superimpose this kind of result upon the case material would have necessitated superhuman arithmetical powers, which (if they will forgive me) I am sure Professor Kiloh and Dr. Ball do not possess.

I do not intend to answer Costello's statistical arguments point by point. Whatever he may say, the fact remains that Costello and Selby (1965, page 499) state "The findings presented here confirm the original findings (Costello and Smith, 1963) suggesting no difference between reactive and endogenous depressives in their sleep patterns." This, it seems to me, is clearly a claim to have confirmed the null hypothesis, which (as I pointed out in my previous letter (*Journal*, August 1965, page 773) their data do not and cannot do.

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KILOH, L. G., BALL, J. R. B., and GARSIDE, R. F. (1962). Brit. med. J., i, 1225.

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DEAR SIR,

Dr. Costello's detailed reply (*Journal*, September 1965, page 905) calls for some comment. My concern with his criticism (1) of the paper by Kiloh and Garside (2) arose from the suggestion that their results were influenced by bias in the recording of data. Since those who take the trouble to do the kind of work under discussion (as we are doing at present in Newcastle) are likely to start with the premise that qualitatively different kinds of depression do exist, the notion that preconceptions can invalidate results must be examined with care.

Actually, Costello's statement "our intent was to compare sleep pattern data obtained from case histories with sleep pattern data obtained in standardized interviews" (although based apparently on a misunderstanding) seems to imply that provided standardized interviews are used, data can be collected without bias. I would agree. Certainly there can be no question of the necessity to define terms and to standardize methods of eliciting and recording information as exactly as possible. Indeed the great advantage of the method by which the presence or absence of individual features are recorded, and their intercorrelations subsequently calculated, is precisely that contamination of data and uncertainties about diagnostic procedure are reduced to a minimum. Since this was in fact the method of Kiloh and Garside, their results in regard to sleep pattern must carry more weight than those of Costello and Selby, whose diagnostic groups were constructed by the old-fashioned clinical method in which, as they point out, the data are liable to contamination. For, unfortunately, we remain in total ignorance of how their independent interviewer arrived at his diagnoses, and what importance he gave to sleep patterns among the other features. On the other hand Kiloh and Garside's data show the factor loadings, on their bipolar factor, of both initial insomnia and early wakening, as reported by patients in standardized interviews. Naturally, the actual amount of sleep achieved by patients is a different question.

It is worth adding that while Kiloh and Garside's data showed a close fit between clinical diagnosis and the factor loadings, this is less important than the demonstration that a bipolar factor does exist. Further study of this factor may well lead to modification of current ideas about the classification of depressions.

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References

1. COSTELLO, C. G., and SELBY, M. M. (1965). Brit. J. Psychiat., 111, 497.

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INTELLIGENCE OF PATIENTS IN SUBNORMALITY HOSPITALS

DEAR SIR,

The letters from Drs. Bavin, Shapiro and Walk (*Journal*, June and September 1965) raise three main issues.

1. The distinction between legal and clinical classification

Dr. Bavin urges that the terms Subnormal and Severely Subnormal should be limited strictly to the classification of patients dealt with under the Act and should not be used for the planning of clinical services; Dr. Shapiro refers to the dangers of equating legal terminology with clinical classification. What they advocate may well be desirable, but we must also ask whether it is reconcilable with current practice. It was concern with current practice that led us to conduct our survey; although not uninterested in official intentions, we were chiefly concerned with actual usage in the implementation of the new Act—and it must be evident that principles may not

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