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"SICK" OR "HOOKED": SMOKERS' PERCEPTIONS OF THEIR ADDICTION

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Abstract—A postal questionnaire was completed by 233 smokers who had contacted a television company for help with stopping smoking. Subjects recorded how well each of 20 statements described their feelings about their own smoking. These responses were submitted to a principal components analysis which revealed two interpretable factors. The first ('Sick') reflected a tendency to see smoking as a sickness, and a greater concern over health consequences. The second ('Hooked') reflected a feeling of inability to give up smoking, and a resentment at other's attempts at dissuasion. Subjects with higher 'Sick' factor scores perceived greater potential benefit in their stopping (in terms of a reduction of risk of cancer). Higher 'Hooked' factor scores were given by females, older smokers, those who described themselves as more extremely addicted, and those who saw less benefit for themselves in stopping.

It is now widely recognized that cigarette smoking has much in common with dependence on other drugs (e.g. Krasnegor, 1979). On the one hand, this has led to a view of smoking as a kind of 'sickness' in need of 'treatment'. On the other hand, there has been a growing realization that individual motivational factors are extremely important in predicting outcomes such as abstinence and cessation (e.g. Schachter, 1982).

These emphases on 'sickness' and on 'motivation' often seem to pull in different directions. For instance, commenting on the concept of alcoholism as a disease (cf. Jellinek, 1960) Robinson (1972) points out that the 'sick role' classically involves an exchange of rights and responsibilities, whereby the 'sick' person hands over to medical professionals the responsibility for changing his or her own condition, and in return claims the right to be looked after as a 'patient'. This, however, can produce difficulties for treatment, where the therapist may require patients to be more 'motivated' to help themselves.

This study is based on the assumption that it is important to consider the attitudes that smokers, like the users of any drug, have towards their addiction, how confident or otherwise they feel in their own ability to give up, how strongly they express their wish to do so, and how prepared they are to take on the role of a 'sick' person entitled to expert help from professionals.

METHOD

Subjects

Subjects were respondents to two postal questionnaires (A and B) mailed simultaneously to a random sample drawn from a total of over half-a-million members of the

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general public of the United Kingdom. These were all people who had written in to the independent broadcasting company Granada Television following a program in October 1977 in which the company offered free 'kits' to anyone who wanted to give up smoking (in fact, very few received the promised 'kits', most being simple sent a broadsheet 'newspaper' with antismoking advice. This may have contributed to a low response rate).

A total of 20,000 people received questionnaire A, of which 2,000 also received questionnaire B. Both questionnaires asked subjects to state their names and addresses. There were 2,343 returns of questionnaire A and 233 returns of questionnaire B. Of these 233, 17 failed to complete questionnaire A. Clearly, no claim can be made that this sample is 'representative' of the general population of smokers wishing to give up, though a follow-up study on a small number of non-respondents revealed no obvious difference between them and the respondents.

The 216 subjects who completed both questionnaires included 89 males and 127 females, with an average of 32.32 years. Mean reported cigarette consumption was 25.79 per day, with no significant difference between males and females.

The Questionnaires

Questionnaire A. The questionnaire contained four printed pages of items concerning personal details, smoking attitudes and behavior. A full description of this questionnaire is given by Eiser, van der Pligt, Raw and Sutton (In press) where the findings from the larger sample (of 2,343) are reported. The present paper is concerned primarily with questionnaire B, and therefore only with the following information provided by questionnaire A: sex, age, cigarette consumption, a measure of perceived addiction (this read "How addicted do you think you are to smoking?", with responses in terms of four categories—not at all, slightly, fairly, extremely) and a 'probability difference' measure of benefits of stopping smoking (this read "If you stopped smoking altogether do you think *your* chances of getting lung cancer would be lower than if you continued to smoke?" with three response categories—about the same, a bit lower, much lower).

Questionnaire B. The questionnaire contained 20 statements introduced as "examples of the sort of thing smokers sometimes say about their smoking". The text of these statements is given in Table 1. Many of these were based on the items used by Eiser and Gossop (1979) in a study of patients at a drug-dependence clinic (see also Gossop, Eiser & Ward, 1982). Subjects responded to each statement in terms of four categories (scored from 1 to 4 respectively)—not at all how I feel, only slightly how I feel, quite like how I feel, very much how I feel. Subjects' responses to this questionnaire contained no missing data.

RESULTS

The data from questionnaire B were first analysed without reference to subjects' responses on questionnaire A. All 233 subjects were therefore included.

Factor structure

We first performed a principal components analysis on subjects' ratings of the 20 statements. Table 1 presents the results of an oblique two-factor solution. Factor 1, with an eigenvalue of 3.36, accounted for 16.8% of the variance, Factor 2, with an eigenvalue of 2.20, accounted for a further 11.0%. The correlation between the factors was .092. A further five factors, accounting in all for another 31.5% of the variance, obtained eigenvalues ranging from 1.09 to 1.51, but none of these were as easily interpretable.

Table 1. Principal components factor matrix (two factors, oblique rotation) for ratings of 20 statements in Questionnaire B by 233 subjects

	Factor 1 'Sick'	Factor 2 'Hooked'
1. I'm frightened about what smoking may be doing to me	0.72	0.06
2. Even if I stopped smoking for a while, I'm sure that other people would persuade me to start again.	0.07	0.28
3. I resent other people telling me that I shouldn't smoke	−0.25	0.49
4. I don't think I'm really prepared to give up smoking if it proves too difficult or distressing	−0.05	0.57
5. I've never made a serious effort to give up smoking completely	−0.06	0.26
6. If life was easier, I'd have less need to smoke	0.28	0.48
7. I feel I'm constantly being 'got at' nowadays because I'm a smoker	0.03	0.51
8. I know that some people die because they smoke, but I think most smokers stay just as healthy as non-smokers	−0.47	0.45
9. I'd like to give up smoking if I could do so easily	0.12	0.21
10. If I really wanted to, I could give up smoking	−0.04	−0.47
11. I'm not going to be able to give up smoking unless someone helps me	−0.38	0.59
12. I think you have to smoke a lot more than I do to put your health at serious risk	−0.28	0.15
13. I'd feel very ashamed of myself if I tried to give up smoking and failed	0.29	0.31
14. If I gave up smoking, I'd expect to feel a lot healthier than I do now	0.51	0.12
15. I find smoking helps me cope when I've got problems	0.05	0.41
16. I think of my smoking as a sickness which needs to be cured	0.73	0.21
17. I think that the government should do more to persuade people not to smoke	0.61	0.00
18. What I feel I really need is a pill or some sort of medicine that'll stop me wanting to smoke	0.50	0.42
19. I feel that other people are partly to blame for the fact that I became a smoker	0.14	−0.01
20. I really want to stop smoking, but I need somebody to tell me how to do it	0.58	0.40

The structure of the two factor solution was very similar to that found by Eiser and Gossop (1979), although the order of the two factors was reversed. We therefore adopted the same labels for the two factors. Factor 1, which we called 'Sick', was marked by heavier loadings from items identifying smoking as a 'sickness', and reflecting concern with the health consequences, e.g. items 1 and 16.

Factor 2, which we labeled 'Hooked', was marked by items expressing a lack of confidence in one's ability and perhaps in one's motivation to stop smoking, e.g. items 4, 10 and 11. Also characteristic of this factor was an expressed need for smoking to help one cope (items 6 and 15) and a resentment at others' attempts at dissuasion (items 3 and 7).

Comparisons of responses to questionnaires A and B

To see how subjects' responses on questionnaire B compared with their responses to certain items on questionnaire A, two factor scores were calculated for each subject, the first for 'Sick' (Factor 1) and the second for 'Hooked' (Factor 2). These calculations involved using the factor score coefficients derived from the two-factor solution on all 233 subjects previously described.

For the 216 subjects who responded to both questionnaires, the mean factor score for 'Sick' was 3.13, and that for 'Hooked' was 4.48. The scores of 'Sick' showed no significant difference between the sexes; means were 3.18 for males and 3.10 for females, $t(214) = 0.53$, n.s. However, females had higher 'Hooked' scores than males; means were 4.17 and 4.70, $t(214) = 4.04$, $p < .001$. Subjects with higher 'Hooked' scores tended to be older ($r = .28$, $p < .001$), but the correlation between age and 'Sick' was

nonsignificant. The correlations between cigarette consumption and 'Sick' ($r = .11$) and 'Hooked' ($r = .12$) were nonsignificant.

To determine the relationship between the factor scores and perceived addiction the sample was split so as to compare the 135 who described themselves as 'extremely' addicted with the 81 who described themselves as relatively less addicted. There was no significant difference in terms of mean factors scores on 'Sick' between those who described themselves as 'extremely' rather than less addicted (3.22 vs 3.00, $t(214) = 1.58$, ns); however, the factor scores on 'Hooked' showed a signifcant mean difference, with those who saw themselves as extremely addicted being more "Hooked', as one would expect (4.69 vs 4.12, $t(214) = 4.32$, $p < .001$). The 'extremely addicted' group on average, were older (33.82 vs 29.87 years, $t(200) = 2.45$, $p < .02$) and had a higher daily cigarette consumption (27.93 vs 22.18, $t(213) = 4.61$, $p < .001$).

Similar analyses were performed to compare the 101 who responded 'about the same' or 'a bit lower' (small benefit) with the 114 who responded 'much lower' (large benefit) to the 'probability difference' question asking if their chances of lung cancer would be lower if they stopped smoking (one subject failed to complete this item). The 'small benefit' group showed significantly lower 'Sick' factor scores, on average, than the 'large benefit' group (2.65 vs 3.56, $t(213) = 7.33$, $p < .001$), and significantly higher 'Hooked' factor scores (4.70 vs 4.28, $t(213) = 3.19$, $p < .002$). The 'small benefit' group, on average, were older (34.84 vs 30.17 years, $t(199) = 2.98$, $p < .005$), but did not smoke more heavily (26.01 vs 25.57, $t(212) = 0.35$, ns.)

DISCUSSION

In a manner that closely resembles the pattern of responses obtained from users of illicit drugs (Eiser & Gossop, 1979), our subjects' perceptions of their addiction to smoking suggested two distinguishable dimensions. The first dimension involved a view of smoking as a 'sickness' to be cured and a greater concern with health consequences. The second dimension involved a low estimate of one's ability or readiness to give up smoking, and a resentment at others' attempts at dissuasion.

The task of health educators would be easier if there was only one kind of rationalization on which smokers relied. Our data suggest a more complex picture. The pessimism of the 'Hooked' smokers regarding their ability to give up may well be regarded as a major obstacle to behavior change. However, removing this obstacle through persuasion may be very difficult when such beliefs account for previous failures at abstinence. The 'Sick' smokers, however, while more confident in the ability of professionals to help them break their habit, show no greater self-reliance. There are good reasons to suppose that the adoption of such a passive 'patient' role may be inappropriate (Leventhal & Cleary, 1980). Different beliefs may therefore contribute to the maintenance of the smoking habit in different ways, with different implications for behavior change.

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