Personality put to the test

SIR — To paraphrase Samuel Johnson, it is no crime to write a foolish article. Accordingly, Blinkhorn and Johnson¹ walk the streets free men. But earlier correspondence² has not addressed the major and fallacious arguments of this paper.

We challenge Blinkhorn and Johnson's conclusion that there is "precious little evidence" that even the best personality tests predict job performance. We contend that (1) the three personality tests reviewed by these authors are far from the best personality measures in use; (2) the authors totally ignored important new developments in the field and presented simple and well-known statistical procedures as if they were revelations to researchers in personnel selection; (3) their highly contrived empirical illustration is so unrealistic as to be ludicrous; and (4) their informal survey of research was biased and inconsistent with other published surveys.

The three tests that Blinkhorn and Johnson singled out as representing the "top end of the market" are, on average, more than half a century old. A perusal of the most recent Mental Measurements Yearbook³ reveals harsh criticism of these tests, clearly demonstrating their inadequacy when evaluated by experts. There have been substantial developments in personality measurement that Blinkhorn and Johnson failed to reflect in their review. They contrived an example using 30 predictors with only 50 people, implying that this absurd attribute to entity ratio represented typical practice in personnel psychology. Such obvious misuse of statistics, even if isolated examples perpetrated by poorly trained or unscrupulous personnel consultants can be found, has no bearing whatsoever on the scientific question of whether or not personality measures predict job performance.

Blinkhorn and Johnson's conclusions were based by their own admission on "an informal survey of research". More systematic and comprehensive reviews⁴ using modern, quantitative meta-analytic methods have drawn more sanguine conclusions about the role of personality predictors of job performance. To cite but one research example, Day and Silverman⁵ demonstrated that even after considering the effects of cognitive ability, three personality dimensions were significantly linked to hypothesized facets of accounting performance.

Blinkhorn and Johnson failed to address the issue of utility. The appropriate evaluation of the utility of a selection system is not the level of the validity coefficient of individual predictors, but rather of the validity and benefit accruing from the use of composite predictors. Even with moderate validities, very substantial economic benefits have been demonstrated.

Thus, it is obvious that Blinkhorn and Johnson began with the conclusion that per-

sonality testing had "insignificant" utility for employment selection and proceeded to "prove" their point by claiming that a small and unrepresentative set of studies and an example of an indefensible statistical procedure represented typical practice. On the contrary, systematically sampled validity studies from refereed journals require different conclusions: (i) when appropriate job analyses are undertaken, modern psychometrically sound personality measures are valid predictors of job performance, and (ii) such valid measures show substantial economic benefits when measured in terms of increased productivity and reduced training costs.

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Beating the systematics

Sir — Systematists are a vital part of the biological community, but conflicts continuously arise between the desire of systematists to apply the oldest names and the need of other biologists for nomenclatural stability (*Nature* 350, 466; 1991).

We advance the following modest proposal with an eye towards making the interests of the two groups more convergent. Each time a change in nomenclature is published, the systematist should be required to conduct a literature search for all citations to the taxon in the past 50 years, and append the list to the paper.

This scholarly task would usually be child's play for those accustomed to ferreting out antecedent names from centuries-old, foreign-language documents. Furthermore, it is analogous to the requirement that the rest of us deposit vouchers of our taxa. But in rare cases the literature on a taxon would be so voluminuous that the systematist would drop the task in favour of easier prey.

The names that would be saved in this way are precisely those that other biologists most want left alone, contributing stability to well-worked taxa while leaving the systematists free to exercise their art on taxa not yet discovered by the rest of us.

Of course there is no guarantee that a particularly zealous (or right-thinking, depending on one's point of view) name-changer would not go ahead and compile the complete list of all citations to, say, *Drosophila melanogaster*. But at least the rest of us could derive some solace from a useful appendix and also from the knowledge that its author must have gained some appreciation of the costs of such changes.

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Extremes of reality

Sir — I see that the war between the Flute Toodlers and the Tuba Boompers plays on, with the former insisting that, inasmuch as they cannot understand Wittgenstein, this proves he was crazy; the latter's indignant riposte is "What's wrong with being crazy?", as illustrated by F. A. Jenner (*Nature* 351, 10; 1991), who maintains, with Karl Jaspers, that psychotics "see into depths" of reality that the merely sane cannot, offering us "an abundance of content representing fundamental problems of philosophy".

I would urge both parties to reconsider their extremist positions. The fact that we may not fully understand someone does not, necessarily, demonstrate that he is mad. Neither does it demonstrate that he is, necessarily, a profound and brilliant philosopher.

What entertains me are the arrogant absolutes indulged in on both sides, but what troubles me is the claim that, in dealing with questions of reality, insanity offers just as good and possibly an even better approach than sanity, these things merely being relative, as we all know.

No doubt, as Jaspers contentedly affirmed, "The philosopher in us cannot but be fascinated by this extraordinary reality [of the psychotic mind] and feel its challenge". Many millions felt its challenge in the 1930s and 1940s as a man gifted with such 'extraordinary reality' dealt with matters of reality in his own inimitable philosophic fashion.

Not understanding much of what Wittgenstein had to say leaves me in the position of being unable to decide definitively whether he was brilliant, loony or just possibly neither. But if I understand Dr Jenner of the University of Sheffield's Department of Psychiatry, I tremble for psychiatry's grip on reality.

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