

Primary schoolboys: image of self and smoker

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Bland, J. M., Bewley, B. R., and Day, I. (1975). *British Journal of Preventive and Social Medicine*, 29, 262-266. **Primary schoolboys: image of self and smoker.** The way primary schoolboys see themselves and also see young smokers, may have implications for health education. In this paper a comparison is made between the self-images of 229 primary schoolboys and their images of a young person who smokes. The two images were very different, both for smokers and non-smokers, although the difference for smokers was smaller. It appears that children of this age who smoke do not see themselves as 'smokers', and may not relate the health education they receive on this subject to themselves.

Health education is potentially one of the more effective available methods of improving health, but it is a complex and unpredictable process. This is perhaps particularly so in the area of smoking.

Children start to smoke at an early age, and an increase in respiratory symptoms associated with this has been reported elsewhere (Holland and Elliott, 1968; Bewley, Halil, and Snaith, 1973). The long-term health consequences are well known. Health education efforts directed against smoking have not produced encouraging results (Holland and Elliott, 1968; Jeffreys, Norman-Taylor, and Griffiths, 1967). A better understanding of how children see smoking by others and themselves may help in the development of better preventive techniques.

As part of his study of secondary schoolboys, Bynner (1969) asked the boys to rate their images of themselves and of a smoker on a semantic differential scale. He found that self-image and smoker-image were much closer for smokers than for non-smokers. In this paper a description is given of a similar comparison among primary schoolboys.

METHOD

In March 1971, 7115 schoolchildren aged 10 to 11½ years, who were attending primary school in the administrative county of Derbyshire, completed a self-administered questionnaire about their smoking

and respiratory symptoms. The methods and results of this survey have been reported elsewhere (Bewley *et al.* 1973). A sample of these children, stratified by smoking habit, was asked to complete a second, more detailed questionnaire in July 1971. For the stratification, the children were divided into four groups according to their smoking. A heavy smoker was defined as a child who reported smoking more than one cigarette a day, a light smoker as a child who smoked less than one cigarette a day but at least one a week, an experimental smoker as one who had smoked, but was smoking less than one a week, and a non-smoker as one who had never smoked. The 33 heavy smokers (29 boys and four girls) identified in the first stage were included in the sample. Altogether 67 light smokers were chosen at random. These 100 smokers were matched for sex, school class, and age (within six months) with 100 experimental smokers and 100 non-smokers.

The second questionnaire was self-administered. The children were again asked about their smoking, and further questions were asked about smoking by members of the household and friends, and attitudes towards smoking. The results of these questions and the details of the method have been reported elsewhere (Bewley, Bland, and Harris, 1974). The children were also asked to tick as many as they wished of 16 words or phrases which they felt described themselves. The same 16 words were

presented again in a different order, and the children were asked to tick those which described a young person who smokes cigarettes.

RESULTS

The analysis is based on boys only, as there were too few girls to provide meaningful results. A total of 229 boys completed the questionnaire, the remaining five having left the area or being absent from school at the time of the study.

The percentages of boys marking each item on the self-image scale are shown in Table I. There were significant differences between the groups for six items. More smokers than non-smokers saw themselves as 'tough', 'trouble-maker', 'good at sport', and 'foolish'. However, the majority of smokers did not see themselves in this way, 'foolish' being chosen by only 25% of smokers and 'trouble-maker' by 35%. More non-smokers than smokers saw themselves as 'friendly' and 'sensible'. The differences were small, and on the whole the pattern was similar in the four groups. The eight descriptions most frequently chosen by boys in each group were 'friendly', 'good at sport', 'sensible', 'good at

school work', 'tough', 'easy going', 'good looking', and 'nervous', except that the non-smokers did not include 'tough' but substituted 'popular'.

The percentages of boys marking each item for a young person who smokes cigarettes are shown in Table II. There were three items which showed significant differences between the groups. Fewer smokers than non-smokers saw the smoker as a 'trouble-maker'. More of them saw the smoker as 'friendly' and 'clever' although these terms were chosen by only 31% and 24% respectively of the heavy smokers, and less often by the other groups. Again, the first eight items were similar in the four groups. These were, in order of frequency, 'foolish', 'trouble-maker', 'careless', 'tough', 'untidy', 'lazy', 'nervous', and 'easy going'. Among the heavy smokers, 'trouble-maker' was replaced by 'friendly' and among the light smokers 'good looking' was ranked seventh, 'lazy' and 'easy going' both being ranked eighth equal with 'good at sport'. For all groups, three items, 'tough', 'nervous', and 'easy going', were included in the first eight items for the images of both self and smoker.

Across all the four groups, the two images studied, of self and of smoker, are strikingly different.

TABLE I
IMAGE OF SELF: PERCENTAGE OF BOYS TICKING EACH ITEM

Image	Smoker			Non-smoker	Total	*
	Heavy	Light	Experimental			
Friendly	62.1	81.3	85.5	82.9	80.8	P < 0.05
Good at sport	79.3	77.1	68.4	55.3	67.3	P < 0.05
Sensible	41.4	58.3	55.3	75.0	60.7	P < 0.01
Good at school work	44.8	45.8	47.4	55.3	49.3	NS
Tough	62.1	56.3	47.4	30.3	45.4	P < 0.01
Easy going	41.4	50.0	42.1	44.7	44.5	NS
Good looking	51.7	50.0	40.8	40.8	44.1	NS
Nervous	37.9	45.8	35.5	42.1	40.2	NS
Popular	27.6	43.8	40.8	40.8	39.7	NS
Clever	31.0	31.3	36.8	36.8	34.9	NS
Shy	31.0	31.3	26.3	30.3	29.3	NS
Careless	27.6	29.2	17.1	25.0	23.6	NS
Untidy	31.0	22.9	21.1	22.4	23.1	NS
Trouble maker	34.5	35.4	11.8	10.5	19.2	P < 0.001
Lazy	20.7	20.8	15.8	10.5	15.7	NS
Foolish	24.1	25.0	7.9	11.8	14.9	P < 0.01
Number in group	29	48	76	76	229	

* Significance of χ^2 test for difference between groups. Columns have been combined where necessary

TABLE II
IMAGE OF A YOUNG PERSON WHO SMOKES: PERCENTAGE OF BOYS TICKING EACH ITEM

Image	Smoker			Non-smoker	Total	*
	Heavy	Light	Experimental			
Friendly	31.0	18.8	13.2	7.9	14.9	P < 0.05
Good at sport	17.2	22.9	11.8	14.5	15.7	NS
Sensible	6.9	2.1	2.6	4.0	3.5	No test possible
Good at school work	3.5	10.4	10.5	5.3	7.9	NS
Tough	34.5	41.7	39.5	38.2	38.9	NS
Easy going	24.1	22.9	19.7	15.8	19.7	NS
Good looking	20.7	27.1	15.8	11.8	17.5	NS
Nervous	17.2	33.3	25.0	21.1	24.5	NS
Popular	17.2	10.4	13.2	6.6	10.9	NS
Clever	24.1	16.7	10.5	6.6	12.2	P < 0.05
Shy	20.7	10.4	5.3	6.6	8.7	NS
Careless	44.8	37.5	39.5	38.2	39.3	NS
Untidy	34.5	35.4	38.2	36.8	36.7	NS
Trouble maker	20.7	50.0	48.7	47.4	45.0	P < 0.05
Lazy	34.5	22.9	38.2	36.8	34.1	NS
Foolish	34.5	52.1	60.5	56.6	54.2	NS
Number in group	29	48	76	76	229	

* Significance of χ^2 test for differences between group. Columns have been combined where necessary

Some of the differences between the groups in the frequency with which particular items were chosen may have arisen because boys in different groups ticked with different frequencies. The mean number of ticks for each group in the image of self and the smoker showed no appreciable differences between the four groups (Table III).

The 16 items were also ranked according to the frequency with which they were chosen by each group, first as the image of self, and then as the image of the smoker (Table IV). The two rankings for each group were compared using Kendall's rank correlation coefficient (Kendall, 1970). This is also shown in Table IV, together with a test of significance using an approximate standard normal

variate. For each group of boys, the correlation was negative, significantly for the non-smokers and for the experimental smokers, but not for the light or heavy smokers. There was a gradient in the correlations, the largest negative correlation being among the non-smokers, and the smallest being among the heavy smokers. Thus within each group, image of self and image of smoker were different, but among the smokers this difference was less marked.

DISCUSSION

These data have a number of difficulties in interpretation. The boys may not have described themselves as they really saw themselves, but rather as they would like to be, or to appear. It is possible that the image they gave of a young person who smokes cigarettes was the way they actually saw the young smoker, or the image that they assumed would be acceptable to adults. As in the case of any study setting out to investigate attitudes and opinions, it is difficult to see how such a 'social desirability' effect can be removed, and these ambiguities resolved. However, although other interpretations are possible, we have interpreted

TABLE III
MEAN NUMBER OF ITEMS SELECTED ON EACH SCALE FOR EACH GROUP

Image	Smokers			
	Heavy	Light	Experimental	Non-smokers
Of self	6.5	7.0	6.0	6.1
smoker	3.9	4.1	3.9	3.5

TABLE IV
RANK ORDERS OF ITEMS IN IMAGE SCALE

Image	Heavy Smokers		Light Smokers		Experimenters		Non-smokers		Totals	
	Image of		Image of		Image of		Image of		Image of	
	Self	Smoker	Self	Smoker	Self	Smoker	Self	Smoker	Self	Smoker
Friendly	2.5	6	1	11	1	10.5	1	11	1	11
Good at sport ..	1	13	2	9	2	12	3.5	9	2	10
Sensible	6.5	15	3	16	3	16	2	16	3	16
Good at school work	5	16	7.5	14	4.5	13.5	3.5	15	4	15
Tough	2.5	3.5	4	3	4.5	3.5	10.5	3.5	5	4
Easy going	6.5	7.5	5.5	9	6	8	5	8	6	8
Good looking ..	4	10	5.5	7	7.5	9	7.5	10	7	9
Nervous	8	13	7.5	6	10	7	6	7	8	7
Popular	13.5	13	9	14	7.5	10.5	7.5	13	9	13
Clever	11	7.5	11.5	12	9	13.5	9	13	10	12
Shy	11	10	11.5	14	11	15	10.5	13	11	14
Careless	13.5	1	13	4	13	3.5	12	3.5	12	3
Untidy	11	3.5	15	5	12	5.5	13	5.5	13	5
Trouble maker ..	9	10	10	2	15	2	15.5	2	14	2
Lazy	16	3.5	16	9	14	5.5	15.5	5.5	15	6
Foolish	15	3.5	14	1	16	1	14	1	16	1
Kendall's rank correlation coefficient	-0.30		-0.22		-0.47		-0.53		-0.43	
z	1.57 NS		1.18 NS		2.57 P < 0.05		2.82 P < 0.01		2.39 P < 0.05	

the data as the representation of the boys' true images of self and smoker.

These data suggest that in the early stages of taking up smoking, children do not identify themselves in the same way as they identify a smoker. The image of a smoker is of a boy who is foolish, a trouble-maker, careless, untidy, and tough. Their image of themselves is of someone friendly, sensible, good at sport and school work, and tough. The image of self is opposed to the image of the smoker. Despite this, those who smoke view the smoker in a more favourable light than does the non-smoker.

Two of the three items which showed frequency differences in the smoker image also showed differences in the self-image. Fewer smokers than non-smokers saw the smokers as a 'trouble-maker', but more smokers saw themselves as trouble-makers. More of the smokers saw the smoker as friendly, but few saw themselves as friendly. Differences on this item 'friendly' may possibly be explained by assuming that some children smoke in order to acquire friendship. However, it is difficult to find any comparable explanation for the differences on the item 'trouble-maker'.

It is hard to compare our findings with those of Bynner. We were dealing with a younger age group, and were not using precisely the same items or techniques, and we unfortunately did not follow Bynner in requesting the image of a non-smoker. Our finding that 'tough' was seen as a characteristic of the smoker, and that non-smokers were less likely to see themselves as 'tough', agrees with Bynner's finding among secondary schoolboys. In general, however, the differences between our groups were small, the separation being much less than that found by Bynner. This may have been because the boys were younger, marked differences between groups not yet having emerged.

The overall impression given by these data is that these boys did not see themselves as smokers. This is true even of those who said that they were smoking every day. They saw the young person who smokes as being very different from themselves. In a previous paper (Bewley *et al.*, 1974), we gave the results of a series of questions on these boys' attitudes to smoking. Most of the boys in each group agreed that it was a bad idea for children to smoke, that it

was a waste of money, and that children did it to show off. Less than half in any group thought smoking was enjoyable.

Perhaps in the light of this, we can interpret the data as showing that at this age boys who smoke do not see themselves as 'the smoker' at whom health education is directed. If this is so, health educators are faced with a serious problem—how to discourage children from smoking cigarettes if they do not recognize themselves as smokers?

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REFERENCES

- BEWLEY, B. R., BLAND, J. M., and HARRIS, R. (1974). Factors associated with the starting of cigarette smoking by primary schoolchildren. *Brit. J. prev. soc. Med.*, **28**, 37.
- , HALIL, T., and SNAITH, A. H. (1973). Smoking by primary schoolchildren: prevalence and associated respiratory symptoms. *Brit. J. prev. soc. Med.*, **27**, 150.
- BYNNER, J. M. (1969). *The Young Smoker*. Government Social Survey. HMSO, London.
- HOLLAND, W. W. and ELLIOTT, A. (1968). Cigarette smoking, respiratory symptoms and anti-smoking propaganda. *Lancet*, **1**, 41.
- JEFFREYS, M., NORMAN-TAYLOR, W., and GRIFFITHS, G. (1967). Long term results of an anti-smoking educational campaign. *Med. Offr*, **117**, 93.
- KENDALL, M. G. (1970). *Rank Correlation Methods*, 4th ed. Griffin, London.