

ANTISMOKING ATTITUDES AND GENERAL PREJUDICE: AN EMPIRICAL STUDY

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Summary.—A group of 5,977 persons was interviewed concerning attitudes towards smoking and smokers. Prejudice against smoking was significantly related to prejudice against various racial, religious and political groups and was noted in personality types previously found to be characteristically prejudiced. Mortality was much greater in prejudiced nonsmokers than in nonprejudiced smokers.

Over the centuries, there has been much strong feeling against smoking, drinking, prostitution, and many other sources of satisfaction and need-fulfillment, based on religious, ethical, and other arguments. These have often led to savage punishments, such as the whipping of prostitutes in the middle ages, similar punishments dished out to Moslems caught drinking in Mohammedan countries, and the infliction of the death penalty for smoking by Sultan Muhrad IV (Eysenck, 1965). Recent objections to the smoking of cigarettes often are based on the alleged medical consequences of smoking, e.g., lung cancer and heart disease, but such arguments leave out of account the many criticisms that have been made of the poor methodology and bad statistics characteristic of the work on which they are based (Eysenck, 1980, 1986). Thus it appears possible that extremely adverse views of cigarette smoking may be due to prejudice and may be found in generally prejudiced individuals, i.e., individuals showing prejudice in other areas as well. It is this hypothesis which is being tested in the empirical study here reported.

In a previous paper, Grossarth-Maticek, Eysenck, and Vetter (in press) have shown that a population of 6,796 males aged between 45 and 55 yr., interviewed and asked questions concerning eight possible objects of prejudice in Heidelberg, West Germany, gave evidence of a general factor of prejudice, in the sense that prejudiced answers to these questions were all positively intercorrelated. Objects of the prejudice were democracy, Jews, Arabs, Slavs, Christian religion, the USA, Communism, and other races. In addition, prejudice of the kind measured was related to personality and to alienation, defined in terms of a question referring to the experiences of the persons concerned over the past three years, leading to an increasing deterioration of their material situation and their social position, so that in comparison with earlier years they were becoming poorer and less integrated.

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The personality types in question have been described in detail elsewhere (Grossarth-Maticek, Eysenck, & Vetter, 1988), where extended questionnaires used to determine the personality types are given. These personality types were originally derived to predict cancer and coronary heart disease, Type 1 being shown to be cancer-prone, Type 2 to be coronary heart disease-prone, Type 3 to be essentially psychopathic, and Type 4 to be essentially normal. It was found that persons of Types 1, 2, and 3 were very significantly more prejudiced than persons of Type 4.

In the present study, 5,977 individuals took part who had also taken part in the previous study of prejudice. Five additional questions regarding smoking were asked, and extreme antismoking prejudice was recorded when all five questions were answered with "Yes". The questions are:

1. Is the smoking of cigarettes the most important cause of many chronic and fatal diseases, such as lung cancer, heart infarct, bronchitis, etc.?
2. Are you personally ready to fight against cigarette smoking in all the ways which are legally available to you?
3. Do you think that smokers who continue smoking in spite of knowing the bad effects of that habit on health, deserve no sympathy or consideration?
4. Do you think that smokers are personally fully responsible for diseases which may appear later on?
5. Would you say that the smoking of cigarettes is so much more important for certain diseases that it would be irresponsible to investigate other additional causes for these diseases, such as psychosocial factors, because this might lead to the exoneration of cigarette smoking?

Table 1 shows the main results of this study. Numbers belonging to

TABLE 1
PREJUDICE AGAINST SMOKING IN FOUR PERSONALITY TYPES

Measure		Type 1	Type 2	Type 3	Type 4
1. Number belonging to type	<i>f</i>	1590	1720	1970	1516
2. Extreme prejudice against smoking	<i>f</i>	296	378	296	65
	%	19	22	15	4
3. Total number of smokers	<i>f</i>	581	716	916	618
	%	37	42	46	41
4. Socioeconomic alienation	<i>f</i>	268	351	312	201
	%	17	20	16	13
5. Average age (yr.)		51.3	51.6	50.9	51.5

each of the four personality types are roughly equal, as are the numbers of smokers in each, with the latter varying from 37% to 46%. The average age in the four groups is similar too, ranging from 50.9 to 51.6 yr. The variation in socioeconomic alienation is somewhat larger, ranging from 13% to 21%;

this, however, is very much less than the variation in extreme prejudice against smoking. Here Type 4, which in our previous study emerged as the least prejudiced type, shows only 4% as extremely prejudiced, as opposed to 19%, 22% and 15% of Types 1, 2 and 3, i.e., the personality types previously shown to demonstrate prejudice in the sociopolitical field. These differences are significant ($p < .001$) and demonstrate clearly that personality type is related to prejudice against smoking.

The relationship between antismoking prejudice, and the eight sociopolitical types of prejudice, is shown in Table 2. Six of the eight Pearson

TABLE 2
PRODUCT-MOMENT CORRELATIONS BETWEEN SMOKING PREJUDICE
AND POLITICAL PREJUDICE

	<i>r</i>	<i>p</i>
1. Antidemocratic	0.02	
2. AntiSemitic	0.06	.001
3. AntiArab	0.05	.001
4. AntiSlav	0.09	.001
5. AntiChristian	0.01	
6. Racist	0.11	.001
7. AntiAmerican	0.05	.001
8. AntiCommunist	0.05	.001

correlations are significant ($p \leq .001$), with only two (antidemocratic and antiChristian prejudice) being nonsignificant. Even for these two types of prejudice, however, the relationship is in the predicted direction. The correlations are small: their significance is based on the large number of subjects involved.

The large number of participants, constituting a random sample of the population within the controls for sex and age introduced into the study, would make almost any observed differences significant, but the data make it clear that the differences between the personality types are socially significant as well as statistically significant. Types 1, 2, and 3 showed antismoking prejudice five times as frequently as do people of Type 4, the unprejudiced, normal type; this surely is an important indication that the prejudice itself is somewhat irrational, being based on features of the personality which lead to prejudice in many directions. It should be noted that individuals of Types 1, 2, and 3 tend to have high scores on a neuroticism inventory, suggesting that prejudice is related to emotional instability.

Previous studies have shown that individuals of Type 1 die frequently of cancer, individuals of Type 2 die frequently of coronary heart disease, while individuals of Type 3 and Type 4 are much less likely to die of these and other

causes (Grossarth-Maticek, Eysenck, & Vetter, 1988). It might therefore be predicted that individuals showing antismoking prejudice, being predominantly made up of Types 1 and 2, would show higher mortality rates. A ten-year follow-up study gave the results shown in Table 3 (interviewer follow-up and death certificate ascertainment). It will be seen that approximately 25% of

TABLE 3
MORTALITY RATES OF PREJUDICED NONSMOKERS
AND NONPREJUDICED SMOKERS

	Type 1	Type 2	Type 3	Type 4
Population of Anti-Smokers				
N	281	352	261	59
Died	69 (25%)	89 (25%)	64 (25%)	16 (27%)
Infarct	19 (7%)	42 (12%)	31 (12%)	4 (7%)
Cancer	24 (9%)	11 (3%)	5 (2%)	3 (5%)
Smokers in Total Sample				
N	581	716	916	618
Died	84 (14%)	92 (13%)	59 (6%)	21 (3%)
Infarct	56 (10%)	24 (3%)	8 (1%)	2 (0%)
Cancer	12 (2%)	42 (6%)	3 (0%)	4 (1%)

the prejudiced individuals died, as compared with 256 out of 2831 nonprejudiced smokers, i.e., 9%. Thus 9% of smokers died as compared with 25% of the nonsmoking but prejudiced individuals, indicating that prejudice is much more dangerous to health than smoking! Note that the number of prejudiced individuals is smaller than the numbers given in Table 1; this is so because a small number of probands had left Heidelberg, where the study was carried out, and could not be traced. There is practically no change in age and sex composition due to this factor.

In talking here about antismoking prejudice, we do not intend to suggest that smoking is not involved in the causation of physical disease, or that opposition to cigarette smoking is itself a prejudice. Recent work summarized by Eysenck (1986) has shown that there are many criticisms to be made of the usual arguments suggesting a close causal relationship between smoking and cancer, cardiovascular disease and other disorders, but the evidence is certainly not sufficient to *disprove* such a relationship. What is suggested is rather, that the relationships involved are very complex, and the recent work of Grossarth-Maticek, Eysenck, and Vetter (1988) has indicated that personality factors in a series of large-scale prospective studies were significantly more predictive of disease than was smoking, and interacted with smoking in complex ways to predict cancer and coronary heart disease. The term "prejudice" is reserved for those who answer in the positive direction to all the five ques-

tions in the smoking inventory, and the evidence makes it clear that such an answer is factually wrong for Question 1 and Question 5, and scientifically meaningless regarding Question 4. Questions 2 and 3 suggest an emotional response much stronger than would seem to be justified towards smokers. Thus to answer all five questions in a positive direction suggests an extremity of view which may rightly be considered prejudice. The fact that this "prejudice" correlates very significantly with a type of personality already known to be given to prejudice, and also with prejudice in other fields, does suggest that we are here dealing with something rather different from an unemotional appraisal of the factual situation but rather emotional response determined by nonfactual factors.

Conclusions

This study has shown that the general factor of "prejudice" previously only based on sociopolitical attitudes, extends also to other fields, such as smoking. Prejudice against smoking is found in the same type of person showing sociopolitical prejudice in other fields, and such prejudices are correlated with antismoking prejudice. Further work might include looking at other prejudices involving issues not related to the sociopolitical field, such as drinking, prostitution, etc.

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