Seasonality in onset of youth smoking parallels seasonality in cigarette sales

Cigarette sales in the USA peak in the summer months, June through August. This finding prompted examination of data on the onset of youth smoking to determine whether a similar pattern could be discerned. In this letter we report data from the Development and Assessment of Nicotine Dependence in Youth (DANDY) study. The sample of 679 seventh grade students from the USA had a mean initial age of 13.1 years (range 12–15 years). They were interviewed every three to four months over two and a half years. Subjects were asked to provide dates for their first use of any tobacco product, and their first puff and first inhalation on a cigarette. Additionally they provided dates for the first time they smoked twice within a 60 day period (monthly smoking) and the onset of daily smoking.

All measures of smoking onset peaked during the summer months of June through August with the modal month being July (table 1). Thus, the onset of youth smoking parallels seasonality in cigarette sales. One might speculate that summer peaks in youth smoking reflect an increase in unstructured time and a decrease in adult supervision. Additionally, there may be decreased structured time during the summer. It is interesting to note also that alcohol advertising expenditures are greatest in the late spring and early summer. This corresponds to a pronounced peak during July in self reported heavy episodic drinking among adults. Further research might explore the factors underlying these seasonal phenomena. Additionally, we would be curious to see if similar phenomena occur in the southern hemisphere.

Just as campaigns against underage drinking and drunk driving focus on periods when these activities may be greater, tobacco use prevention efforts might optimally be focused on the summer period of maximum vulnerability.

RJ Wellman
Behavioral Science Department, Fitchburg State College, Fitchburg, Massachusetts, USA

Table 1  Frequencies of youth smoking behaviour by month

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<th>Jan</th>
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<td>4.8</td>
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<td>First smoked monthly</td>
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<tr>
<td>%</td>
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<td>5.8</td>
<td>6.8</td>
<td>3.0</td>
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References

Do mobile phones replace cigarette smoking among teenagers?

It has been hypothesised that the rise in mobile phone usage over the past few years may be in part responsible for an observed decline in smoking prevalence among teenagers in the UK. Specifically it has been suggested that mobile phone use competes with smoking as a symbol of maturity for teenagers aspiring to be seen as adults. Additionally “pay as you go” cards may compete with cigarettes for pocket money. The association between the rise in mobile phone usage and falling rates of smoking has not, however, been observed in several other European countries.

We included questions on mobile phones in a cross sectional study of 4250 13–14 year old school children participating in the five year prospective Health and Behaviour in Teenagers Study (HABITS). The mean age of students was 13.8 years and 58% were male. Questionnaires were completed in the classroom between January and December 2001. We assessed current smoking status, mobile phone ownership, who paid for call charges, and sociodemographic characteristics.

In our sample 36.5% had never smoked a cigarette, 18.7% had tried smoking only once, 9.9% were ex-smokers, 8% sometimes smoked, 3.7% reported smoking between 1–6 cigarettes a week, and 3.3% reported smoking > 6 cigarettes a week. A total of 75% of the sample owned a mobile phone, of whom 65% paid for their own calls. Mobile phone ownership was positively associated with the extent of smoking experience (χ²(1) = 130.6, p < 0.001). This relation was found in both boys (χ²(1) = 44.7, p < 0.001) and girls (χ²(1) = 91.5, p < 0.001). Among self reported never smokers 68% owned a mobile phone, rising in a graded fashion with increasing smoking experience to 95.5% in those smoking > 6 cigarettes per week (fig 1).

Among those who owned a mobile phone, there was no significant association between paying for phone calls and smoking status (χ²(3) = 7.8, p = 0.16). Additionally, among those who smoked and owned a mobile phone there was no association between paying for phone calls and socioeconomic background as indicated by housing tenure and household car ownership.

Our findings go against the hypothesised protective effect of mobile phone ownership on smoking uptake. We found a positive association between the extent of smoking experience and the likelihood of owning a mobile. This relation was similar among boys and girls. Rather than competing, mobile phone ownership appears to be a complementary behaviour to smoking, possibly reinforcing a young person’s image of himself or herself as an aspiring adult.

Additionally, children who pay for their own calls are less likely to smoke. This indicates that paying for mobile phone calls does not prevent children from also smoking. Since at this age only 3.3% of the sample reported smoking > 6 cigarettes a week, it may be that, at the observed level of cigarette consumption, mobile phone expenses do not compete with smoking in a significant way.

Our study has some limitations. We did not look at the amount of time spent using a mobile phone, or the amount of money spent on call costs. The cross sectional nature of our data precludes an examination of whether mobile phone ownership might in some children have prevented or delayed uptake of smoking. Since we studied only 13 and 14 year olds, we cannot be sure that similar findings would emerge at other ages. Nevertheless, it seems clear that in general mobile phone ownership is associated with an increased rather
than a decreased likelihood of smoking in teenagers.

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