

BRIEF COMMUNICATION

A note on 'Smoking, personality and reasons for smoking'

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In their recent paper on smoking and personality, McManus & Weeks (1982) administered the Eysenck Personality Questionnaire (EPQ) and questionnaires regarding smoking to 100 subjects, and calculated correlations between the personality traits measured (psychoticism, extraversion, neuroticism, and lie scale scores) and smoking. Contrary to expectation, there was no correlation with extraversion (E), only slight correlation with neuroticism, but a significant correlation with psychoticism (P). They argue that the lack of correlation with E is due to the changed contents of the scale, which has been changed from earlier versions, such as the Eysenck Personality Inventory (EPI), by the omission of some impulsiveness items. They quote a paper by Rocklin & Revelle (1981) which argues in a similar vein.

The purpose of this note is to indicate (1) that the McManus & Weeks findings are not typical of work with the EPQ, and (2) to suggest an alternative hypothesis which might explain the emergence of psychoticism as a personality factor correlated with smoking. Taking the first point first, the work of Powell and of Jamison quoted in Eysenck (1980), using the Junior Version of the EPQ (Eysenck & Eysenck, 1976), gives positive correlations with the new E scale, very much as did the older version. The results are discussed in Eysenck's (1980) book on *The Causes and Effects of Smoking*.

More recently, Spielberger & Jacobs (1983) reported results on the correlation between personality and smoking in over 900 students. Using the EPQ, they concluded that:

In the present study, smokers scored higher than non-smokers on the EPQ extraversion, neuroticism and psychoticism scales, and non-smokers had higher

lie scores than smokers... The differences observed between smokers and non-smokers on the EPQ scales were in the same direction for both sexes, but these differences were larger in magnitude for the females... Taken as a whole, the results of the present study provide additional support for Smith's (1970), and Matarazzo & Matarazzo's (1965) conclusions that smokers are more extraverted, neurotic and tense, and have stronger antisocial tendencies than non-smokers.

Thus, on this much larger sample, we find that extraversion, even in the form of the new E scale on the EPQ, nevertheless retains its correlation with smoking behaviour.

Correlational studies are notoriously dependent on large numbers for the achievement of replicable and reliable results in view of the large standard errors of correlation coefficients. Possibly one of the reasons for the failure of correlations between smoking, on the one hand, and extraversion and neuroticism, on the other, to emerge from the McManus & Weeks study is the small number of subjects, and their heterogeneity. It would not be reasonable to accept uncritically their view that: 'The most important single result in the present study is the complete lack of a relationship between E (extraversion) and any measure of cigarette smoking' (p. 354). They state that: 'This result cannot readily be attributed to relatively small sample size since we did find a significant relation between P and smoking, and also between E and another aspect of smoking: namely, rolling one's own cigarettes' (p. 354). This is not a reasonable argument, since out of the very large number of correlations calculated by McManus & Weeks, some truly significant ones might by chance appear insignificant, and some truly insignificant ones might appear significant statistically. It is particularly when large numbers of correlations are calculated on a small sample that chance errors may produce unreasonable results.

However, there is another possibility which

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may suggest that, in the future, correlations between smoking and extraversion might be smaller than in the past, and correlations between psychoticism and smoking larger. Human behaviour, such as smoking, is determined by many factors, one of which must undoubtedly be the social acceptance of the behaviour in question. There has been a considerable change over the past 20 years or so in the social acceptability of smoking; when Eysenck *et al.* (1960) carried out their original work on the importance of extraversion in causing smoking behaviour, smoking was socially acceptable, and hence socially oriented extraverts might be reinforced for smoking. Nowadays, smoking behaviour is socially disapproved, and hence socially oriented extraverts might be put off smoking to some extent, thus lowering the expected degree of correlation.

Equally, social disapproval might actually attract high P scorers, seeing that much of their conduct is anti-social, aggressive and socially undesirable. For them, social disapproval may constitute positive reinforcement, and hence over the years there might be an *increase* in the correlation between smoking and P, at the same time as there occurred a *decrement* in the correlation between extraversion and smoking.

This possibility is difficult to test experimentally because we cannot go back over time to test populations not subject to the recent disapproval of smoking behaviour. The point is merely raised in order to stress the importance of repeated measurement over the years, administering identical test instruments to populations chosen according to identical criteria. Similarly, longitudinal follow-up studies are essential if we are ever to obtain a firm understanding of the relationship

between personality and smoking. In the past, research in this field has suffered greatly from being confined to small, unrepresentative populations, tested on only one occasion. The fact that replicable overall findings have emerged does not preclude the possibility that important changes are taking place, and merely hint at the robustness of the relationship between personality and smoking. Nevertheless, the time must surely have come for those interested in this field to get together and arrange for routine testing of quota samples of the population to be carried out at regular intervals, using personality scales based on the best theories available at the time. It is only along these lines that we shall achieve a better understanding of the dynamics underlying the relationship between personality and smoking, rather than being restricted to a static picture, taken at one point of time and applying to one particular population only.

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