



The meaning of smoking as health and social risk in adolescence

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Abstract

This investigation describes what smoking means to adolescents, and attempts to better understand it as a rite of passage. Applying a social ontology to an often-individualized issue, interviews were conducted with 20 adolescent smokers between the ages of 13 and 19. Results show that adolescents possess detailed information about the risks of smoking. Both age and gender differentiated the meanings of smoking which were found to be both positive and negative. Valence inconsistency increased with age. Results are interpreted within a cultural, developmental framework and suggest reconstructing smoking risks as potentially positive. Implications for research and prevention are discussed.

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Introduction

Population-based studies of youth smoking suggest an ironic element. Youth who smoke have substantial information about the health risks associated with smoking (Ontario Tobacco Research Unit, 1997), state a readiness to quit that subsequently decreases after 20 years of age (Stephens & Stephens, 1996), and yet continue to smoke. Reports on youth smoking further

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suggest that the incidence of adolescent experimentation with tobacco has increased steadily over the last 40 years (Addiction Research Foundation, 1998). Despite a growth in prevention and cessation programs, 29% of females and 26% of males from ages 12–19 years report having smoked in the last 12 months (Ontario Tobacco Research Unit, 1997).

According to the Addiction Research Foundation (1998), over half (55%) of adolescent smokers have attempted to quit during the previous year. Among those who have attempted to quit, 22% tried four or more times, 41% could not remain abstinent for longer than 1 week, and 57% reported that quitting was very difficult. Age tends to be positively related to successful smoking cessation such that older smokers are more likely to make successful quit attempts and are less likely to relapse (Bjornson et al., 1995; Freund, D'Agostino, Belanger, Kannel, & Stokes, 1992; McWhorter, Boyd, & Mattson, 1990). Adolescent smoking remains one of the most consistent predictors of adult smoking. Statistics Canada (1998) has shown that among daily smokers, the odds of being a heavy smoker were 2.5 times higher for those who started at age 13 or younger than for those who started after age 19. Prevention efforts that target youth smoking remain a necessity.

What accounts for this ironic element of adolescent smoking? The answer is related to the way that smoking begins. Interactive models of smoking (Ward, Klesges, & Halpern, 1997) suggest joint influences of biological and addictive components (withdrawal, weight gain and craving), cultural components (gender, age, social context), psychological processes, and demographics (smoking history). However, the interplay of these factors deserves more research attention as it can translate into prevention (Pertraitis, Flay, & Miller, 1995). The development of personal meanings of smoking (Levitt & Selman, 1996; Levitt, Selman, & Richmond, 1991) suggests that smoking decisions are bound up with the individual meanings that the act holds.

Adolescent smokers are one group who can inform such efforts. Smoking youth who have attempted to quit should illuminate the necessary contradictions that occur during smoking withdrawal (Prochaska & DiClemente, 1992). This includes coming to terms with the addictive properties of nicotine, and the possible health and social risks involved in smoking. Specifically, Prochaska (1994) proposes that social components of smoking interventions should increase the pros of smoking cessation and the cons of smoking. Unfortunately, little is known about how to actually facilitate this process or its relation to the culture of youth.

In an attempt to delineate such a process, Hine, Summers, Tilleczek, and Lewko (1997) proposed a knowledge-based decision system based on the idea of mental models. Mental models are representational schemata that enable individuals to make inferences and predictions, to understand phenomenon, to decide what action to take, and to enter events by proxy (Johnson-Laird, 1983). When applied to youth smoking, the model proceeds theoretically in four steps: (1) youth activate information about smoking in short-term memory, (2) they then constitute their own mental model based on their current smoking behaviour, (3) when asked about their smoking, they run a mental model to generate possible pros and cons of smoking and future decisions, and (4) they weigh and combine this information and arrive at a decision upon which they act. Therefore, information is necessary at the beginning of the process and new information and experiences feed into progressively more complex knowledge about smoking.

Given the social nature of adolescent smoking (McDonald & Lawrence, 1996; McKenzie-Richer, 1997; Ontario Tobacco Research Unit, 1997), and the importance of youth culture in understanding social and health risks (Lightfoot, 1997; Tilleczek, 2004), the present article will

describe the social influences that mediate smoking knowledge along developmental lines (Baumrind, 1987; Valliant, 1977). The construct of personal meaning helps to describe this integrative function of knowledge that mediates individual and cultural factors. In a process akin to Giddens' (1984) notion of "structuration", assessing the personal meaning of smoking should illustrate the relationships between youth culture and individual smoking acts. Levitt and Selman's (1996) concept of personal meaning has two useful hallmarks for this work; the interactive nature of the individual in relation to their risk taking culture, and the developmental nature of meaning making which is assessed in relation to the awareness that young people voice about their decisions to smoke.

Therefore, this current investigation has attempted to describe the interpersonal, cultural, and addictive components of adolescent smoking by asking young people what smoking means to them. It acknowledges previous research which suggests that information is helpful but not sufficient in reducing smoking (DiClemente, Hansen, & Ponton, 1996; Durlack, 1997). It is not simply the knowledge of lung disease and cancer that is protective, but the integration of this knowledge with management strategies which are proposed to occur as adolescents make meaning of their smoking. The extent to which adolescents view risk-taking as statements about him or herself, who she or he wants to become, or how he or she relates to others, holds the capacity to be prophylactic against risk (Levitt and Selman, 1996; Lightfoot, 1997). The framework used here allows us to consider an adolescent's growing awareness of the nature of their own smoking within a complex web of social relationships in which the search for rites of passage propel them into adulthood.

This study employs a qualitative approach to more fully understand the population-based irony of youth smoking. Describing the meaning of smoking in the lives of adolescents who take health risks provides insights into the following three components of adolescent smoking: (1) the degree to which smoking youth possess information of smoking risks (2) the extent to which smoking youth are ready to change behaviour in response to this information, and (3) the variable meanings of smoking by gender and age.

Method

Participants

Teachers in grades 7 and 8 (elementary schools); and grades 11 and 12 (secondary schools) approached students to participate in a study about smoking. Both the elementary and secondary schools were located in middle class neighbourhoods of a Northern Canadian community (population approximately 100,000). Within the schools, a maximum variation sampling strategy was employed to create a sample of 20 students, 10 from elementary school (early adolescence) and 10 from secondary school (older adolescence). The groups were also balanced by gender with 5 females and 5 males in each. All respondents were white, Anglophone students.

Smokers were students who were regular cigarette smokers for at least 1 year. Regular smokers were defined as those who self-identified as smoking at least two times per week. Regular smokers were also asked to rate the frequency of their smoking and that of their best friend during the past year. The rating scale ranged from never (0) through nearly every day (6). Other possible scores

Table 1
Mean smoking level by age, participant and best friend

Group	Mean age	Mean rated personal smoking level	Mean rated smoking level of best friend
Early adolescence ($n = 10$)	13.3	4.5	5.8
Older adolescence ($n = 10$)	17.1	5.7	6.0

were: Once or twice (1); once a month or less (2); 2–3 days per month (3); once or twice a week (4); and 3–5 days/week (5). Table 1 reports the mean chronological ages and smoking levels of the sample and their closest friends. It suggests that the sample were smoking, on average, approximately four times per week. Their best friends were smoking, on average, approximately six times per week.

Procedure

No time limit was set on the duration of the interview. Each lasted between 45 and 90 min. All interviews were conducted within the school day. Both parents and students completed informed consent forms. Interviews were semi-structured and contained multiple prompts. The interview protocol involved a recursive concept analysis designed to elicit information about smoking by exploring its meaning and related concepts. The process has been previously employed to describe the social contexts of adolescent risk taking (Tilleczek & Stratton, 2001).

An initial list of thoughts and images was elicited to describe cigarette smoking by stating, “Let’s begin by listing all images and ideas that come to mind when I say the word smoking”. Participants listed out between three and seven concepts. Each was probed in turn for the meaning of that concept in relation to their smoking behaviour. For example, if a student suggested “black lungs” as an image or idea, the interviewer would return to the concept and say “how do black lungs relate to your own smoking?” and/or “Can you say more about black lungs and smoking?” When repetition was reached, or the participant could not add to the concept, the next was probed in turn. This approach has been known to produce reliable and valid data in that the information gathered consistently elicits the meaning of smoking in a rich descriptive way, and helps to avoid the gathering of rehearsed information (Rothe, 2000).

Each interview was transcribed to produce a text-based record of 10–25 pages. The interview was linked to demographic data stored in an SPSS data file. Interview transcripts were sorted into four groups by age and gender (older males, younger males, older females, and younger females). To address the reliability of the method, two independent readers examined the transcripts to cross-check coding and findings. Each reader coded the transcript for main themes about the knowledge of smoking, valence consistency, and developmental thematic analysis. Given that pictorial display is a critical part of qualitative analyses (Miles & Huberman, 1994), the transcripts were analyzed by each reader using visual coding frames in three ways.

(1) *Information about smoking risks*: Responses relating to health and social risks were coded. The categories were decided upon by two independent readers who read the transcripts and reached full agreement on the mutually exclusive categories. Health risks emerged as one or more

of the following categories: cancer related; lung disease; general illness; addiction; heart disease; psychological/mood alteration; and effects related to second-hand smoke. Social risks were coded as one or more of the following categories: the financial costs of smoking; negative attitude and disapproval of friends and family; the negative effect on one's reputation; the negative effect on one's appearance; and negative school and learning outcomes (the loss of time for these ventures). Once categories were agreed upon, transcripts were re-read, responses were tallied, and sums calculated. Multiple responses were allowed within each. The analysis was conducted separately for each of the four groups.

(2) *Readiness and valence analysis*: Readiness to quit was assessed if the participant stated, at any point in the interview, that they would like to quit smoking. Both coders arrived at 100 per cent correspondence on this analysis, by reading the transcript and deciphering if the participant stated such readiness. Valence consistency (towards or against smoking) was analyzed by reading the entire transcript and attempting to characterize the participant as generally feeling positively or negatively about smoking. Given that all participants were smokers, a positive valence towards smoking was considered to be *consistent* in that they expressed positive views about smoking. Those holding a negative valence were *inconsistent*. For instance, "smoking only gets you into trouble" would exemplify negative valence and "smoking is cool" shows positive valence. In general, both coders reached agreement on the general characterization of transcripts for valence. However, it became clear on further discussion, that each transcript held multiple contradictions within it. For example, a participant could suggest that even though they smoke, smoking creates many problems for them (i.e. inconsistent valence). However, later in the interview, they could also suggest that smoking holds positive outcomes (consistent valence). Quotations were selected from the transcripts that helped to explicate the contradictions. Both coders found multiple examples of such inconsistency.

(3) *Developmental and thematic analysis*: This analysis is essentially the coding of answer(s) given to the question: Why do you smoke? For each of the four groups, multiple responses were placed in one of 16 possible sections of a matrix adapted from Levitt and Selman's (1996, p. 223) analysis of risk-taking behaviours based on developmental levels (from dismissive to integrated) and awareness dimensions (See Table 2).

Adaptations were made to Levitt and Selman's (1996) coding scheme such that responses were coded here as relating to smoking specifically and not to risk-taking generally. Also, the original six developmental levels were regrouped into four (eliminating the original "dismissive" and "integrated" as separate levels) and the original four awareness dimensions were re-grouped into three. (1) Agenic responses addressed the manner in which constructs such as personal control, causality and responsibility were conceptualized with respect to smoking. (2) Personalized/self-reflective responses conveyed an appreciation that one's own experience with smoking fulfills or is associated with a need particular to the individual. These included differences in one's pattern of smoking relative to the wishes of others. Responses illustrated a perspective on identity processes (such as motivations or personality style) as related to smoking. (3) Contextual responses refer to the process of connecting a smoking choice to cultural influences such as peer group, social class, age status, smoking by-laws and family dynamics.

Both coders reached complete agreement that the adapted matrix was useful in categorizing the transcripts. A process of successive approximation (Neuman, 2000) was used to work through the interview transcripts and decide on main themes. Multiple responses emerged from the

Table 2
Thematic analysis coding matrix

Developmental level	Agentic	Personalized	Self-reflective	Contextual
Rule-based External Impersonal	External, physical sources affecting everyone the same way. No intention or personal responsibility			
Rule-based External Personal	External, situation-based applied to the self. Intention and responsibility outside self	Experience with risk particular to self but in basis of external and situation factors. Subjectivity acknowledged but not differentiated from self	Observing self takes third person perspective on internal motivations, fears, as they bear on risk choices	Contributions of agency, personalization and reflection integrated into differentiated analysis of cultural factors. Risk is associated with personal background and laden with meaning relevant to self and social relationships
Need-based Internal Not integrated	Internally based influence on risk with focus on motivation, state and wishes, fears. Responsibility and intention not owned by self	Subjective nature of risk perceived as internal, psychologically based and differentiated from self		
Need-based Internal Integrated	Responsibility for internal states underlying risk and the context in which they develop	Uniqueness of risk appreciated as function of both internal states and background history. Simultaneous coordination of subjective and objective	Products of self-reflection become objects of introspection as ground for contextualization	

transcripts. The mutually agreed upon template of the matrix was used to interpret, tally and place illustrative passages. The passages from the transcripts were meant to capture the descriptive essence. An empty cell signals an absence of responses. For example, early male adolescent transcripts produced 31 separate responses to the question, “Why do you smoke?” (See Table 5).

Results

Information about health and social risks

All students spoke about both health and social risks of smoking. Multiple responses of health and social risks (83 and 58, respectively) were coded. Distinct categories and frequencies emerged for each as illustrated in Tables 3 and 4. The overall knowledge and escalating nature of health and social risks was particularly well articulated by one older adolescent:

Already I know I am having respiratory problems. When you are lying in bed and wheezing, there’s something wrong there. The cons certainly outnumber the pros. Heart disease and lung cancer can happen. All the health risks definitely. It kind of takes away from what you can achieve. All of a sudden you’re doing something harmful to your body. Your body isn’t at its

Table 3
Frequency of health risk responses by age and gender

Health risks	<i>n</i>	Early male	Early female	Older male	Older female
Addiction	16	2	5	4	5
Illness/harm	12	3	3	2	4
Heart	10	0	1	4	5
Lungs	16	1	5	5	5
Cancer	16	3	3	5	5
Second hand	6	1	1	2	2
Mood	7	1	1	2	3
Total	83	11	19	24	29

Table 4
Frequency of social risk responses by age and gender

Social risks	<i>n</i>	Early male	Early female	Older male	Older female
Financial	10	3	2	1	4
Negative family view	11	3	3	3	2
Negative view others	11	2	3	3	3
Damage reputation	9	1	3	2	3
Physical appearance	13	3	3	4	3
Loss of time	4	0	1	1	2
Total	58	11	17	14	17

peak. No matter what you do, it won't be as good as it could be. And you are just socially unacceptable. That's really a con. And your parents are disappointed.

Readiness and valence consistency

Every adolescent expressed a readiness to quit smoking to overcome social and health risks. Six of ten (60%) early adolescents were consistent such that smoking held mostly positive meaning in their lives. For the youngest women, the positive valence was related to the socially adaptive properties such as gaining acceptance with the older crowd, attracting the opposite sex, fitting in, rebelling, and having fun (playing). Among the other four (40%), readiness to quit was accompanied by a mostly negative (inconsistent) valence of smoking. Among older adolescents, a self-reflective knowledge of smoking was expressed such that they saw themselves as part of a growing number of youth that wished to quit, but could not. One grade 12 male articulated this the following way:

The thing that I cannot figure out about teenagers is we know the dangers yet we still do it. I can't understand that. I am kind of quitting.

And later in the interview:

Most teenagers have the attitude that nothing can hurt them so I don't think they really care... Maybe I don't have the regular teenage attitude about being invincible because it scares me.

Another male in grade 12 stated:

In the beginning, I thought there was nothing wrong with smoking... Anything that is natural, there is nothing bad with it. I think that was just kind of like a mask to put in front of it so I wouldn't really think of the consequences.

The responses of the older adolescent women were notably contradictory. For example, the following two passages are taken from different sections of the same transcript:

I see the way people look at me now a days. I wish I could stop. I really do. But it is difficult. I've tried a couple of times. Now a days especially, with everyone being so conscious about health issues, people don't want to smoke anymore.

And later in the same interview,

It relaxes you. It sounds silly but it's almost like when you walk into a room and you sit down and you're just kinda scanning... You don't really want to talk to anyone. It gives you time to think. It doesn't really make sense, but I've noticed it. You'll go somewhere and won't really know anyone ... so you just sit down and have a cigarette and you feel like you don't have to talk to anyone... When I started out I thought it was cool. You think that maybe you're a rebel. You're a little teenager and everyone strives, I guess, to be a bit of a rebel. It almost seemed like it was a natural thing to do when you made the change to high school because all of a sudden you were thrown in with these other people who were older than you and it really gave you a false sense of security."

Most male respondents stated a readiness to quit and expressed inconsistent valence in the face of their readiness to quit. The depth of this inconsistency was noteworthy, as exemplified below:

When I look back at all the people who don't smoke, I wish I was like that. A lot of people who don't smoke get a lot better grades and are doing better in school... The people that I hang around with out of school, and if they're a bit older, it's just kind of a stereotype that I put on them—they all smoke, they are all on welfare...I'd say about 90% of them do a lot of drugs and drink a lot. ... When you see the different people in the hallway or in class... you can tell the smokers. A lot of smokers tend to brag... They say "Oh man, I can't wait for next period, then we can get out of here." The non-smokers say, "I have homework to do in the computer room. I have to do some stuff, I have to go to lunch and do all these things during that time. I have to go home because I have a job."

In general, the qualitative characterization of the data for these adolescent smokers is one of contradiction. Only one male adolescent interview could be characterized as consistent. Most respondents stated a readiness to quit smoking, and often described an inconsistent (negative) valence which co-existed with the view that their own smoking also held positive meanings for their social lives. The health risks, however, were seen as consistently negative.

Thematic/developmental analysis

Distinct zones by theme, age, and gender emerged. Early adolescent males gave 31 multiple responses which fell mainly into the centre-left of the matrix (See Table 5). Every young male cited peer pressure as an important reason for smoking. This rule-based, external but personal response was characterized by responsibility for smoking originating with others and relating in an undefined way to their own smoking. A noteworthy trend emerged such that playful meanings of smoking were described including the look, sound and feel of lighters, cigarette packages (sound of foil and plastic), and cigarette smoke itself. The ability to form social groups was also frequently mentioned.

The youngest females gave 38 multiple responses which also occupied the centre-left of the matrix (See Table 6). Of particular interest were the responses detailing the situation-specific nature of the act of smoking and the insistence that peer's influence was internalized (as opposed

Table 5
Early adolescent male smoking meanings

Developmental level	Agenic	Personalized/self-reflective	Contextual
Rule-based Impersonal	Images of smoking as play, Holding fire, lighting lighters, cigarette packages, smoke itself (9)		
Rule-based Personal	Addiction, craving (2)	Curious about parental smoking, Peer pressure (10)	
Need-based Not integrated	Relieve boredom, made my own decision, relax (3)	Need to fit in, helps to form gangs/groups (7)	

Table 6
Early adolescent females smoking meanings

Developmental level	Agenic	Personalized/Self-reflective	Contextual
Rule-based Personal	Cigarettes easy to get, ads for smoking are interesting, (4)	Peer pressure (1)	
Need-based Not integrated	I wanted to, relieve boredom, suppress hunger, relax (10)	Need to fit in, rebellion from parents, chance to break rules, sheer fun of risk (hiding, parties, recess) (situation specific) (21) Smoking is subconscious, relieves emotional pain (2)	

Table 7
Older adolescent female smoking meanings

Developmental level	Agenic	Personalized/self-reflective	Contextual
Rule-based Personal	Addiction, family pressure (7)		
Need-based Not integrated		Fit in or rebel against (peer, siblings, parents) (12)	
Need-based Integrated		Smoking provides false sense of security in social settings (seen as “silly, rationalizing.”) (2)	Addiction seen in historical and contextual context of age, family, peer and societal smoking (laws, availability) Choice to begin smoking made easier by family and peer patterns and encouragement (6) Smoking as meeting internal needs for cohort and status became habit (form of life) beyond addiction (overcome stress, provide control, age status) (3)

to the external nature of the influence of peers by the young males). Other noteworthy themes were the images of fun, play, intrigue and the excitement of executing the strategic interactions necessary to purchase, hide and avoid getting caught. The thrills of smoking as a risk itself, the game-like quality, the “cute advertisements”, and living on the edge of rules were common themes. Unlike the younger males, the females spoke about the use of tobacco to relieve appetite and boredom.

Older adolescent females provided 30 multiple responses. Their pattern was similar to that of the older adolescent males (See [Tables 7 and 8](#)). The older adolescent women spoke consistently of

Table 8
Older adolescent males smoking meanings

Developmental level	Agenic	Personalized/self-reflective	Contextual
Rule-based Personal	Physical addiction (2)		
Need-based Not integrated	Relaxation, boredom (2)	Tastes great when drinking or after a meal, social setting fit in (sibling, parties, peers) (10)	
Need-based Integrated			Choice to begin smoking made easier by family and peer smoking patterns, encouragement, (5) Smoking meets internal needs for cohort and status which, became habit (form of life) as opposed to physical addiction (fill time, look older, be cool as group) (10)

the importance of addiction and expressed an insistence that although they are addicted to cigarettes now (and thus external and agenic) there was a personalized, historical and contextual view. They suggested that the process of initiation into smoking was social and only later became addictive. They were frequently articulate about the place of smoking in meeting a need to fit in with and/or rebel against their social contexts.

Older adolescent male responses ranged from agenic to contextual. Twenty-nine multiple responses were coded, 15 of which were contextualized. Most insisted that the act of smoking was well suited to their youth culture. For example, it was seen as a normal part of the social scene, and mixed well with drinking and partying. Both the older males and females articulated the connection between social context and smoking such that friends and siblings were present most often and incited the act of smoking. However, they insisted that the choice to smoke was also individual and the pressure to smoke was stated to be only imagined or was culturally derived.

In summary, analyses revealed three categories of results as follows:

- (1) Information about the health and social risks of smoking was widespread with concern for illnesses (cancer and heart disease) and harm to physical appearance cited with greatest frequency. Noteworthy gender trends include the lesser range of possible risks cited by males than females. Older adolescents cited more health and social risks than did younger respondents especially relating to cancer, lung disease and heart disease. Participants voiced knowledge of the process of the escalating nature of smoking risks as related to addiction and increased usage. While negative health and social risks were frequently discussed, many positive aspects to smoking were mentioned, suggesting that the risk can be understood as adaptive in gaining social status.
- (2) Valence analysis revealed much inconsistency between smoking behaviour, the expressed will to quit, and the positive meanings of smoking. For the younger group, positive meanings were

related to gaining acceptance, fitting in, and the sheer fun of risk. For the older group, the positive meanings were self-reflective and contextual illustrating awareness of belonging to a growing group of “teenage risk takers”. Older adolescent interviews revealed more frequently articulated valence inconsistency than did early adolescent interviews. However, the majority of respondents voiced simultaneously competing meanings of smoking (positive and negative).

- (3) Thematic and developmental level analyses revealed differentiation of zones of meaning by age and gender. Responses from early adolescent males and females occupied the centre-left zone of the matrix. Responses were agenic and personalized. The adaptive nature of smoking was related to the fun, excitement, play, fitting in, and rebellion. Younger women also found a positive meaning in relaxation and hunger suppression. Older adolescent (male and female) responses were similar to each other, with notable patterns of the cultural and socially adaptive nature of smoking.

Discussion

The general concern of this investigation was the elucidation of the meaning of smoking for adolescents who smoke cigarettes. There were three specific objectives of this study: to assess the degree to which smoking youth possess information about smoking; to assess the extent to which smoking youth are ready to change their behaviour; and to describe variable meanings of smoking by age and gender.

All adolescents possessed detailed information about the health and social risks of smoking. However, the younger group (especially the males) cited fewer risks than did the older group. This suggests a need for more specific information about smoking risks in elementary curricula. The study also suggests that elementary prevention programs could address the socially adaptive meanings of smoking such as group engagement, body image, fun, risk, and the joy of “holding fire”. There is something sublime about smoking as described by these students. Early adolescent culture consists of the transitioning into full adolescence, and smoking is deemed to be an important rite. Prevention could acknowledge the need for empowerment (Tilleczek, 2001, 2003), and find ways to speak with students about alternative ways to gain this status (Tilleczek, 2004).

The status sought by older adolescents consists of rites which transition them towards adulthood. Older youth were more likely to cite health risks due to heart disease, lung disease and cancer. If knowledge is a critical entry point to the process of change (Hine et al., 1997; Prochaska, 1994), this study suggests that knowledge is augmented by the experience of smoking. The older group was more likely than the younger group to reflect on their addiction and contextualize their own smoking as a part of youth culture. The expected growing capacity with age to gain perspective on behaviour (Levitt & Selman, 1996), to consider, and to reconcile advantages and disadvantages in decisions (Prochaska, 1994), was also borne out. The older group’s responses were more self-reflective and contextual. The expected rise in inconsistency in smoking valence with age found here suggests that culturally informed levels of meaning making hold a kernel of contradiction necessary to change behaviour (Prochaska, 1994). This inconsistency in the face of detailed information and experience with smoking signals readiness for transformation (Levitt & Selman, 1996; Lightfoot, 1997). Future research could inform secondary school prevention by assessing the multiple sources of this culturally informed view.

The above suggestions for both elementary and secondary school prevention are based on the age and gender differences which emerged from the data. Similarities are also instructive such that almost all smoking youth were inconsistent in their valance which suggests the messiness and contradiction which is smoking. To approach the act as though it were a straight forward “problem” would overlook the intricacies that this qualitative research suggests. All of these adolescents held detailed information about smoking and tend to problematize only the health issues and risks. The social risks are less often mentioned and are seen as good reasons for beginning and continuing to smoke. If the addictive properties of smoking could be seen to override all other meanings, we would expect the younger group to be more ready to quit. Previous literature corroborates our findings such that older smokers are more likely to make successful quit attempts and are less likely to relapse (Bjornson et al., 1995; Freund et al., 1992; McWhorter, Boyd, & Mattson, 1990). We further suggest that the greater contradiction with age is bound up in finding alternate ways to transition into adulthood.

If we recognize that empowerment and transition play an important part in adolescent smoking, prevention must move past the individualistic “just say no” abstinence approach which pathologizes the transgression. It also calls into question Prochaska’s (1994) proposal that smoking interventions ought to increase the pros of smoking cessation and the cons of smoking. Discussions of the cultural pros that youth see in smoking are a useful step in intervention which can empower youth to recognize their smoking patterns and work towards thinking about healthier risks that they can take to propel their status needs. Holding negative attitudes towards smoking and having non-smoking peers are two consistently predictive variables of adolescent smoking cessation (Halpern, 1994; Hansen, Collins, Johnson, & Graham, 1985). However, interpersonal concerns such as the effects of smoking on others or pressure from friends or family has not been shown as predictive in quitting (Halpern & Warner, 1993). The youth in this study did hold such negative views of smoking and had best friends who were smokers. The fact that they continue to smoke suggests that these negative social pressures are enough to create contradiction, but not enough to overcome the addiction or the need to gain status.

A further practical implication of the study is that the methodology could itself be useful in prevention efforts. For example, it suggests a way to elicit, using mental models interviewing, contradictions which need to be understood prior to launching into a generic prevention program. Personalized smoking patterns can be mapped into descriptive zones for assessment by health educators. For example, peer influence, addiction, and social status operate at differing levels across adolescence. Effective prevention could not only target early intervention (Dryfoos, 1993), but focus to impart information and experience differently for different phases of adolescence. Thus, the ways in which to acknowledge and utilize the fact that youth see risk as adaptive to their lives can be linked to prevention (Moore & Parsons, 2000; Tilleczek, 2000, 2004). Understanding that smoking is seen as a risk which brings positive outcomes leads us to engaging youth to discuss their personal meanings.

Understanding these meanings of smoking is a critical but neglected road to prevention. This study suggests a difficult irony which persists in adolescent smoking, namely youth have detailed information about smoking, are ready to quit, but continue to smoke. There is ambivalence about quitting which is tied up in the addictive and social properties of smoking, and which operates in different ways for different youth. Smoking functions as a cultural rite of passage for adolescents which reflects their searching for ways to claim “adult” status.

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