generalize these findings, this analysis uniquely offers a discursive perspective on smokers' negotiations of nicotine addiction. This analysis shows that the term 'nicotine addiction' is not neutral, and has particular meanings for smokers and problematic implications for their identities – a topic that has been more thoroughly investigated in young populations of smokers. For instance, previous analyses have identified adolescent smokers' reluctance to identify as addicted because it signifies a lack of self-control and moral worth (Moffat & Johnson 2001; Johnson et al. 2003; Bottorff et al. 2004; Amos et al. 2006). Among our sample of adult smokers, we found similar themes of morality. Indeed, control over one's life and body was central in participants' constructions of a heavily addicted smoker – which most participants distanced themselves from in their interviews. Applying a discursive lens allowed us to explore the moral connotations associated with particular identity positions and how this influences smokers' engagement with certain concepts (i.e. nicotine addiction). However, exploring the meanings attached to nicotine addiction for smokers living with other addictions or chronic conditions may provide a more positive portrayal of nicotine addiction (see Etter & Perneger 2001).

Rejecting the concept of nicotine addiction had, as we have shown, direct implications for smokers' strategies or ideas around smoking cessation. For instance, we found that cold turkey was commonly presented as the best way to quit (Morphett et al. 2015). Participants suggested that this method relied on the presence of willpower, self-determination, and mental strength, consistent with cultural representations of quitting as an individual project of self-control and discipline (White et al. 2013). In these accounts of cold turkey, participants made little reference to addiction (nicotine or otherwise). We argue that this is because the deterministic nature of biological explanations of nicotine addiction (as we have discussed) is discursively incompatible with the rational self-determined narrative of quitting cold turkey, which relies exclusively on individual autonomy and personal responsibility.

It is interesting to note, participants' views of a nicotine addict align with DSM-III criteria for nicotine dependence (Hirshbein 2014). However, smokers' uptake of, or dissonance associated with, the label of 'nicotine dependence' is an important avenue for future research, especially for those interested in the utility of smoking cessation aids. This study focused only on current smokers, with one regular e-cigarette user incidentally recruited. E-cigarettes have been described as a disruptive technology that could end tobacco smoking (Fairchild et al. 2014). However, to date, only a minority of smokers have switched to vaping, even in countries that have permissive policies toward e-cigarettes (e.g. the UK: McNeill et al. 2015). This suggests that switching from smoking to vaping may not be straightforward for many smokers, despite these devices being more appealing than NRT as a means of cessation.

Our findings highlight that smokers' language around their smoking and addiction is more than simply storytelling (for example, marijuana: Tombor et al. 2013). Instead, this language offers insight into the identity work involved in (Vangeli & West 2012; Tombor et al. 2013), and the social practices tied to (Blue et al. 2016), behavior change (i.e. stopping smoking). Our understanding is that participants' notions of habitual or psychological addiction illustrate their attempt to regain the agency that is readily lost in deterministic narratives of a heavily addicted smoker (i.e. lack of control over life and body). Indeed, narrative therapy offers a valuable way of working with addicted individuals, drawing out their multiple perspectives of addiction and honoring their agentic language in order to position the individual as an active agent and source of change (Strasser et al. 2016). Part of this process involves therapeutic attention to meaning making. Thus, the counselor or health professional can take a non-prescriptive approach to the individual and their addiction, exploring motivations and agency towards these various practices without any pre-determined outcome (i.e. smoking cessation), allowing possibilities for harm reduction approaches (Strasser et al. 2016).

In terms of the limits of this analysis, given this is a qualitative analysis of in-depth interviews with 29 smokers, we do not suggest that these data are representative of the broader population of Australian smokers. Instead, we offer an account of meanings and negotiations of nicotine addiction situated within a particular socio-cultural context – a country with comprehensive tobacco denormalization policies, overt anti-smoking campaigns and highly restrictive policies concerning e-cigarettes. Also worth noting, the interview guide was worded such that it only queried participants about their views on nicotine's role in relation to addiction to smoking, 'do you consider yourself addicted to nicotine', rather than exploring their general knowledge about nicotine. This question foregrounded nicotine as a source of addiction, as opposed to the 'object' (cigarettes) or the practice (smoking), implying participants understood that tobacco cigarettes contain nicotine, and that they were affected, to some extent, by nicotine. It is possible that some participants rejected the notion of being addicted to nicotine because they did not understand nicotine's contribution to the psychoactive effects of smoking and development of addiction. However, previous research has found high public awareness that cigarettes contain nicotine (Cummings et al. 2004; Hall et al. 2014)

and qualitative research has also found that smokers associate nicotine with addiction (Moracco et al. 2016).

These findings have implications for health professionals' engagement with smokers about cessation. It is important that health professionals acknowledge that nicotine addiction (a) is viewed on a continuum, (b) may have negative connotations for smokers, and (c) is seen by many as one component of a very complex behavior or practice. It may be useful for health professionals to prompt smokers about the source/s of their addiction and use this information to find a particular method that may work for their addiction; NRT may help nicotine- or physically addicted smokers, but may be less suited to those who believe they are habit- or psychologically addicted to smoking.

Smokers who profess to 'love' or 'enjoy' their cigarettes may also require a different form of support given their potential rejection of concepts of addiction. Switching to e-cigarettes, which 'remain located as products consumed for pleasure' (Bell & Keane 2012), may be a promising option for these smokers. However, our study suggests that e-cigarettes may not be immediately accepted as an adequate replacement by smokers with a strong attachment to smoking. Having a realistic expectation that switching to vaping may take some time to habituate to new routines combined with support from experienced vapers (e.g. through vaping forums and groups) may assist. Modifying scales that tap into these many aspects of addiction would be useful in clinical practice to help health professionals engage with the complex ways in which smokers conceptualize their addiction to cigarettes (e.g. Fagerström 1978; Hall et al. 2014; Morphett et al. 2016). The adaption and use of such scales would also assist health professionals (and smokers) in understanding that reasons for continued smoking extend beyond nicotine addiction.

Disclosure statement

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