

Résumé

Les perceptions des adolescents à l'égard de la dépendance à la nicotine

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La présente étude avait pour but d'approfondir les connaissances sur les perceptions des adolescents à l'égard de la dépendance à la nicotine. Notre analyse, de type secondaire, a porté sur 80 entretiens qualitatifs avec des adolescents ayant fait diverses expériences de la cigarette. Les transcriptions d'entrevues ont fait l'objet d'une étude systématique dans le but de faire ressortir les explications des jeunes concernant la dépendance à la nicotine. On a constaté que celles-ci présupposent un enchaînement de causalité, depuis l'exposition à la nicotine jusqu'à la dépendance; elles citent des facteurs comme l'usage répété, le fait que le cerveau et le corps « s'habituent » à la nicotine, la faiblesse des individus et l'influence de la famille. Les explications avancées démontrent que les adolescents se perçoivent comme des acteurs passifs relativement au phénomène. Ces résultats pourront servir à la conception de programmes destinés à sensibiliser les jeunes à la dépendance à la nicotine.

Mots-clés : adolescents, tabagisme, dépendance à la nicotine, tabac

Adolescent Constructions of Nicotine Addiction

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The purpose of this qualitative study was to extend our understanding of how adolescents view nicotine addiction. This secondary analysis included 80 open-ended interviews with adolescents with a variety of smoking histories. The transcribed interviews were systematically analyzed to identify salient explanations of nicotine addiction. These explanations presuppose causal pathways of nicotine exposure leading to addiction and include repeated use, the brain and body “getting used to” nicotine, personal weakness, and family influences. A further explanation is that some youths pretend to be addicted to project a “cool” image. These explanations illustrate that some youths see themselves as passive players in the formation of nicotine addiction. The findings can be used in the development of programs to raise youth awareness about nicotine addiction.

Keywords: adolescents, smoking, nicotine addiction, nicotine dependence, tobacco

Nicotine dependence in adolescents is usually classified at about half the rate observed in adults; however, the majority of adolescent smokers consider themselves to be addicted and find it difficult to stop smoking (Colby, Tiffany, Shiffman, & Niaura, 2000a). Although youth smoking has been linked to social factors, some researchers have observed that the reasons for smoking most frequently cited by adolescents are pleasure and addiction (Eiser, 1985; Sarason, Mankowski, Peterson, & Dinh, 1992). Daughton, Daughton, and Patil (1997) found that 52% of high-school smokers were already “hooked” on cigarettes or believed they had a good chance of becoming addicted within 5 years. However, although some adolescent smokers recognize their susceptibility to nicotine addiction, a significant proportion do not. Applying risk-perception theory, Virgili, Owen, and Sverson (1991) concluded that adolescent smokers perceive less personal risk of addiction than “experimenters” (i.e., occasional smokers), former smokers, and those who have never smoked.

Researchers acknowledge the need for more work focusing on nicotine addiction in adolescents (Colby, Tiffany, Shiffman, & Niaura, 2000b; Kassel, 2000; Moffat & Johnson, 2001; Shadel, Shiffman, Niaura, Nichter, & Abrams, 2000). Developments in social science underscore the need for professionals to understand the lay knowledge that underpins health beliefs and practices (Popay & Williams, 1996). In addition, theories of

health behaviour suggest that the way in which one views a health risk has implications for decision-making and lifestyle choices (Montano, Kasprzyk, & Taplin, 1997; Strecher & Rosenstock, 1997). It is well known that most addicted adults started smoking in adolescence. If we are to reduce nicotine addiction, we need a better grasp of how teenagers understand and explain nicotine addiction. The views of 10- and 11-year-old children on smoking and addiction indicate that they are vulnerable to taking up smoking and becoming addicted (Rugkasa, Knox, et al., 2001). Adolescent girls' experiences of nicotine addiction include resistance to a smoking identity, failure to view addiction as a consequence of their smoking, and surprise at how quickly they could become addicted (Moffat & Johnson, 2001). Ongoing close attention to adolescents' views could inform health promotion interventions to better address nicotine addiction among youths.

Several explanatory models of nicotine addiction have been proposed to delineate the causal factors. Genetic researchers have proposed that genetic and environmental factors influence smoking initiation and continuation (Koopmans, Slutske, Heath, Neale, & Boomsma, 1999; True et al., 1997) and that specific genes play a role in determining smoking behaviour (Mah, Tang, Liauw, Nagel, & Schneider, 1998; Marubio & Changeux, 2000; Rosecrans, 1989). Others have proposed a "sensitivity" model in which an individual's initial sensitivity to nicotine determines the development of tolerance for, and thus dependence on, nicotine (Pomerleau, 1995; Pomerleau, Collins, Shiffman, & Pomerleau, 1993). Physiological models also have been proposed to explain the action of nicotine on nicotinic receptors in the brain (Mah et al.; Marubio & Changeux; Lueders et al., 1999; Rosecrans). An additional source of exposure to nicotine is environmental tobacco smoke (ETS). While cotinine levels reveal that many youths are exposed to nicotine via ETS (Ashley et al., 1998), there is no evidence that this exposure increases their risk of addiction. Psychological models focus on affective and emotional factors that predispose a person to nicotine dependence. For example, the self-medication model (Gilbert & Gilbert, 1995) describes how individuals cope with difficult situations by smoking and may explain the addictive potential of nicotine in persons with depression (Balfour, 2000; Benowitz, 1999).

Although influenced directly by emerging scientific and medical evidence, societal explanations of addiction are culturally bound and have shifted over time with changes in dominant social and moral values. Researchers have described the social constructions of addiction to drugs and alcohol, highlighting the common-sense understandings of various publics and how they function as paradigms for constructing the world and give meaning to experience (Heim, Davies, Cheyne, & Smallwood,

2001; Nichter, 2003; Peele, 1985). These constructions are multidimensional and sometimes contradictory. For example, Heim et al. suggest that the concept of addiction is used to remove blame for unfavourable behaviour and simultaneously to stigmatize morally. With the increasing public attention on tobacco control, scientific theories of nicotine addiction are entering public discourse and influencing the ways in which society views nicotine addiction.

Constructivists argue that constructions and reconstructions of reality are experientially based and dependent for their form and content on consensus among individuals or groups (Guba, 1990). Adolescents are exposed to education on the adverse effects of smoking through school programs, television, and the guidance of parents and health professionals. However, little is known about how youths view nicotine addiction in the context of health education, their personal experiences with smoking, and other factors such as policies aimed at limiting youth access to tobacco. The purpose of this qualitative study was to examine dialogues with teenagers about tobacco use and to describe their views on nicotine addiction, no matter how partial or implausible.

Methods

In this qualitative study (Lincoln & Guba, 1985), we carried out a secondary analysis of interviews with youths conducted as part of several research projects focused on teenagers' experiences with tobacco use. Adolescents with a variety of smoking histories were recruited. They included regular smokers, occasional or social smokers, and those who considered themselves to be former smokers. The open-ended interviews were based on techniques described by Kvale (1996) and focused on gaining in-depth accounts of adolescents' experiences with tobacco. The interviews covered a wide range of topics, including personal experiences with cigarettes and smoking, observations of others' smoking behaviour, and views on addiction. The interviews lasted from 45 to 60 minutes and were audiotaped and transcribed. All youths provided informed consent prior to participating in the interviews.

We began by analyzing a set of 47 individual interviews and one focus group interview that were available for secondary analysis. Six youths who were recruited for a pilot study participated in a focus group exploring issues of tobacco use. The majority of the individual interviews ($n = 35$) were collected as part of a qualitative study examining the transition from experimentation to regular tobacco use among adolescents (Johnson et al., 2003). We recruited youths who self-identified as casual, regular, or former smokers, as well as a few who had only experimented with smoking. Another 12 interviews were conducted with adolescent

female smokers in a study to explore the meaning of nicotine addiction (Moffat & Johnson, 2001). Using NVivo, a computer program that facilitates qualitative analysis, we searched the data set for segments of text that included explanations of dependence, addiction, lack of control over smoking, and experiences associated with cessation. These sections of data were then subjected to detailed thematic analysis that compared and contrasted explanations to identify unique explanations of addiction and the strategies used to construct them.

The research team discussed the analyses and interpretation at regular intervals. Questions were raised on the basis of the data reviewed, and directions for additional search and analytic strategies were set. After the initial phase of data analysis, preliminary findings were verified and refined through an additional secondary analysis with a second set of open-ended interviews ($n = 19$) from an ongoing study of dimensions of adolescent tobacco dependence (Johnson et al., 2002). These interviews also focused on adolescents' experiences with tobacco and included individuals with a variety of smoking histories. Finally, eight primary interviews were conducted with selected adolescents. Some of these interviews were conducted with individuals who had been interviewed previously, because they were good informants. The questions in these final interviews focused specifically on adolescents' understanding of how nicotine addiction arises and provided an opportunity to validate the findings.

Results

In total, interviews with 80 adolescents were analyzed in this study. Slightly more males than females participated and the average age was 16 years (see Table 1). On average, participants tried their first cigarette at age 13 (range 9 to 17 years) and smoked for 3 years (range 1 to 7 years). Adolescents with a variety of smoking histories were included in the data sets used in this study: 41 defined themselves as regular or daily smokers, 21 as occasional or social smokers, and 18 as former smokers.

Adolescent Constructions of Nicotine Addiction

The participants constructed their understanding of nicotine addiction in the context of their observations of smokers, integrating what they heard from peers, family members, educators, and the media with their own experiences with cigarettes. Some youths began by admitting that they had "no clue" about addiction and indicated that they had never thought about what made them want cigarettes. The interview represented the first time they had reflected on or discussed the development of nicotine addiction. Many of the participants puzzled over nicotine

Table 1 Demographic Information for All Participants (n = 80)

Characteristics	N	%
<i>Gender</i>		
Male	45	56
Female	35	44
<i>Smoking status</i>		
Occasional/social	21	26
Regular/daily	41	51
Former	18	23
	Mean Years (SD)	Range in Years
Age at time of interview	16 (1.3)	13–19
Age at first whole cigarette	13 (1.5)	9–17
Duration of smoking	3 (1.7)	< 1–7

addiction, stating that they did not know much about it. For example, one youth who indicated that she was aware of the health effects of smoking said she did not know how long it takes before one becomes so addicted that it is difficult to abstain [15-year-old female, daily smoker, 3–4 quit attempts]. Others had well-formed opinions and explanations. Nonetheless, when probed, all the participants attempted to understand nicotine addiction. For example, one youth said: “I don’t know if your lungs become dependent on the smoke you inhale. It seems kind of silly, because of course they don’t want the smoke, so why would they?” [16-year-old male, occasional smoker]

The adolescents tended to use several strategies to distance themselves from nicotine addiction. Few admitted to being addicted or even to being vulnerable to nicotine addiction. They drew on their observations of other smokers (who they thought were addicted) instead of exploring their own addiction. Others talked about nicotine addiction in a depersonalized way — for example, by describing the effects of nicotine on “the body” and “the brain,” effectively separating addiction from their subjective and embodied experiences with smoking. Yet others focused on factors beyond one’s control (e.g., the actions of others, personality traits), and in so doing presented some teenagers as passive, vulnerable, and powerless in the face of addiction.

Our analysis of adolescents’ constructions of nicotine addiction revealed four broad explanations. These presuppose causal pathways of nicotine exposure leading to addiction. Some concentrate on the phenomenon of addiction itself, others on the factors or circumstances that

lead to it. A possible fifth explanation is that some youths pretend to be addicted in order to project a “cool” image. While the data support five predominant constructions, some teenagers drew on several concurrently in an attempt to provide a full account of nicotine addiction. Each of the five explanations is described below.

Nicotine addiction as repeated use. Some adolescents explained that addiction occurs with sustained smoking, arguing that nicotine “adds up over the years.” This was perhaps the simplest and most obvious explanation; the more one smokes, the greater one’s chances of becoming addicted. At times, the tone used by adolescents in offering this explanation suggested that the cause of nicotine addiction is self-evident. For example, one youth stated, “It’s not like someone with red hair becomes addicted; it’s just who becomes addicted to it smokes enough and starts to need it” [14-year-old female, daily smoker, 2 quit attempts]. The informants further emphasized that addiction is associated with lengthy periods of smoking, daily smoking, excessive smoking, or “overdoing smoking.”

Some adolescents explained why they believed that repeated use leads to addiction. Three postulations were provided, one focusing on the accumulation of nicotine, another on the development of a “taste” for or enjoyment of smoking, and the third on the development of a smoking habit.

According to the first postulation, nicotine “builds up” in the body and creates a need for more nicotine. One adolescent described the process of nicotine addiction as follows: “You start off with a little bit and you just build up and build up... That’s the way their addiction forms. They just need a little bit and then they need more and then they need more” [16-year-old female, occasional smoker]. Others tried to formulate a more sophisticated response but admitted that they did not know how this “build-up” of nicotine leads to addiction: “I guess it’s just tolerance. I don’t know if there’s a certain tolerance that your body has for addiction... I actually don’t know the basis of addiction. I don’t know if it’s a mental aspect or biological” [18-year-old female, occasional smoker].

The second postulation is that “repeated use” leads to greater enjoyment. This explanation implies that addiction occurs as one acquires a taste for or appreciation of smoking: “You start to like it more, and so the more you like it, the more often you want it. So I think the more that somebody smokes for a while, the greater the chance of them getting addicted” [16-year-old female, daily smoker, 1 quit attempt].

In her effort to understand the phenomenon of “enjoying” an addictive substance, one girl compared nicotine addiction to “addiction to a job,” associating addiction with enjoyment of a chosen activity:

“Addiction means mostly, like, you get addicted because you enjoy it... Say you like a certain job, and you like it a lot, and you start getting addicted to it. That’s how it goes” [15-year-old female, daily smoker].

The third way some adolescents believed repeated use leads to addiction is through habituation, or “getting used to” smoking. One adolescent explained how smoking had become a part of her everyday life:

When you’re a smoker you get used to smoking at different points in the day. Like, it’s weird to think, but certain times, like before I go to bed, I have to have a cigarette. As soon as I wake up and have my coffee I have a cigarette.... There’s certain times where...when I’m driving I have to have a cigarette...I smoke a lot more when I’m driving just because it’s what I do, like, I drive and I smoke. It’s natural to me now. [17-year-old female, daily smoker]

Some adolescents, it was suggested, become attached to smoking routines and used to the actions involved in smoking (e.g., holding a cigarette), the implication being that addiction occurs because smoking is associated with certain events, activities, and feelings, and as a result people “just keep on doing it.”

Many of the participants who believed that nicotine addiction is related to repeated use introduced the idea of degrees of addiction — light, moderate, and heavy. Some speculated that “heavy addiction” occurs among older people who have smoked for extended periods. One youth explained: “I think that for someone who has been smoking for maybe 60 years...their addiction is going to be a lot stronger and a lot harder to break, as opposed to someone who is only smoking for 6 months” [16-year-old female, daily smoker, no quit attempts]. These adolescents reasoned that those who smoke relatively little or who have smoked for a short period experience less addiction: “Our friend who just took up smoking is lightly addicted because he doesn’t smoke very much. I’m moderately addicted because I will feel the need for a cigarette every so often” [16-year-old male, occasional smoker]. One adolescent who described her smoking as a “habit” did not believe she had reached the point of being addicted because she had not yet started “craving” cigarettes. Nevertheless, because of her concerns about addiction she remained vigilant for signs of craving so she could stop smoking before passing “the point of no return” [16-year-old female, daily smoker, no quit attempts].

The teenagers drew on observations of people they knew who were addicted to support their conclusions: “My God, Mom...smokes a lot and she’s...always, like, ‘Oh, I need one, I can’t concentrate...’ I think that’s just because she has been smoking her whole life and she just

smokes really a lot of cigarettes” [16-year-old female, daily smoker, no quit attempts].

Nicotine addiction as the body and brain “getting used to it.” Some adolescents suggested that addiction occurs when the body and the brain “get used to” nicotine, thereby creating a continuous need for nicotine to “function normally.” Without nicotine, an addicted individual experiences cravings: “Your body says you need one at that time; you just can’t ignore what your body says.” Some focused on the sensations or effects that the body experiences in the absence of nicotine: “My understanding is that addiction is when...the body can’t function without it, when the body goes, like, nauseous, gets all stressed out and, you know, just doesn’t function, just like your whole mind doesn’t think right or anything” [17-year-old female, daily smoker].

Thus, nicotine addiction was conceptualized by these youths as beyond one’s control and was equated by some with the body’s need for food. Others focused on the role of the brain in nicotine addiction: “The brain forces you to think you need a cigarette.” Although some of the adolescents used the terms “brain” and “body” interchangeably, others were adamant that addiction is caused by one or the other, and still others referred to the combined roles of the brain and the body.

The descriptions of the mechanisms by which the brain and body “get used to it” varied in sophistication and detail. Some of the adolescents were unable to specify the addictive component(s) of cigarettes: “...tar or something in the cigarette.” They pointed to a vague bodily process that causes people to lose the ability to control their smoking: “You’re not wanting it, really wanting it [a cigarette]...but, inside, something’s just, like, needing it.... It’s like the person inside you is wanting just to have one” [18-year-old male, daily smoker, 2 quit attempts].

Others were more specific about the mechanisms by which the brain and body “get used to it.” They suggested that as people smoke more frequently their nicotine “levels go up” and as their body becomes “more tolerant” there is a greater need for nicotine: “That’s the way their addiction forms. They just need a little bit and then they need more and then they need more.” Some of these youths spoke of nicotine in the way one speaks of drugs such as heroin, using terms such as “dose,” “levels,” and “withdrawal.” Others used the concept of “refuelling” to explain the need for nicotine — stating, for example, that smokers lose nicotine through sweating, creating a need to “refuel” the body by smoking to top up their nicotine level. They postulated that this explains why smokers crave cigarettes after exercise and sexual activity.

Finally, some of the adolescents offered more sophisticated explanations, reasoning that it is the “cells” that become addicted. They theorized that certain people become addicted to nicotine because their bodies

lack a chemical or lack a protective gene. Others maintained that the body stops producing naturally occurring chemicals with prolonged smoking:

Just like Chapstick [lip balm], it stops your body from producing the stuff that makes your lips moist. Like, nicotine is replacing a chemical that makes you calm when you are stressed out. And so, when you take away your cigarette, your body doesn't know how to produce the chemical any more, and your body gets all freaked out. [17-year-old male, daily smoker, 3 quit attempts]

These adolescents spoke of the consequences of not acquiring sufficient nicotine. The short-term consequences, they believed, include irritability and cravings.

Nicotine addiction as personal weakness. A third explanation of nicotine addiction was based on the premise that it develops because of “weakness” or vulnerability due to “personal problems.” The youths explained that this weakness is reflected in smokers’ admission that they had not really wanted to start smoking, as well as their inability to cut down or quit. One youth maintained that adolescents often take up smoking when they feel vulnerable in certain situations and have a cigarette whenever they experience this feeling. Another suggested that smokers typically have low self-esteem and smoke to “prove they are better” or to “look cool.” It was argued that not all teenagers who smoke become addicted, that the development of addiction “depends on what kind of person they are.” Thus, addiction was viewed by some as a result of “mental weakness” or “weak-mindedness” rather than as a physical condition.

In these explanations of nicotine addiction as a personal weakness, a moral tone was evident in the language used and the adolescents tended to distance themselves from addicted smokers by disclosing their own perceived character strengths. For example, some maintained that the weak become addicted while those who are “in control” of their lives and their smoking do not: “I’ve been so comfortable with smoking and I’m not really getting addicted because I know I’m so much in control of my life... If people had more control of their lives, perhaps they [would] know when enough is enough” [16-year-old female, occasional smoker]; “Very few young people are lucky enough to be strong enough to not get addicted” [16-year-old female, daily smoker, 3 quit attempts]; “It shows that they are weak if they are addicted because they don’t have the willpower to quit” [15-year-old female, daily smoker, 3–4 quit attempts].

Some adolescents associated personal weakness with a particular kind of “addictive” personality characterized by lack of confidence, inability to

resist peer pressure, and lack of personal conviction. One boy reasoned that immaturity is a factor in susceptibility to addiction: "When you are younger you have...a more addictive personality" [17-year-old male, occasional smoker]. Because of the focus on willpower and mental control of smoking, some adolescents suggested that nicotine addiction is not a true addiction, like heroin addiction, and referred to the need to smoke cigarettes as a "so-called addiction." Although they admitted that some youths need to smoke, they believed that smoking cigarettes "is not really an addiction if you can control it."

Nicotine addiction as family influence. Some of the adolescents explained that nicotine addiction occurs because of the influence of both immediate and extended family members. Instead of viewing nicotine addiction as stemming from personal characteristics or choices, they believed that people become *passively* addicted. Many of the participants who held this position were regular smokers and had several relatives who smoked. Three central arguments were used to support this position: the availability of cigarettes in the home, exposure to smoking and ETS, and an inherited predisposition to addiction.

If family members smoke, reasoned some youths, cigarettes are readily available and the likelihood of their becoming addicted increases: "If they can get their hands on them, chances are they'll become addicted" [15-year-old female, daily smoker, no quit attempts]. These youths suggested that they have no choice but to smoke when cigarettes are available: "I might as well smoke it if I have it" [18-year-old male, daily smoker, 2 quit attempts].

Many of the adolescents maintained that seeing others smoke and being exposed to ETS, particularly in the home, creates an addiction to nicotine. They reasoned that when family members smoke, children "get used" to smoking and ETS and hence view it as "normal." They explained that even the smell of smoke becomes a part of everyday life and is associated with the home:

If your parents smoke, you have so much more chance of becoming [addicted]. For one [thing], you've had it in your system, like second-hand smoke, as long as your parents have smoked. And then it's just...second nature. It doesn't smell like stale cigarettes. It smells like home [laughs] or like...the living room. [17-year-old male, occasional smoker]

These teenagers expressed a belief that continued exposure to smoking creates a disposition to smoke and to become addicted. One youth said that after her parents divorced she was no longer exposed to cigarette smoke because her father, a regular smoker, had left the home. She started to have feelings of panic and reasoned that she was experiencing nicotine withdrawal even though she was a non-smoker at the

time. She maintained that this prompted her to take up smoking and to become a regular smoker [15-year-old female, daily smoker].

One boy reasoned that daily exposure in the home leads to “smoke being in your system.” Another adolescent offered a detailed account of how children’s exposure to smoke sensitizes them to cigarettes and puts them at risk for addiction:

When you’re younger and there’s smoke around you...there’s potential for being addicted to it just from the clouds of smoke that go onto children’s faces. And so they [parents] might already be creating this addiction that they are not even aware of. And so when they [the children] have that first cigarette, it’ll be sort of a re-enactment of when they were younger with all the smoke around them. [17-year-old female, former smoker, 3–4 quit attempts]

This girl attributed sensitization to the subconscious acceptance of smoking that occurs when everyone smokes: “And if they’re smoking it gives you this idea, in your head, that...what those kinds of people do is okay... I think subconsciously, somewhere in my brain, it is still...okay, everyone does this.”

A third attribution of addiction to family influences was based on the proposition that if one’s relatives smoke or have other addictions there might be a hereditary component to nicotine addiction. When asked why some people are more prone to addiction than others, one girl stated, “I don’t know if it’s hereditary, but both my mother and [I] smoke” [16-year-old female, occasional smoker, 1 quit attempt]. Others traced the smoking patterns in their family: “My mom and my auntie and my uncles, they all smoke. And my cousins smoke. And even my dad’s side smoke, his sister and all my cousins. So maybe it’s in your family or something. When they smoke, then you smoke” [16-year-old male, daily smoker, approximately 10 quit attempts]. Some were convinced they were susceptible to addiction because of a family predisposition. One youth who was a daily smoker stated:

I have an addictive personality because people in my family have been addicted to...certain drugs and...alcohol and stuff like that. My dad had a drug addiction and people...my grandparents and...in the family, like, genes, kind of. My dad always tells me I have to be careful with everything. Because of him I can get addicted easily to more stuff, because of him having the addiction. [16-year-old female, daily smoker]

Nicotine addiction as “image.” Most of the youths described nicotine addiction as something they recognized in others. A few theorized that there is no such thing as nicotine addiction, particularly among teenagers, because people can stop smoking if they really want to. They

further suggested that youths who claim they are addicted are simply pretending to be addicted, arguing that smoking “doesn’t seem to come naturally to them” and that they do not look like “real smokers.” They referred to this phenomenon as “false” or “made-up” addiction, explaining that teenagers smoke to impress and to project a “cool” image:

You get that person who has, like, one smoke a month and “Oh, I am so addicted, I am so addicted, blah, blah, blah.” And they just blurt out things they have heard before. They are trying to make it sound like they smoke all the time. [16-year-old male, daily smoker, 7–8 quit attempts]

The adolescents who subscribed to the notion of addiction as image suggested that teenagers who pretend to be addicted are more dependent on the image than on nicotine. Acting addicted was said to offer certain advantages. For example, one youth admitted to “acting addicted” in order to “hang out” with a certain group [14-year-old female, occasional smoker]. Another suggested that people who want to be “known as smokers” act addicted because it is “cool” [16-year-old male, daily smoker].

Discussion

Other researchers have described children’s ideas concerning nicotine addiction (Rugkasa, Kennedy, et al., 2001; Rugkasa, Knox, et al., 2001) and adolescent girls’ experiences of it (Moffat & Johnson, 2001). However, this is the first study to focus specifically on adolescent constructions of nicotine addiction. Compared to the ideas of children, which focus almost exclusively on the dangers and costs of addiction, those of adolescents are more complex and include less dramatic and harmful images of nicotine addiction. We also noticed a tendency for adolescents to recognize and focus on nicotine addiction in others rather than in themselves, and to implicate other smokers in youths’ vulnerability to nicotine addiction. These perspectives on nicotine addiction extend our understanding of the profound influence of parents who smoke on the smoking behaviour of children, beyond that suggested by social modelling theories. Echoing the findings of Moffat and Johnson, the participants in this study downplayed the link between individual behaviour and the development of addiction; a number of them saw themselves as immune to addiction even though they smoked.

Why do teenagers minimize their role in nicotine addiction? It is possible that they are simply resisting the warnings of authority figures about addiction. It is also possible that these findings reflect a tendency to distance oneself from the label of addiction because in social discourse

addiction is often associated with lack of control and immorality and is viewed as distasteful. Some might suggest that the findings reflect theories of a heightened egocentrism during adolescence that contributes to perceived invulnerability to natural hazards and behaviour-linked risks. Nevertheless, there is a growing body of research challenging commonly held views related to adolescent competence in judging risk and uncovering the multidimensional components of risk judgements (Millstein & Halpern-Felsher, 2002).

The constructions of nicotine addiction provided by these adolescents reflect elements of different models of addiction that have had credence in public discourse, such as genetic, exposure, and adaptation theories (Peele, 1985). In general, however, the youths ascribed far less importance to scientific “facts” than to personal experiences and observations, hunches, and, sometimes, misinformation as they struggled to understand the mechanisms involved in nicotine addiction. Other studies have also found that lay conceptualizations of addiction reflect personal knowledge of addictive substances and morals, rather than facts about the addicted state (Heim et al., 2001).

Teenagers clearly draw on various sources of information regarding addiction (and addicts). The challenge for nurses engaged in health education is to be aware of how adolescents position themselves in relation to “addiction” and to be mindful of how education campaigns around tobacco and other drugs impact the social climate for disclosure and dialogue with regard to substance use. By removing some of the moral censure that accompanies “addiction,” and by facilitating meaningful dialogue with youths about tobacco use and addiction, we will be able to provide a foundation for introducing a scientific understanding of nicotine addiction. Our knowledge of nicotine addiction is evolving rapidly, with new discoveries being made related to genetics (Li, 2003; Yoshimasu & Kiyohara, 2003) and the influence of sex and gender on addiction (Benowitz & Hatsukami, 1998). In addition, there is new evidence suggesting that some teenagers develop nicotine addiction more rapidly than previously theorized (DiFranza, Savageau, Fletcher, et al., 2002; DiFranza, Savageau, Rigotti, et al., 2002). Many of these discoveries have received media attention and inevitably inform adolescents’ views on tobacco use. It is important for nurses to keep up to date with new discoveries and incorporate relevant findings into health education programs focusing on tobacco.

Lay theories of health and illness are embedded in causal schemas that are grounded in life experiences (Stein, Roeser, & Markus, 1998). The realities described by the participants in the present study pose considerable challenges for nurses and health educators. How can we provide support for adolescents who do not want to smoke yet belong to fami-

lies in which smoking is “normal” and in which encouragement to quit is non-existent? Furthermore, as suggested by Stein et al., lay theories may not be easily replaced because the behaviours these causal schemas support become enmeshed in individuals’ self-concepts.

The youths interviewed were interested in the topic of nicotine addiction and puzzled over it, but questions remain. What notions of nicotine addiction should be cultivated among youths, and to what end? Tobacco-reduction programs for children and adolescents have concentrated on smoking bans on school premises (Northrup, Ashley, & Ferrence, 1998; Pickett, Northrup, & Ashley, 1999) as well as on prevention regarding the long-term, often delayed, adverse health effects of smoking and strategies for resisting smoking (BC Ministry of Education & BC Ministry of Health, 2000). The limited attention given to nicotine and its immediate effects is perhaps reflected in the views expressed by the participants in the present study.

The findings of this study suggest some priorities for nurses involved in youth tobacco control, including the fostering of accessible and accurate health education related to the action of nicotine. Although information about nicotine addiction will likely be insufficient to deter adolescents from smoking, knowledge that responds to their social contexts and experiences is key to empowering them to make decisions about their health.

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Authors' Note

This research was supported by grants from the British Columbia Medical Services Foundation and the National Cancer Institute of Canada, and through career awards from the Canadian Institutes of Health Research (CIHR) to Drs. Bottorff, Johnson, and Ratner.

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