

before and in the same orders. One half of each group was given recognition tests with frequent intrusions as alternatives; the other halves had a test with rare intrusions as alternatives. The mean number of correct items identified per subject was 10.5 with the former halves, 13.1 with the latter, a difference which is statistically significant ( $P < 0.01$ ). For comparison, the mean score per subject in the original recall test was 9.6 items.

Our results indicate that when memory for an item is imperfect the subject is able to identify certain of its characteristics. If a number of items in the set of alternatives from which he has to choose have similar characteristics, then he will be unable to tell which item is new and which has been seen before. If only one has them, then he can correctly identify it. Furthermore, since our results were obtained from a group of subjects rather than intensive study of individuals, there would seem to be some communality in the characteristics used by different persons for encoding numbers in memory.

H. C. A. DALE  
A. D. BADDELEY

Medical Research Council  
Applied Psychology Research Unit,  
Cambridge.

<sup>1</sup> Davis, R., Sutherland, N. S., and Judd, B. R., *J. Exp. Psychol.*, **61**, 422 (1961).

<sup>2</sup> Judd, B. R., and Sutherland, N. S., *Inform. Control*, **2**, 315 (1959)

### The *T* Concept

THE concept of tendermindedness has been at the centre of a controversy ever since Eysenck<sup>1</sup> attempted to relate it to political attitudes. First Christie<sup>2</sup> then Hanley and Rokeach<sup>3</sup> sought to discredit the ideas put forward by Eysenck. To some extent the issue has been difficult to settle because there has been no external criterion against which *T* could be validated. Until now it has been open to whatever interpretation the various parties have cared to place on it. Nor has the scale at present used by Eysenck to measure *T* ever been factor analysed.

In the present work the *T* scale was administered to a quota sample of 122 adults obtained from two London boroughs by the random route method. Age, sex, occupation, and political and religious affiliations were also obtained.

Factor analysis revealed the primary component to be a measure of what might best be described as 'moralistic religiosity'. The top eight items, with loadings from 0.496 up to 0.748, all make direct references to religion, the Church, God, Christ, and life after death. No other religious items appear in the scale. The next ten items all exude a strong moralistic aroma; four are directly connected with sexual behaviour, and the rest are all redolent of moral turpitude in one form or another. These items carry loadings from 0.298 to 0.466 on the primary component.

The last three items, with loadings over 0.200, are of interest in that they have a humanitarian quality and score in precisely the opposite direction to that required by the *T* concept and the key used by Eysenck. The remaining humanitarian items follow this trend with lower loadings.

To confirm this general finding, religious affiliations were used as an external criterion. Those with religious affiliations scored higher on *T* than those without, the difference being significant beyond the 0.001 level on a two-tailed test.

Political affiliations follow the pattern built into the scale by Melvin<sup>4</sup>, in that there is little to choose between Socialists and Conservatives, while Liberals appear higher on *T*. Previously reported correlations between Communism and Fascism and toughmindedness are easy to understand in view of the explicit opposition of these creeds to the established church. Nor, in the circumstance, is it difficult to believe that *T* is correlated with neuroticism as recently reported by Eysenck<sup>5</sup>.

The essential weakness of the *T* scale as it stands is made clear by comparing Torquemada and Eichmann, both of whom were noted for their ruthless efficiency and hideous inhumanity. Given his religious affiliations and moralistic fervour, it would have been virtually impossible for Torquemada to have appeared as other than a distinctly tenderminded soul, despite his authoritarian temperament. Eichmann, on the other hand, although of a very similar disposition, would emerge as extremely toughminded simply because his particular creed was diametrically opposed to religious dogma other than its own.

R. T. GREEN  
B. G. STACEY

Department of Psychology,  
University College,  
London.

<sup>1</sup> Eysenck, H. J., *The Psychology of Politics* (Routledge, Kegan Paul, London, 1954).

<sup>2</sup> Christie, R., *Amer. J. Psychol.*, **68**, 702 (1955); *Psychol. Bull.*, **53**, 411, 439 (1956).

<sup>3</sup> Rokeach, M., and Hanley, C., *Psychol. Bull.*, **53**, 189 (1956).

<sup>4</sup> Melvin, D., Ph.D. thesis, Univ. of London (1955).

<sup>5</sup> Eysenck, H. J., *J. Soc. Psychol.*, **53**, 243 (1961).

Green and Stacey strongly support my own interpretation of 'tendermindedness', as well as giving it statistical backing. In my description in *Psychology of Politics* (p.132), I wrote: "the tenderminded set of opinions appears to be dominated by ethical, moralistic, super-ego, altruistic values". The relationship with liberalism reported by Green and Stacey is also as predicted and found by us. It is difficult, therefore, to follow their reasoning when they speak of "the essential weakness" of the *T* scale. They seek to demonstrate this by referring to hypothetical scores on the scale which might be made by Torquemada and Eichmann. It need scarcely be said in a scientific journal that hypothetical data not obtained in an actual experiment but merely postulated to suit the convenience of the author have little empirical value, quite apart from the fact that I have always been at pains to stress that the scale was relevant only to the country where it was constructed and validated, and only at the time when this process was carried out; extension of its validity could clearly only be made on the basis of empirical demonstration. I would never have claimed that the scale as it stood had much relevance to conditions so utterly different as those obtaining in Spain 300 years ago, and I cannot, therefore, regard the hypothetical demonstration of Torquemada's tendermindedness as being in any way relevant to the argument. Eichmann's equally hypothetical toughmindedness I would not wish to doubt, however, although here, too, empirical evidence would be desirable.

H. G. EYSENCK

Institute of Psychiatry,  
Maudsley Hospital,  
Denmark Hill,  
London, S.E.5.