

BRIEF REPORT

Reconsidering stress and smoking: a qualitative study among college students

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Background: Although it is widely acknowledged among adult smokers that increases in smoking are often precipitated by stressful events, far less attention has been given to smoking during times of stress among youth.

Aims: To address this gap by drawing attention to the social utility of smoking in contexts associated with stress among college students.

Design: Face-to-face semistructured interviews with college freshmen at a large midwestern university in the US.

Participants: Male and female low-level smokers ($n=24$), defined as those who reported regular weekday smoking (typically 3–4 cigarettes a day) and smoking at parties on weekends, were interviewed once in person. In addition, 40 brief interviews with smokers were conducted during final examination.

Measurements: Interviews focused on a range of issues including current smoking behaviour and reasons for smoking. As part of the interview, students were given a deck of cards that listed a range of reasons for smoking. Participants were asked to select cards that described their smoking experience in the past 2 weeks. Those who selected cards that indicated smoking when stressed were asked to explain the reasons why they did so.

Results: A review of qualitative responses reveals that smoking served multiple functions during times of stress for college students. Cigarettes are a consumption event that facilitates a brief social interaction during study times when students feel isolated from their friends. Cigarettes also serve as an idiom of distress, signalling non-verbally to others that they were stressed. Students described smoking to manage their own stress and also to help manage “second-hand stress” from their friends and classmates.

Conclusions: Moving away from an individual-focused analysis of stress to a broader assessment of the social contexts of smoking provides a more nuanced account of the multifunctionality of cigarettes in students’ lives. Qualitative research draws attention to issues including the need for smoking and socialising during examination time, smoking as a way to take a break and refocus, notions of second-hand stress and smoking to manage social relationships.

In the past decade, several US-based studies have reported significant levels of smoking among college students, with approximately 30% of college students reporting having smoked in the past 30 days, and 40% reporting having smoked in the past year.^{1,2} Studies have found that a majority of college students who smoke are social smokers, meaning that they smoke more often with others than when alone, particularly when drinking, and that they smoke at low levels.^{3,4} To understand better the patterns of low-level tobacco use, qualitative research was conducted to examine closely the

contexts in which students smoked. It has been suggested that a better understanding of the social context of smoking may help enhance tobacco control research and practice.⁵ Two broad contexts that begged consideration were positive social contexts in which tobacco use occurred (such as parties where alcohol was consumed), and contexts associated with stress, be this stressful life events (such as the taking of exams) or stressful events related to the management of social relationships and shifts in identity at this time of transition in life.

This article highlights major findings of qualitative research on smoking in contexts associated with stress among college students. It is well established in the general population that increases in smoking are often precipitated by stressful events.^{6,7} We draw attention to the social utility of smoking in contexts associated with stress, acknowledging that tobacco use also has psychological and physiological effects when used as a form of stress management and self-medication.

Three major issues guided the research: (1) to explore the extent to which students use smoking as a multifunctional tool for stress management; (2) to determine whether students use smoking as an idiom of distress and a means of showing empathy when a friend is under stress; and (3) to provide details on the complex of motivations that lead students to smoke during examination time.

METHODS

The paper draws on data from a longitudinal study of college students (2002–3) funded by the Robert Wood Johnson Foundation Tobacco Etiology Research Network. The study was conducted at a large midwestern university, where 912 college freshmen were followed through the academic year to explore patterns of tobacco uptake and trajectories of use.^{8,9} Study participants completed weekly online surveys in which they detailed their use of tobacco and other substances. Survey responses were used to identify informants for the qualitative component of the study. Following the study protocol, half of the students who participated in the web-based surveys were accessible for the qualitative component, ensuring that the other half remained clean from potential bias or behavioural change that might be introduced through the interviews. Preliminary data analyses in month 4 of the study provided insights into the range of smoking behaviour in the sample. On the basis of reviews of these data, we established specific criteria to define various groups of interest, including low-level smokers, who are the focus of this paper. Low-level smokers were identified as those students who reported regular weekday smoking (typically 3 or 4 cigarettes a day) and who reported weekend smoking during a 3-week period during the first semester. Of the students available for the qualitative component, 57 students met the low-level smoking criteria. We randomly selected 30 students for interviews and 24 agreed to participate.

Semistructured interviews with low-level smokers lasted approximately 1 h and focused on a range of issues including

smoking history, current smoking behaviour, reasons for smoking and so on. Students were given a deck of 25 cards, with a reason for smoking listed on each card (eg, because I was drinking alcohol, to catch up with friends, as a study break, to collect my thoughts, to relieve stress). Informants were asked to go through the deck and select the cards that reflected the reasons why they had smoked in the past 2 weeks. They were then asked to talk about their selection and the types of situations that led them to smoke more or less. Students who discussed smoking when stressed were asked for a further explanation for when they did so.

In this paper, we also draw on brief in-person interviews with smokers ($n = 40$) conducted during final exam time, which focused on exam smoking, a time hypothesised to be associated with stress. There were two broad sampling criteria for these interviews: (1) that they were among the one-half of the sample available for qualitative interviews; and (2) that they had smoked at some level during the week of the final examinations. A total of 135 participants were screened and the first 40 who reported smoking were interviewed. The interview was short (10 min) and highly structured, geared towards exploring their smoking experience during the final examinations. Students were asked about changes in smoking during the weeks of the final examinations, reasons for changes and the contexts in which most smoking occurred. A card exercise similar to the one described above was also used.

RESULTS

A review of students' responses highlights multiple functions served by smoking, including that smoking: (1) helped clear one's mind when shifting from one subject to another; (2) served as an aid in alleviating anticipated stress; (3) helped to refocus one's thoughts during a study session, facilitating greater concentration; and (4) served as a reward to celebrate the completion of a study session or an examination. Students also described using cigarettes to change their mood or frame of mind when transitioning from studying to "being social". This might be analogised to an adult having a drink to help wind down after work, a behaviour referred to in the alcohol literature as "re-keying".¹⁰

Examples from the narrative data may help elucidate the multiple functions of smoking to reduce stress in context. Steve, an engineering student who smoked 1–2 cigarettes a day, enjoyed smoking while walking from the residence hall to the library, where he did most of his studying. Smoking helped him relax and transition from the stressful events of the day to the serious concentration and focus he needed for his studies. He also enjoyed smoking when returning to the residence hall as a way to transition to his living space. For Steve, smoking was mostly a solitary behaviour.

Another student, Nick, described himself as "easily annoyed in large freshmen class environments", and reported that smoking helped him cope with anticipated stress. As he explained,

When I'm headed off to class, if I know I'm going to be stressed out, I try to beat myself to it, and calm myself down. Knowing that I'm going to be annoyed, I have a cigarette which makes me feel better.

Students described a variety of ways in which cigarettes helped them study. For example, Emily, who smoked four cigarettes a day, explained how "even if I'm on a roll studying, I'll just suddenly go blank." To help her work through that, she takes a short break, and a cigarette provides her the opportunity to do that. For Emily, smoking is a productive time, shared with friends, that helps relieve the stress of excessive concentration.

During this break, which lasts about 3–4 min, she disengages from her studies, calms down and is recharged. The break is circumscribed, lasting as long as the cigarette. She then returns to her studying with a renewed focus.

For other students, like Brian, a smoking break helps puzzle through an issue allowing him to work more efficiently through a problem he is facing in his schoolwork. As he explained, "... like a lot of times, my homework is something I need to sit down and think about and work out in my head. It just helps if you sit down and smoke a cigarette and think about it, it's a good way to help you reflect." Unlike Emily, who uses her smoking break to disengage from her schoolwork for a few moments, Brian uses a cigarette to facilitate thinking. Although the smoking break is ostensibly for stress relief for both students, cigarettes serve different purposes and meanings for each of them.

Students also discussed the benefits of smoking when experiencing relationship-related stressors. For Stacy, having a cigarette was useful to help modulate or even out emotionally charged stressful states. As she explained, "If I'm upset about something, then I'll have a cigarette. That's the first thing I want to do. If my boyfriend and I get in a fight, then I'll run outside to smoke. It makes me feel better." Similarly, Greg also turned to cigarettes in the face of relational stress, noting, "If I have problems with my family or my girlfriend, then usually I'll smoke more ... It calms me down if nothing else." Even for students who smoked at low levels, there was a strong expectancy that during times of stress a cigarette would deliver relief, if only briefly.

Cigarettes also served as an idiom of distress, signalling non-verbally to others that one was going through a difficult time. In some cases "smoke signals" were interpreted by friends that one wanted to be alone, whereas in other cases smoking was seen as a signal for companionship. Several informants noted that they became concerned when they saw a friend smoking too much, as it signalled that something was wrong, that the person was troubled or worried. This evaluation was based on how much their friend smoked and also the manner and circumstances under which they smoked. Chain smoking, inhaling or exhaling deeply, and clutching the cigarette in one's hand were all mentioned as conveying a message of distress. As an example, John recounted how he had smoked with his girlfriend after a fight: "I can remember when I got really pissed off during a long drive home from a concert. I just chain smoked the entire way. I was trying to prove a point to her while I was doing it." Rather than talk to his girlfriend about what he was feeling, John used his cigarettes to communicate negative affect.

Notably, some informants reported that at times they smoked not because of their own stress, but because a friend was stressed. This could play out in two divergent ways. In the first case, which we label "empathetic smoking", one smokes a cigarette with a friend as a way of showing support when they are experiencing a difficult time. Empathetic smoking can be thought of as the sharing of presence on a somatic and emotional level, which may involve engaging in a similar rhythm with the person who is stressed. It may or may not involve talking—in fact, smoking a cigarette together may replace the need to talk about a problem. We found this to be the case particularly among men who found it difficult to articulate feelings.⁹ Engaging in empathetic smoking entails the use of a cigarette as a tool to express solidarity with a friend. For example, one male student who typically smoked one or two cigarettes a day described how he sometimes smoked more when his room-mate was distressed. During such times, he smoked to keep his friend company, which he thought would make him feel better.

A second pattern of behaviour, overlapping with, but distinct from, empathetic smoking, is best described by the term “second-hand stress”. In such cases, which were more common among women, the stress that one’s friend was experiencing actually became their own. Kate, for example, explained how she often experienced the stress of her close friends. She noted, “When someone’s upset, like a really good friend, I’ll get upset also. If someone has hurt my friend’s feelings or done something intentionally to my friend to upset her, it makes me mad, so usually I’ll have a cigarette to cope with that.”

The concept of second-hand stress also emerged in interviews conducted during the final examination, a period associated with higher stress and, which our quantitative data indicated, was associated with higher aggregate levels of smoking.¹¹ During this time, we identified several reasons why students increased their smoking, besides experiencing stress over an upcoming examination. Indeed, the most common reason cited for smoking during the examination was to be social—that is, to join friends for a study break. While some students took study breaks alone, other students described taking a break with friends outside the residence hall or the library. Students reported that they took a smoking break not because they were stressed out or needed a break, but because a friend was stressed out and needed to take a break. Examination stress was described as “contagious”. Studying long hours with friends nearby meant more invitations and opportunities for study breaks involving cigarettes. By going out and smoking together, students experienced a feeling of solidarity and camaraderie with others—a comforting feeling that one was not alone in their misery. Other students explained that they had poor study skills, so taking frequent breaks was useful. Cigarettes provided an opportunity for a short break, not a long break as would be needed if they went out for food.

Smoking with friends during the week of the final examinations was useful because during this time there were no classes or parties to attend, so smoking breaks provided a good opportunity—in fact, one of the only opportunities—to socialise

with friends and catch up on what was going on with others. Students explained that increased free time because of having no more classes, coupled with the monotony of studying, left them feeling bored. Almost half of the low-level smokers we interviewed reported that their smoking increased during finals mostly because of boredom. As one male student explained, “Boredom definitely causes the need to smoke a cigarette. I don’t know if it’s just because you don’t have anything to do or what, you just see them sitting on your table and you’re just like ‘waste a couple of minutes, go out and have one, talk to some friends’.”

Discussion

So how does qualitative research add to our understanding of smoking during times of stress among low-level college smokers? First, we draw attention to the multifunctionality of cigarettes in students’ lives, in addition to how cigarettes function as a nicotine-delivery device. Cigarettes are a consumption event that facilitates both “time-out” and “time-bounded” social interactions.^{12, 13} Smoking is undertaken both as a means of taking one’s mind off of a stressful subject/event as well as an aid in focusing one’s thoughts when under stress. An invitation to smoke a cigarette creates an opportunity to interact that is stress reducing. This opportunity is elastic: the social interactional time may either be open-ended and truly “time-out”, or limited to the time it takes to smoke a cigarette making it an “efficient” time marker.

A second point highlighted is that smoking serves as an idiom of distress as well as an opportunity to bond socially with another who is feeling stressed. Engaging in empathetic smoking may be as a somatic mode of attention, as a way of establishing a sense of connectedness through the shared act of smoking, especially when smoking takes on a rhythmic quality.⁹ Smoking provides a shared time and space where strong emotions may be diffused.

A third point emerges from a close examination of why more smoking occurs during the week of the final examination. Moving away from an individual-focused analysis of stress (typically examined by stress scales) to a broader assessment of the social context of smoking leads us to reconsider what might otherwise seem like an obvious correlation not worthy of further inquiry. To understand smoking among college students, it is not enough to measure the correlation between stressful events, such as final examinations, and changes in levels of smoking among students. It is all too easy to assume that such correlations are indicative of a stressful event.

An important methodological lesson is to be learnt from a reassessment of smoking during finals. “Finals week” is not simply a risk factor predisposing to higher rates of smoking, but is a risk marker for a whole cluster of behaviours. A closer examination of what is actually transpiring in context gives a more highly nuanced account, drawing our attention to states of boredom, the need for socialising, empathetic smoking and second-hand stress, smoking as a way of taking a study break or refocusing, and smoking as a way of re-keying and celebrating the end of an examination. Future studies need to consider the social functions of smoking at times when students experience stressful social relations.

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What this paper adds

- Social smoking among college students is a recognised and growing concern among tobacco control practitioners.
- To date, relatively few qualitative studies have been conducted among this population, and little is known about the social contexts that contribute to increased smoking during times of stress.
- In this article, we draw on interviews with college freshmen, drawing attention to the multifunctionality of smoking in addition to how cigarettes function as a nicotine-delivery device.
- Data reveal how cigarettes facilitate social interaction, and how increased smoking often occurs as a result of a cluster of social behaviours including the need for socialising, empathetic smoking and second-hand stress. This nuanced account of college smoking alerts researchers to be aware of the possibility for conflating data on increased smoking during times of stress with one’s actual experience of stress.
- Using a social context framework forces the researcher to look beyond individual behaviour to study group interaction. This approach holds promise for a greater understanding of smoking among youth.

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