Correspondence

noticeably, and the availability heuristic comes to influence the process of making a diagnosis. I would propose that far from producing more investigations striving to make predictions come true, this heuristic produces fewer investigations which might refute the prediction. Survey any group of juniors and they will tell you all too readily of how frustrated they become when faced with the operation of the anchoring and adjustment heuristic which prevents their consultant relinquishing a diagnosis based on the availability heuristic, despite the refutatory evidence produced (perhaps from further investigations).

Even for the best clinician, who makes judgements free of heuristics and bias, the nature of a consultant's work is so different from that of a junior that one might expect differences in practice. A consultant can usually work with the assumption that simple, routine, or screening investigations have been done by the juniors (if not, why not?). It is in the nature of a consultant's work to be concerned with the few incisive investigations while leaving the commonplace in the hands of their juniors. I would have been interested to have seen a breakdown of Dr White's results by type of investigation.

Although I do not doubt the therapeutic effect of investigations for the investigator, this does not automatically negate their diagnostic value, or mean that their use is a problem. In order to make economic savings one would have to reduce considerably the numbers of a particular investigation ordered. Almost certainly that would result in an increase in the cost per investigation. Many investigations are carried out in bulk, and are a necessary and appropriate part of the care of patients in other specialities. The cost per item is thus quite low, and is unlikely to be affected by a small reduction in work for psychiatry. What price should we put on the detection of those cases of "Wilson's disease or parasagittal meningioma that the textbooks and lectures would have us believe languishes on every back ward"?

Brunswick House Glossop Road, Sheffield

Dr White replies **DEAR SIR**

The hard results in my paper demonstrate some outcome research. The process which led to this outcome was the decision-making behaviour of clinician psychiatrists. This process cannot be demonstrated by any method presently available to us and will always be open to conjecture. I am delighted to engender discussion, either through the *Psychiatric Bulletin* or in person, about the nature of the process.

The phenomena that Dr Adams and I have both addressed are in the realm of judgement and decision-making (JDM) theory, the understanding of the processes of judgement and choice. Approaches to understanding decision behaviour originated two centuries ago with Bernoulli's (1713) ideas in economics and Bayes' (1763) theorem for games theory. Further contribution came from utilitarian philosophy. The early part of the 20th century saw attempts to produce normative models of JDM theory. Numerous disciplines, statistics, economics, management, philosophy, social policies and law, as well as psychology, have found value in these models of JDM theory for understanding and improving the accuracy of their work. Medicine has been strangely absent from that list.

The evidence, from innumerable other sources as well as myself, has shown that man is clearly not the rational being he would like to believe (Polya, 1941; Kahnemann, Slovic & Tversky, 1982). As a result, recent years have seen a change in emphasis from normative theories of perfect JDM towards descriptive theories that attempt to understand the anomalies and aberrations found in decision behaviour wherever it takes place (Kahnemann, Slovic & Tversky, 1982; Kahnemann & Tversky, 1979; Slovic, Fischhoff & Lichenstein, 1977). Heuristics have proved one of the most prominent and successful contributions. The challenge facing this intriguing field is to bridge the gap between the theoretical core of JDM and the various practical applications.

The way that Dr Adams and I can attribute such simple differences in outcome to such wide differences in process suggests that the time is ripe for application of decision theory in medicine.

ANTHONY WHITE

Glenside Hospital Stapleton, Bristol

References

S. J. Adams

- KAHNEMANN, D., SLOVIC, P. & TVERSKY, A. (1982) Judgement under Uncertainty: Heuristics and Biases. Cambridge: Cambridge University Press.
- & TVERSKY, A. (1979) Prospect theory: an analysis of decision under risk. *Econometrica*, 47, 263–291.
- POLYA, G. (1941) Heuristic reasoning and the theory of probability. American Mathematics Monthly, 48, 450– 465.
- SLOVIC, P., FISCHHOFF, B. & LICHTENSTEIN, S. (1977) Behavioural decision theory. Annual Review of Psychology, 28, 1–39.

A full list of references is available on request from the author.

The strip-searching of women prisoners

Dear Sirs

The strip-searching of prisoners, both on remand and convicted in British prisons, started some years ago. It was introduced for "security reasons". Concern has been expressed about the use of strip-searching, particularly when used on women