“At Face Value”: age progression software provides personalised demonstration of the effects of smoking on appearance

The Task Force for Tobacco-Free Women and Girls in New York State is utilising a computer software program that provides personalised, science-based illustrations of how smoking can affect facial appearance. The task force developed this program at the urging of young people who entered a 1998 essay contest in developed this program at the urging of young people who entered a 1998 essay contest in developed this program at the urging of young people who entered a 1998 essay contest in developed this program at the urging of young people who entered a 1998 essay contest in developed this program at the urging of young people who entered a 1998 essay contest in developed this program at the urging of young people who entered a 1998 essay contest in. Twenty four per cent of the 2000 entrants from across the state advised that knowledge of the unattractive effects of tobacco use would deter girls from smoking. Their idea is supported by studies suggesting that self image and perception of smoker stereotype can play a role in the decision to initiate smoking. Several of the students specifically recommended the use of computer imaging.

Task force members reviewed available literature on the association between smoking and premature facial wrinkling and provided parameters for customisation of the APRIL (age progression image launcher) program by its creators at C.O.R.E. Digital Productions, Inc in Toronto, Ontario, Canada. The original version of this program ages a picture of an 8 year old child to approximately age 80. The “At Face Value” adaptation is designed to add about 30 years to an adolescent face, in two versions: one as a non-smoker and another with the premature wrinkling and unhealthy skin tone of a pack-a-day smoker. The software is unique in that its wrinkling/aging algorithms are based upon photographs of a population cohort of 2000 persons and on published data regarding facial changes associated with aging; therefore, the aging/wrinkling images are based in science and are not an artist’s rendition of aging or the effects of cigarettes on facial wrinkling.

Demonstrations require approximately five minutes each, beginning with a photograph taken by a digital camera connected to the computer. The participant’s sex and ethnic group are entered when the picture is downloaded into the program, blue dots appear around the eyes, nose, and other “landmarks” of the face, identifying key positions to be employed in the aging progression. If necessary, the operator can refine the position of the dots by dragging them with the mouse. The picture is then processed within 55 seconds, producing a file of 21 pairs of pictures, beginning with two identical current pictures and progressing to two versions that illustrate how the participant might look in about 30 years (fig 1). Both versions reflect the structural changes that faces undergo in the normal aging process. The series of pictures can be animated to “morph” from the current to the future.

“At Face Value” is provided as a stand alone program, without any other tobacco use prevention program on that day, to allow for evaluation of its impact independent of other interventions. Questions asked by students are answered, however, and the New York State Smokers’ Quitline telephone number is provided to those interested in cessation. An LCD projector can be used to show the images to a class of students or a larger audience, but smaller groups are preferred. Most people want to see their own picture and several peers’ pictures and then move on. Approximately 10 feet by 10 feet (3 × 3 m) of floor space is needed, in an area where light from any other sources can be controlled. Hardware requirements include a PC or laptop computer with three dimensional graphics accelerator, compatible digital camera with tripod, a black backdrop, and two photography lights with stands and dimmers. Each software license is US$5000.

Participating middle, high school, and college students completed surveys before and after being photographed, to establish their prior experiences with tobacco and to detect changes in attitudes about tobacco. The demonstration appears to affect current smokers and never smokers in different ways. In early data, smokers have shown significant change between pre- and post-demonstration responses to the questions: “Do you think that you will smoke a cigarette anytime during the next year?” (86.7% answered “Yes” pre; 73.3% post; p = 0.000) and “I think that becoming a smoker reflects poor judgment” (33.3% answered “Yes” pre; 43.5% post; p = 0.028). Never smokers, on the other hand, have indicated a change in attitude on the questions: “Do you think that people risk harming themselves if they smoke one or less than one cigarette per day?” (79.2% answered “Yes” pre; 92.1% post; p = 0.001) and “Does concern about your appearance affect the choices you make from day to day?” (68.4% answered “Yes” pre; 78.5% post; p = 0.043).

This intervention tool often evokes strong reactions from young people. Shrieks, laughter, and exclamations of “I’m never going to look like that!” are frequent. Stunned silence is also common. Many participants comment that in their “aged” versions they resemble an older relative, supporting the software’s projection of future appearance.

P E Hysert, A L Mirand, G A Giovinno, K M Cummings, C L Kuo
Roswell Park Cancer Institute, Buffalo, New York, USA

Correspondence to: Patricia Hysert, Roswell Park Cancer Institute, Elm and Carlton Streets, Buffalo, New York 14263-0001, USA; Pat.Hysert@RoswellPark.org

References


Subsidised nicotine replacement therapy

Miller et al present results from a workplace based smoking cessation study where 39% of nicotine replacement therapy (NRT) vouchers were redeemed for NRT patches for half the recommended retail price (RRP US$170, subsidised to US$85). However, the authors conclude that cost may not be a barrier to accessing NRT. The New Zealand experience shows that heavily subsidised NRT (92%...
provided through an existing Quitline service considerably enhances access to NRT for smokers.

A nationwide programme to provide subsidised NRT was implemented from November 2000 through the New Zealand Quitline, a free telephone service for people wanting to quit smoking. Long term cessation rates have been found to improve when NRT is used as part of a behavioural intervention such as counselling.

When smokers call the New Zealand Quitline they are assessed for their eligibility to receive vouchers for subsidised NRT (patches or gum). Eligibility criteria include being a “heavier” smoker (10+ cigarettes/day), motivated to quit, and 18 years of age. The subsidisation reduces the cost of NRT to the smoker from a maximum of NZ$199 (US$109) for eight weeks’ product to NZ$5 (US$2.70) for the first four weeks’ supply, and NZ$10 (US$5.40) for the second four weeks’ supply. This fee covers dispensing costs and provides a means of encouraging some degree of motivation to quit among smokers. Redemtion analysis shows that 73% of voucher recipients comply with the programme and are deemed NRT vouchers are claimed by pharmacists through the Ministry of Health’s Quitline service was flooded with calls as a result of the government coordinated NRT voucher scheme exchange card redemption. BRC Unpublished report to The Ministry of Health, 2002.

Smoking among workers from small companies in the Paris area 10 years after the French tobacco law

Since the introduction of a tobacco law in 1991, smoking in enclosed public areas, including the workplace, has been forbidden in France. At the time this law was introduced we conducted several studies concerning smoking behaviour and the implementation of smoking regulations in the workplace. We believed that it was interesting to repeat this study 10 years later: (1) to assess the prevalence of active smokers in small companies in the Paris area; (2) to assess the prevalence of passive smokers in these companies, (3) to describe the impact of the French tobacco ban in these places of work.

In the French occupational health system, every worker undergoes a medical examination at least once a year regardless of whether they are exposed to occupational hazards. The occupational physician is required to spend one hour studying each worker's record, and to register his/her smoking habits. Occupational physicians in France are not paid for time spent studying each worker's record, but are paid for the time spent doing medical examinations. In the whole sample, the prevalence of regular smokers was 36.9%, the prevalence of smokers smoking at work was 14.6%, and the prevalence of smokers working in an environment where smoking was forbidden was 103.1%. Nearly all regular smokers smoked 1–60 cigarettes a day. The 296 non-smoking workers (9.7%) who were exposed to environmental tobacco smoke at work were considered to be passive smokers. Over two thirds (68.4%) of the workers were banned from smoking at their work station, with the highest rate among clerks (72.2%). About three quarters (76%) of the workers worked in a public room. Thirty eight per cent of workers stated that their direct supervisor was a smoker.

During the same period, 160 occupational physicians completed 690 questionnaires in workplaces selected at random, 678 of which could be analysed. The physician noted whether smoking was banned in every workplace (company or agency). Several questionnaires were completed for a single workplace if it included several departments (offices, workshops, etc.). Smoking was banned in 66% of workplaces (n = 461). Bans were most prevalent in shops, workshops, and warehouse.

The results allowed us to address our three objectives:

(1) The prevalence of smokers (37%) in small companies in the Paris area has decreased with time. The prevalence was 44% in 1979, 12% in 1987, and 43% in 1991. During this 12 year period the prevalence remained stable; however, it seemed to fall by about 6% between 1991 and 2001.

(2) The prevalence of passive smokers in these small companies was 9.7%, according to our restrictive definition of passive smoking. This restrictive definition did not make it possible to compare our data with those published in the literature. Several factors were significantly associated with passive smoking: being male, being a blue collar worker, being 25–34 years old, and having a supervisor who smoked.

(3) The ban on smoking at the work station was mentioned by 68% of the workers and smoking was banned in 68% of the workplaces visited. This percentage is higher than that reported by Grizeau and Baudier in 1995 (59%). This difference is due to the fact that the Paris area has made progress in the last six years since the application of the French tobacco law.

The 1991 French tobacco law, the initial purpose of which was to protect non-smokers, seems to have led to a decrease in the prevalence of smoking and to a decrease in cigarette consumption, as shown by other studies on smoking policies. The prevalence of regular smokers decreased by 6% in accordance with the conclusions of Farrell et al that “the ban on smoking in all workplaces should reduce the prevalence of smokers by 10%.” In the Paris area, real progress in the fight against smoking in the workplace was only made after the introduction of a national smokefree legislation, as in Finland.

J Alcouffe, P Fau-Prudhomme, P Manillier, E Lidove, P-Y Monteil

Association interprofessionnelle des centres médicaux et sociaux de la région Île-de-France

Correspondence to: Dr Jacques Alcouffe, 55 Rue Rouget de Lisle, 92158 Suresnes cedex, France; monteileon@acms.asso.fr

References
3 Wilson N. Health Funding Authority special report 3: evidence for tobacco control activities available to the Health Funding Authority. Wellington: Health Funding Authority, New Zealand, 1998.
References


One suggestion for Philip Morris . . . err, sorry, Altria’s new logo . . .
Smoking among workers from small companies in the Paris area 10 years after the French tobacco law

J Alcouffe, P Fau-Prudhomot, P Manillier, E Lidove and P-Y Monteleon

*Tob Control* 2003 12: 239-240
doi: 10.1136/tc.12.2.239

Updated information and services can be found at:
http://tobaccocontrol.bmj.com/content/12/2/239

**References**

This article cites 5 articles, 1 of which you can access for free at:
http://tobaccocontrol.bmj.com/content/12/2/239#BIBL

**Email alerting service**

Receive free email alerts when new articles cite this article. Sign up in the box at the top right corner of the online article.

To request permissions go to:
http://group.bmj.com/group/rights-licensing/permissions

To order reprints go to:
http://journals.bmj.com/cgi/reprintform

To subscribe to BMJ go to:
http://group.bmj.com/subscribe/