Recognition of cigarette brand names and logos by young children in Hong Kong

Jean Peters, Carol Lane Betson, Anthony Johnson Hedley, Tai-Hing Lam, Say-Gark Ong, Chit-Ming Wong, Richard Fielding

Abstract

Objective **– To examine the recognition of cigarette brand names and logos by Hong Kong primary school children.**

Design **– Cross-sectional survey with self-completed questionnaires examining smoking behaviour and recognition of 13 food, drink, cigarette, and toothpaste brand names and logos.**

Subjects **– A total of 9591 primary school children (mean age = 10.3; SD = 1.29) living in two districts of Hong Kong included in 1991 as part of a four-year respiratory health, smoking, and air pollution study which started in 1989.**

Results **– Ever-smoking prevalence was 11% (1067); 15% (759) in boys and 7% (308) in girls, and increased with age. Mean age of smoking the first cigarette was 7.8 years. Brand recognition ranged from 53% (Salem name) to 95% (Marlboro name and Salem logo). Significant differences were found by gender and by smoking status for the identification of drink, cigarette, and toothpaste brand groups. After adjustment in a logistic regression model, ever-smokers, who were more likely to be boys (adjusted odds ratio (OR) = 2.22; 95% confidence interval (CI) = 1.91 to 2.57), of older age (OR = 1.54; 95% CI = 1.46 to 1.62), living in Kwai Tsing district (OR = 1.31; 95% CI = 1.14 to 1.50), were more successful than never-smokers in identifying cigarette brands (OR = 1.82; 95% CI = 1.57 to 2.12).**

Conclusion **– Smoking is a paediatric health problem in Hong Kong; tobacco advertisements are widely recognised by young children and associated with smoking experience. A total ban on environmental advertising is needed as part of a comprehensive policy for the prevention of smoking-related disease in Hong Kong.**

(*Tobacco Control* 1995; 4: 150–155)

Keywords: environmental advertising; brand names, recognition; children

Department of Community Medicine, University of Hong Kong, Hong Kong
J Peters
CL Betson
AJ Hedley
T-H Lam
S-G Ong
C-M Wong
R Fielding

Correspondence to: AJ Hedley, Department of Community Medicine, University of Hong Kong, 7 Sassoon Road, Hong Kong

Introduction

Smoking-related diseases are the most important preventable causes of death in Hong Kong.[1] In the Asia–Pacific region the advertising and promotion of tobacco to young people in general is intensive, although tobacco companies maintain that their advertising policies and practices are not targeted at the young and that they do not try to influence children to start smoking.[2] Their stated aims are to persuade adults to change brands or to encourage brand loyalty in those adults who currently smoke. Nevertheless, studies in the US found that specific material from tobacco advertising campaigns was more successfully identified by children than by adults[3,4] and in some countries the total banning of tobacco advertising is estimated to have resulted in a reduction of tobacco consumption by 4–16%.[5]

In Hong Kong, only a partial ban on cigarette advertising is in place. Cigarette advertisements are permitted in the print media, are carried by taxis, and large-scale displays, including those running the full height of high-rise buildings, dominate the skyline in urban areas. The high profile that the product receives through this and other means of indirect advertising, such as Salem tennis tournaments, Kent holidays and movies, and Marlboro "Red Hot Hits" (music compact discs) and clothing, projects images of maturity, excitement, glamour, confidence, and success. This has been shown to raise children's awareness of cigarettes, and may encourage them to start smoking.[6,7] A few studies have been carried out, but none in Asia, to examine the impact of environmental tobacco advertising on primary school children.[6,8,9]

The purpose of this survey was to examine the smoking behaviour of Chinese-speaking primary school children in Hong Kong and their ability to recognise brand names and logos of widely advertised products, including foods, drinks, cigarettes, and toothpaste.

Subjects and methods

STUDY POPULATION

In a four-year study started in 1989 to examine respiratory health, smoking, and air pollution, Chinese children in primary classes 3 and 4 and their parents were recruited from 17 schools in two areas of Hong Kong: Southern and Kwai Tsing districts. The original selection of the districts was based on the differences between them in air quality. In 1991 an additional 10 schools, four in Kwai Tsing and six in Southern district, situated

close to the original schools, were added to the study.

Details of the initial study design, selection of schools and classes in 1989, and any sociodemographic differences between the two districts have been reported elsewhere.[10,11] The principal criterion for selection of schools in Kwai Tsing was that they were located in a subdistrict with poor air quality, as rated by local officials and the Government Environmental Protection Department. In Southern district, because of its better air quality, all schools were situated in areas of low air pollution. With respect to sociodemographic differences, Kwai Tsing district had more families living in public housing for lower income groups and fewer parents who had continued through to upper secondary or tertiary education.

The data set reported in this paper was taken from the 1991 survey and consisted of the original children in the 1989 survey, now in primary classes 5 and 6, and the new intake of children in primary classes 3 and 4 from the initial 17 schools, plus children in primary classes 3 and 4 from the schools recruited in 1991.

QUESTIONNAIRES

In each of the four years of the study, all children and their parents completed questionnaires that covered respiratory health, smoking behaviour, and sociodemographic factors. The ever-smoking experience in the children was found, after adjustment for sociodemographic factors and indoor and outdoor air pollution, to be associated with respiratory health effects including wheeze, nasal symptoms, and sore throat.[11]

The children were asked questions about current smoking status, age of starting to smoke, number of cigarettes smoked in the last 24 hours, sources of cigarettes, and knowledge and attitude related to smoking. In 1991 children were asked to classify six brand names in Chinese characters (Marlboro, Salem, Carlsberg, Martell, Cadbury, and Colgate) and seven colour-reproduced brand logos (Marlboro, Salem, Coca Cola, Carlsberg, McDonald's, Garden bakery and Colgate; figure) of 13 assorted food, drink, cigarette, and toothpaste brands into one of five categories: food, cigarette, drink, other products, or not known. Four of the brands – Marlboro, Salem, Carlsberg, and Colgate – were presented independently both as a product name and as a product logo.

The completion rate for the 13 brand recognition questions was 99%, with the exception of the McDonald's logo which had a completion rate of 85%. The McDonald's logo gave rise to indecision in the children because it could be categorised in one of three categories – i.e., food, drink, or other – resulting in non-completion of the question in some cases. The questions to the children and the product logos are illustrated in the figure.

The children's questionnaires were administered by a trained research worker and completed in the classroom under supervised conditions. There was no collusion between children and no teachers were present.

ANALYSIS:

Answers to the brand identification questions were graded 1 for correct and 0 for incorrect. Scores were derived, by summing all the correct answers, for: total brand recognition (maximum score = 13), all brand names (6), all brand logos (7), and each product category: drinks (4), cigarettes (4), food (3), and other (2). In the few instances where there were missing data, the cases were excluded from the analysis.

The child's smoking status was determined from one of six possible answers: (a) have never smoked; (b) tried smoking once or a few times; (c) used to smoke but now do not; (d) smoke sometimes but fewer than one cigarette per week; (e) smoke one to six cigarettes per week; and (f) smoke more than six cigarettes per week. Smoking status was defined as: (1) ever-smoker, from a positive response to answer categories (b)–(f), or (2) never-smoker, from a positive response to category (a).

All analyses were carried out using SPSS PC+4.0. Differences between ever-smoking and never-smoking children, in terms of their gender, age, district of residence, and scores of correct answers were analysed by χ^2 and t tests, with 95% confidence intervals (95% CIs) calculated for all point estimates.

To determine the importance of factors associated with smoking behaviour (ever-smokers), the scores for each of the four product categories: food, drink, cigarette, and toothpaste (divided into 100% correct answers or less than 100% correct) were included in a logistic regression model together with gender, age (as a continuous variable), and district of residence as independent variables; and from the model, the adjusted odds ratios (ORs) with 95% CIs were determined for each factor.[12] The analysis of scores was repeated to examine responses with more than 50% correct, with responses divided as follows:

- drinks, cigarettes: none, one, or two correct answers compared with three or four correct (ie, 75–100% correct);
- food: none or one correct compared with two or three correct (ie, 67–100% correct);
- other: none or one correct compared with two correct (ie, 100% correct).

Results

STUDY POPULATION

In the 1991 survey, 27 schools consisting of 271 primary classes 3–6 took part . A total of 9657 children, representing 99% of the total child population sampled, completed the questionnaires. The 66 (0.7%) children who failed to indicate their smoking status were excluded from the analysis so the final data set consisted of 9591 children (table 1). Numbers of children in the two districts were similar, with 4917 in Southern district and 4674 in Kwai Tsing. There were no differences be-

Please indicate what types of product are represented by the following logos or names? (Please tick in the box under the appropriate product ☑)

			Food	Cigarette	Drink	Others	Don't know
56.	Ka Si Park	嘉士伯	☐	☐	☐	☐	☐
57.	Man Bo Lo	萬寶路	☐	☐	☐	☐	☐
58.	Kut Park Lay	吉百利	☐	☐	☐	☐	☐
59.	Go Lo Kit	高露潔	☐	☐	☐	☐	☐
60.	Sha Lone	沙龍	☐	☐	☐	☐	☐
61.	Ma Dare Lay	馬爹利	☐	☐	☐	☐	☐

Note: For questions 56–61, the Chinese characters are translated into English according to the Cantonese pronunciation of the characters. The English names are: 56. Carlsberg, 57. Marlboro, 58. Cadbury, 59. Colgate, 60. Salem, 61. Martell.

62.		☐	☐	☐	☐	☐
63.		☐	☐	☐	☐	☐
64.	Carlsberg	☐	☐	☐	☐	☐
65.	Garden	☐	☐	☐	☐	☐
66.	Salem	☐	☐	☐	☐	☐
67.	Colgate	☐	☐	☐	☐	☐
68.	Coke	☐	☐	☐	☐	☐

Brand names and logos presented in the questionnaire for identification.

Table 1 Number and prevalence (%) of children smoking

Age (years)	Boys		Girls	
	Never-smoker	*Ever-smoker*	*Never-smoker*	*Ever-smoker*
8	753 (93)	59 (7)	800 (97)	28 (3)
9	1208 (91)	115 (9)	1340 (95)	71 (5)
10	981 (86)	157 (14)	1059 (94)	67 (6)
11	772 (79)	204 (21)	728 (91)	72 (9)
12	376 (72)	148 (28)	364 (87)	52 (13)
⩾ 13	73 (49)	76 (51)	70 (80)	18 (20)
Subtotal	4163 (85)	759 (15)	4361 (93)	308 (7)
Total	4922		4669	

tween districts of residence by gender (χ^2 = 1.2, df = 1, p = 0.2), or by age (t = 1.2, df = 9598, p = 0.2).

SMOKING PREVALENCE

A total of 1067 (11%, 95% CI = 10.5 to 11.8%) were found to be ever-smokers. Of these, 83% (886) had tried smoking once or a few times; 8% (81) used to smoke; 6% (62) smoked fewer than one cigarette per week, 2% (24) smoked one to six cigarettes per week, and 1% (14) smoked more than six cigarettes per week.

There were differences between ever-smokers and never-smokers: by district of residence, with 9.8% (95% CI = 9.0 to 10.7%) ever-smoking children in Southern district and 12.5% (95% CI = 11.5 to 13.4%) in Kwai Tsing (χ^2 = 17.3, df = 1, p < 0.001); by gender, with 15.4% (95% CI = 14.4 to 16.4%) ever-smokers in boys and 6.6% (95% CI = 5.9 to 7.3%) in girls (χ^2 = 188.8, df = 1, p < 0.001); by age, with ever-smoking children being older (mean age = 11.1 years; 95% CI = 11.0 to 11.2) than never-smokers (mean = 10.2; 95% CI = 10.1 to 10.4) (t = 20.6, df = 9589, p < 0.001).

IDENTIFICATION OF BRANDS

Successful recognition of the individual brand names and logos was very high overall with an average of 82%, ranging from 53% (Salem name) to 95% (Marlboro name and Salem logo). Of the three most successfully identified brands, the top two were tobacco products: Marlboro name (95%) and Salem logo (95%), and the third was a food, Garden bakery (94%).

There were no significant differences in mean total scores for the 13 items between districts but there were gender differences with mean scores of 11.0 (95% CI = 10.9 to 11.1) and 10.6 (95% CI = 10.5 to 10.6) for boys and girls, respectively (t = 9.3, df = 8817, p < 0.001). More boys correctly identified three of the four cigarette brand names or logos, two of the three alcoholic drinks, and the Colgate logo, whereas girls were more successful only in the recognition of the Garden bakery logo (table 2).

Recognition of products was greater with increasing age; successful identification of all 13 items occurred in 10% (153) of eight-year-olds but 32% (71) of 13-year-olds (χ^2 = 360.9, df = 1, p < 0.001). However, even in the eight-year-old age group, 1163 (72%; 95% CI = 60 to 84%) of the children identified three or more of the cigarette names and logos correctly.

Table 2 Boys and girls with 100% correct answers

	Boys		Girls		
	%	n	%	n	p Value
All brands	26	4526	18	4293	< 0.001
All logos	41	4643	35	4399	< 0.001
All names	47	4781	33	4553	< 0.001
Cigarettes	52	4824	35	4593	< 0.001
Marlboro*	96	4893	94	4653	< 0.001
Marlboro†	82	4900	69	4657	< 0.001
Salem*	61	4865	45	4627	< 0.001
Salem†	95	4906	95	4652	0.6
Drinks	60	4838	55	4599	< 0.001
Alcoholic drinks	70	4842	64	4606	< 0.001
Coca Cola†	81	4909	82	4661	0.2
Carlsberg*	91	4882	90	4640	0.3
Carlsberg†	88	4900	85	4654	< 0.001
Martell*	78	4886	73	4642	< 0.001
Foods	72	4638	74	4400	0.2
Cadbury*	89	4869	90	4636	0.2
McDonald's†	83	4701	83	4448	0.5
Garden†	94	4896	95	4651	0.02
Other (toothpaste)	69	4859	66	4620	0.009
Colgate*	86	4875	85	4636	0.2
Colgate†	72	4904	70	4651	0.004

* Brand name; † brand logo.

IDENTIFICATION OF BRANDS BY SMOKING BEHAVIOUR

Overall there were significant differences between never-smokers and ever-smokers in mean total scores (t = 6.5, df = 8817, p < 0.001) with ever-smokers scoring higher (11.2; 95% CI = 11.1 to 11.3) than never-smokers (10.7; 95% CI = 10.7 to 10.8). For the four categories of products, the biggest differences between ever-smokers and never-smokers were seen in the cigarette category (OR = 2.39; 95% CI = 2.10 to 2.72). Other significant differences occurred for drinks (OR = 1.29; 95% CI = 1.13 to 1.47) and toothpaste (OR = 1.23; 95% CI = 1.07 to 1.41) (table 3).

With respect to recognition of individual items, there were significant differences (unadjusted OR) with ever-smokers being more successful for all four cigarette items and the Martell name (table 3). In only one instance, for Garden bakery, were never-smokers significantly more successful than ever-smokers.

In the cigarette category, 756 (72%; 95% CI = 69 to 75%) ever-smokers correctly identified both brand names compared with 4181 (50%; 95% CI = 49 to 51%) never-smokers, whereas 871 (82%; 95% CI = 80 to 85%) and 6117 (72%; 95% CI = 71 to 73%) ever-smokers and never-smokers, respectively, correctly identified both cigarette logos.

After adjustment for age, gender, and district of residence, cigarette brand identification was strongly associated with ever-smoking. This was the result of two comparisons: one in which recognition of both cigarette brands was 100% correct compared with responses < 100% correct; and another in which those with more than 50% answers correct were compared with those with fewer answers correct (table 4). In contrast, the associations

Table 3 Never-smokers and ever-smokers with 100% correct answers

	Never-smokers		Ever-smokers		Unadjusted
	n	%	*n*	%	OR (95% CI)
All brands	7827	19	992	30	1.77 (1.54–2.04)
All logos	8020	35	1022	41	1.29 (1.13–1.47)
All names	8300	37	1034	55	2.13 (1.87–2.42)
Cigarettes	8376	41	1041	62	2.39 (2.10–2.72)
Marlboro*	8487	95	1059	97	1.63 (1.13–2.33)
Marlboro†	8500	75	1057	84	1.81 (1.52–2.15)
Salem*	8441	50	1051	73	2.60 (2.26–3.00)
Salem†	8494	95	1064	96	1.40 (1.01–1.93)
Drinks	8392	56	1045	62	1.29 (1.13–1.47)
Alcoholic drinks	8403	65	1045	73	1.40 (1.21–1.61)
Coca Cola†	8505	81	1065	80	0.94 (0.80–1.10)
Carlsberg*	8470	90	1052	91	1.16 (0.92–1.45)
Carlsberg†	8491	86	1063	88	1.17 (0.97–1.42)
Martell*	8471	75	1057	82	1.51 (1.28–1.78)
Foods	8017	69	1021	69	1.00 (0.87–1.14)
Cadbury*	8448	90	1057	89	0.93 (0.75–1.14)
McDonald's†	8118	83	1031	83	0.97 (0.82–1.15)
Garden†	8483	95	1064	93	0.76 (0.59–0.97)
Other (toothpaste)	8424	66	1055	70	1.23 (1.07–1.41)
Colgate*	8454	85	1057	88	1.21 (1.00–1.46)
Colgate†	8492	71	1063	73	1.14 (0.99–1.32)

*Brand name; †brand logo.
OR = odds ratio; CI = confidence interval.

Table 4 Demographic characteristics and correct identification of brands as predictors of ever-smoking children

	Adjusted OR (95% CI)	
Category	*100% correct for all brands*	*> 50% correct for all brands*
Gender (male)	2.22 (1.91–2.57)	2.29 (1.98–2.66)
District (Kwai Tsing)	1.31 (1.14–1.50)	1.29 (1.12–1.48)
Age (per year)	1.54 (1.46–1.62)	1.58 (1.50–1.67)
Cigarettes	1.82 (1.57–2.12)	1.82 (1.44–2.30)
Drinks	1.04 (0.89–1.21)	0.92 (0.74–1.14)
Food	0.82 (0.70–0.96)	0.72 (0.51–1.03)
Toothpaste	0.82 (0.70–0.97)	0.89 (0.76–1.05)

OR = odds ratio; CI = confidence interval.

between smoking and other categories were weak and likely to be chance findings. Ever-smokers tended to be older boys in Kwai Tsing district. The logistic model correctly predicted 89% of all cases as ever-smokers or never-smokers.

Discussion

In Hong Kong, prevalence rates for experimental smoking among secondary school children are high, ranging from 20–47% in 13–16-year-olds[13] and 8–57% in 11–21-year-olds.[14] In 1989, we were the first to report an ever-smoking prevalence of 8% in primary classes 3 and 4, consisting mostly of children aged 8–10 years.[15]

In 1982 Chapman and Fitzgerald[16] found a twofold difference in identification of edited cigarette advertisements by smokers compared with non-smoking Australian children and the debate continues about the impact of advertising on all age groups in society.[5,17] Young people in Hong Kong show differences in smoking behaviour compared with their Western counterparts in that smoking prevalence, especially for girls, is lower at a given age.[13,14,18] Their successful recognition of advertised tobacco brands, however, especially by ever-smokers, shows that the level of awareness is similar to that found in other studies in the West.[3,8,9] Tobacco advertising and tobacco products are clearly making an impression on young children. Even though recognition levels were higher in smoking children, awareness of the product and its promotional messages may influence non-smoking children as young as seven years of age.

Other authors, working in an entirely separate cultural environment, have demonstrated the impact of product promotions on very young children. A recent study in the US reported recognition rates among 3–6-year-olds, for Coca Cola and McDonald's, similar to those reported here.[9] One would expect young children to be able to identify such products because they use them. In primary school children, however, high awareness of the Salem logo and Marlboro name (the two brands identified most successfully in this study from all of those given) is likely to be due to the style and content of advertising and its appeal to young people. In Hong Kong at present, many taxi doors are emblazoned with Joe Camel, a cartoon character recognisable in the US by 91% of six-year-olds.[9] This runs directly counter to clause 9 of the proposed Charter of Children's Rights to freedom from tobacco advertising.[19]

Advertising bans are effective in reducing tobacco consumption[5] and there is considerable local support for strong measures against tobacco advertising in Hong Kong. A 1988 study found that 75% of Hong Kong adults favoured and only 20% opposed restrictions on tobacco advertisements in newspapers and magazines, whereas 76% favoured and 19% opposed restrictions in public transport.[20] A similar but more recent study found that 53% of local residents favoured, and 29% opposed, a total ban on tobacco advertising, including advertisements in printed publications and on billboards.[21]

What is now needed in Hong Kong is legislative action to support both this majority opinion and the Territory's declared health policy, which is to prevent smoking-related diseases. Hong Kong currently imposes some restrictions on cigarette advertisements such as banning them on radio and television and in cinemas. Children are still continuously exposed to indirect advertisements in these media, however, as well as direct advertisements in printed publications and displays, sources from which other reports have demonstrated that they can successfully recall the names and logos of the products advertised.[22] The data presented here indicate that partial restrictions on advertisements – for example, limitation to the use of the name and picture of the product and a health warning – will not protect children from the overall effect of environmental tobacco advertising. The World Health Organisation's Regional Office for the Western Pacific, in its Action Plan on Tobacco or Health for 1995–1999,[23] has called for a "Tobacco-advertising free region by the year 2000" and the Hong Kong Government has endorsed the plan.

This study is the first of its kind in Asia and indicates that new smoking prevention policies to protect young people are needed now, if we are to prevent their recruitment to the ranks of smokers, and if there is any intention to reduce future smoking-related health problems and demands on health resources.

The authors wish to thank the Environmental Protection Department, Hong Kong Government, the Hong Kong Jockey Club (Charities) Limited, Kwai Tsing District Board, and Glaxo Hong Kong Limited for support to the Respiratory Health Study, the Mary Sun Medical Scholarship Fund for support to CM Wong, and all the schools, teachers, children, and their parents for their cooperation and participation in this study.

1 Department of Health. *Public health report no 1. Coronary heart disease and lung cancer*. Hong Kong: Department of Health, 1994.
2 Raftery J. Advertising and smoking. A smouldering debate. *Br J Addict* 1989; **84**: 1241–6.
3 DiFranza JR, Richards JW, Paulman PM, *et al*. Nabisco's cartoon camel promotes Camel cigarettes to children. *JAMA* 1991; **266**: 3149–53.
4 Pierce JP, Gilpin E, Burns DM, *et al*. Does tobacco advertising target young people to start smoking? *JAMA* 1991; **266**: 3154–8.
5 Smee C. *Effect of tobacco advertising on tobacco consumption. A discussion document reviewing the evidence*. London: Economics and Operational Research Division, Department of Health, 1992.
6 Charlton A. Children's advertisement awareness related to their views on smoking. *Health Educ J* 1986; **45**: 75–8.
7 Potts H, Gillies P, Herbert M. Adolescent smoking and opinion of cigarette advertisements. *Health Educ Res* 1986; **1**: 195–201.
8 Aitken P, Leathar D, O'Hagan F, Squair S. Children's awareness of cigarette advertisements and brand imagery. *Br J Addict* 1987; **82**: 615–22.
9 Fischer P, Schwartz MP, Richards JW, Goldstein AO, Rojas TH. Brand logo recognition by children aged 3 to 6 years *JAMA* 1991; **266**: 3145–8.
10 Ong SG, Liu J, Wong CM, *et al*. Studies on the respiratory health of primary school children in urban communities in Hong Kong. *Sci Total Environ* 1991; **106**: 121–35.
11 Department of Community Medicine. *Air pollution and respiratory health in primary school children, 1989–1992. Report to the Environmental Protection Department, Hong Kong Government*. Hong Kong: Department of Community Medicine, University of Hong Kong, 1993 (333 pages).
12 Fleiss JL. *Statistical methods for rates and proportions*, 2nd ed. New York: Wiley, 1981: 75.
13 Hertz AZ. *Smoking among junior secondary school children in Hong Kong in 1990. A report to The Hong Kong Council on Smoking and Health*. Hong Kong: Council on Smoking and Health, 1990: 7.
14 Narcotics Division. *1992 Survey on drug use among students of secondary schools and technical institutes in Hong Kong*. Hong Kong: Government Secretariat, 1993.
15 Department of Community Medicine. *Studies on respiratory health in Hong Kong. Report No 2*. Department of Community Medicine, University of Hong Kong, 1991: 19.
16 Chapman S, Fitzgerald B. Brand preference and advertising recall in adolescent smokers: some implications for health promotion. *Am J Publ Health* 1982; **72**: 491–4.
17 Waxman RH. Tobacco marketing profiteering from children. *JAMA* 1991; **266**: 3185–6.
18 Faculty of Public Health Medicine. *Children and smoking. Guidelines for health promotion no 33*. London: Royal College of Physicians of the UK, 1993.
19 Proboscis. *Children's right to freedom from tobacco – a charter*. London: The Health Summary, 32 King Henry's Road, 1993; **4**: 15.
20 Lam TH, Donnan SPB, Cheng KK, Chan NF. A public opinion survey on proposed legislative changes on smoking control. In: Durston B, Jamrozik K, eds. *Tobacco and Health 1990. The Global War*. Perth: Organising Committee of the Seventh World Conference on Tobacco and Health, 1990: 726–8.
21 Cheng KK, Hedley AJ, Lam TH, Peters J, Bacon-Shone J, Chan A. *A public opinion survey on measures related to the control of smoking in Hong Kong. A report to The Hong Kong Council on Smoking and Health*. Hong Kong: Council on Smoking and Health, 1993: 6.
22 Nelson E, Charlton A. Children and advertising: does the voluntary agreement work? *Health Educ J* 1991; **50**: 12–15.
23 World Health Organisation. Action Plan on Tobacco or Health for 1995–1999. Manila: World Health Organisation Regional Office for the Western Pacific, 1994; 1.

Children smoking, China. Source: Wang Gang-Feng/Panas Pictures.