Correspondence

PREDICTIVE ACCURACY AND CLINICAL UTILITY OF THE GRID TEST OF SCHIZOPHRENIC THOUGHT DISORDER

DEAR SIR,

Hill (1976) has argued that the Grid Test of Schizophrenic Thought Disorder (GTSTD) shows appreciable statistical validity in terms of agreement with clinical judgements of thought disorder but that clinical utility is suspect because, in part, prediction on the basis of baserates often exceeds test prediction. I wish to show that Hill has misapplied the logic of discriminative efficiency and clinical assessment.

Wiggins (1973) has stated that a valid test always possesses greater predictive accuracy than that possible for baserate prediction alone, and has called attention to a misleading example in Meehl and Rosen (1955) that apparently has given rise to the belief that baserate prediction can exceed in accuracy the use of a valid indicator. The correct relationship is shown in the expression (Wiggins, 1973, p. 252):

$$P(VP) = (BR)(SR) + phi\sqrt{BR(1-BR)SR(1-SR)};$$
where $P(VP)$ = probability of valid positives; BR = the baserate; SR = the selection ratio; and phi = the validity coefficient as the phi coefficient.

That is, given a validity coefficient greater than zero, the $P(VP)$ always is greater than that predicted on the basis of baserates (when phi = 0 in the random case).

Using Hill's (1976) example, data pooled from Frith and Lillie (1972) and Bannister, Fransella and Agnew (1971) give a phi value of .286. Let this be the validity of the GTSTD. Imagine a new sample of patients. Suppose the baserate for thought disorder is 10 per cent, as Hill estimates, then retaining the selection ratio implicit in his example, baserate prediction gives $P(VP)$ = 2 per cent. However, with phi = .286, $P(VP)$ is now 5.5 per cent, an increase in predictive accuracy of 3.5 per cent. The importance of this gain in accuracy is a matter of incremental validity (Sechrest, 1963). This example illustrates that a test of validity greater than zero will always yield greater predictive accuracy than that possible from baserate prediction alone.

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HYSTERIA AND URBANIZATION

DEAR SIR,

We should like to report a recent study that we carried out on the incidence of hysteria in one part of Japan. We defined hysteria as the development of physical symptoms in the absence of physical illness but in the presence of some significant psychological change in life circumstances. Most of our patients complained of breathing disturbances, fits or pain, and all displayed importunate and suggestible behaviour in their interactions with medical staff.

We reviewed the notes over two decades (1952–1973) of all women attending the psychiatric outpatient departments of two general hospitals which between them provided the main hospital services for a mixed rural and urban population of one million.

There were two main findings. First the incidence of hysteria in women fell over this period. In the early 1950s it was diagnosed in about 6 per cent of new outpatients; by the early 1970s less than 2 per cent were so diagnosed, despite a comparable attendance rate. Secondly, the incidence bore some relationship to the type of area in which the patient lived. It was highest in the suburbs but low in both rural and inner city areas.

Our finding of a decline in hysteria has been reported from the United States (Stefansson et al, 1976) and elsewhere in Japan. Our finding that the incidence is affected by population density has also

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