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Mr. James R. Brantley
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Dear Mr. Brantley,

Thank you for your letter of October 24th in which you list your accession numbers for the two annual reports which we sent to you.

In that letter, you mentioned that we should contact you if we had any documents of interest to the law enforcement and criminal justice community. Accordingly, our Research Scientist has suggested that I send you a complete set of our METFORS Working Papers in Forensic Psychiatry, which I have enclosed.

I hope they will be of interest to you.

Yours sincerely,

Janice B. Thomas

Janice B. Thomas (Mrs.)
Secretary - B.A.U.

/jbt
encl.

THE ASSESSMENT AND PREDICTION OF DANGEROUS BEHAVIOUR: FACTORS AFFECTING DECISION MAKING IN AN INTERDISCIPLINARY TEAM 1 2

R. Allgood, B.T. Butler, D. Byers, et al

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ABSTRACT

THE ASSESSMENT AND PREDICTION OF DANGEROUS BEHAVIOUR:

FACTORS AFFECTING DECISION MAKING IN AN INTERDISCIPLINARY TEAM

R. Allgood, B.T. Butler, D. Byers, T. Chapeskie, M. Colling, J. Dacre, I. Hartman, F.A.S. Jensen, K. Keeling, R. Mahabir, R.J. Menzies, M. Penfold, J. Pepper, D. Slomen, J. Spirling, R.E. Turner, G. Turrall, A. Watkins, C.D. Webster

The authors argue that to date efforts to predict dangerous behaviour among mentally disordered offenders have been hampered by: (1) misplaced reliance on the use of simple dangerous/not dangerous classifications; (2) inadequate definitions of different types of dangerous behaviour; (3) total confounding of the many possible cues available for use in the prediction of violence.

Data are presented to show that behaviours clinicians are sometimes said to call 'dangerous' depend on the quality of the data-recording system available to them. Studies based on examination of psychiatrist's letters post hoc may, for example, contribute to the 'over-prediction problem'. Simple dangerous/not dangerous dichotomies should be eschewed. The clinician needs a range of possible scores within which to express the strength of his opinion. Illustrative data show how the use of a four-step scale alters the prediction problem. Other preliminary data taken from psychiatric interviews show how attention to defining different types of dangerous behaviour may enable researchers to see patterns and configurations not otherwise apparent.

In the final part of the paper the authors indicate with their own data how, apparently, clinical opinion is influenced by background variables such as present charge and previous experience. Although it is maintained that there may indeed be good reason for judgements to be at least partly based on such factors, it is argued that, under ideal assessment conditions, attempts should be made to build a prediction equation in which each element (including the crucially important interview) is evaluated separately. Finally, a plea is made for greater emphasis on defining, describing, and recording what occurs between patient and psychiatrist during the course of the assessment interview.

THE ASSESSMENT AND PREDICTION OF DANGEROUS BEHAVIOUR:

FACTORS AFFECTING DECISION MAKING IN AN INTERDISCIPLINARY TEAM

A. Allgood, B.T. Butler, D.Byers, T. Chapeskie, M. Colling, J. Dacre, I. Hartman, F.A.S.Jensen, K.Keeling, R.Mahabir, R.J. Menzies, M.Penfold, J.Pepper, D.Slomen, J.Spirling, R.E. Turner, G. Turrall, A. Watkins, C.D.Webster

There is now a substantial literature indicating that mental-health workers over-predict dangerous behaviour to a marked extent (Ennis and Litwack, 1974; Monahan, 1975). Yet rather than suggest that it is impossible to predict the occurrence of dangerous behaviour, we would prefer to be guided by Shah's (1978) recent advice that we "should talk about the predictions of probability of future dangerous behaviour." More specifically, we argue that much of the admittedly difficult prediction problem arises from: (1) misplaced reliance on the use of simple dangerous/not dangerous classifications (i.e., perhaps scales are needed to indicate degree of various types of dangerous behaviour, see Megargee, 1978, p.18); (2) inadequate definition of different types of dangerous behaviour (i.e., perhaps some kinds of dangerous behaviour are more predictable than others); (3) total confounding of the many possible cues available for use in the prediction of violence (i.e., perhaps for research purposes at least, it is necessary to withhold from the interviewer such potentially biasing information as charges, previous record, etc., in order that each element in a prediction equation might be independent).

In this synopsis we attempt to show how our preliminary, continuing research efforts might be expected to help solve the prediction problem raised by the three points mentioned above.

Dealing first with point one, we suggest that some clarity is gained merely by asking clinicians to record degree of dangerousness and also at the same time asking them to indicate separate predictions for dangerousness in the present and the future. Data came from the first 342 court-remanded cases seen over a 6-month period within our Brief Assessment Unit at METFORS (Menzies, Webster, Butler, Turner & Jensen, unpublished). Here each day some four persons are evaluated by a psychiatrist-led interdisciplinary team. In the analyses outlined below the figures are mainly based on the psychiatrist's opinion which was, of course, influenced by the other members of the team (nurse, psychologist, correction officer, social worker).

In Table 1 we see that, overall, the sample was far less likely to be considered dangerous to self than to others. Moreover, as might also be expected, persons were likely to be considered more dangerous both to self and others in the future than in the present. Persons were, after all, being held under conditions of strict custody at the time of assessment. The major point to note, though, is that the use of even a simple four point scale, may partly resolve the "over-prediction" problem. If we assume that, had the clinician been forced into a yes/no dichotomy, persons placed in the 'no' category would have been considered as not dangerous , and those in the combined 'low' medium' and 'high' categories would have been thought dangerous, a very large percentage would have fallen into the single dangerous cateogry (73 percent, leaving aside those in the 'unclear' group). If we now make what may be a more reasonable assumption, that the clinicians would have combined the 'no' and 'low' categories into a single 'not dangerous' grouping and the 'medium' and 'high' categories into 'dangerous', the percent considered dangerous drops to 46 percent. Going one step further, if we now consider only those in the high group as 'dangerous', then the percentage drops to a relatively small

16 percent. This figure is intuitively more reasonable. But the main point is that with a simple scale it is possible, through follow-up study, to help decide where the cut-off point should be (i.e., the clinicians simply cannot improve their ability to predict -- to know where to set their cut-offs -- without this outcome information). Were it to be discovered at follow-up that the bulk of those found to have committed dangerous acts had been placed in the 'high' group, we would have evidence that prediction is possible, at least to some degree. With a simple yes/no dichotomy any possibility for accurate prediction would likely have been obscured. In our most recent revisions to our data-collection system we have moved from a 4- to a 7-point scale.

The adoption of a seven-point scale will, however, solve but part of the difficulty. As might be supected, the data from the unpublished study of Menzies et al show that estimations of dangerousness by individual clinicians from different disciplines tend to relate relatively poorly to the overall final opinion of the team. While there was about 74 percent agreement regarding the presence of mental disorder, about 82 percent agreement concerning fitness for trial, and about 90 percent agreement about the need for certification, the dangerousness categories achieved but low levels of agreement among members of different diciplines (self-present, 55 percent; others-present, 40 percent; self future, 40 percent; others-future, 42 percent).

This difficulty can only be solved by creating a set of definitions to cover different types of dangerousness. In a preliminary exercise (see Dacre and Webster, 1978, unpublished) one of us, a psychiatrist (Dacre), applied to prisoner-patients a set of definitions drawn from Megargee (1976). According to this scheme dangerousness can be classified into four main types: angry aggression, instrumental aggression, hostility,

and transitory anger. Additional facilitating and inhibiting factors were also taken into account by Megargee and ourselves but these are omitted here for the sake of simplicity. For present purposes it is only necessary to know that the simple scheme was applied to 235 patients seen in jail over a seven-month period. A total of 32 persons are considered to be dangerous (when categories of medium and high were collapsed). Table 2 gives the outcome of this study showing that, even with a relatively small sample, most of the possible combinations were represented. True, we have no inter-rater reliability data and admittedly, we have in this instance no chance of a follow-up study to determine the accuracy of prediction, yet this very simple arrangement of data gives rise to the exciting prospect that it might be possible to show that our psychiatrist might have been able to predict some if not all types of dangerousness. We have now much modified and enlarged this system of classification through extended discussions among ourselves.

Even with good behavioural definitions and adequate opportunity to record subtle quantitative differences through the use of proper scales, there remains the problem discussed earlier under point 3. In those studies which have attempted to relate predictions of dangerousness (all too often inferred from psychiatrist's letters to the Court not from suitably designed data recording systems) to outcome at follow-up (most usually from police, hospital, and other such records), it is often asserted that similar predictions could have been made with a knowledge of the charge alone.

That previous history and present charge influence whether or not a person is considered dangerous comes as no surprise to us. In fact we can demonstrate from the Menzies et al study that our group was influenced by these and related variables. Those considered likely to be highly dangerous in the future were more likely to be facing a very serious charge than a relatively

minor charge ($p. < .04$, chi square). This is shown in Table 3a. Similarly those facing charges involving violence against the person were more likely to be considered highly dangerous than those accused of offences against property and public order This is apparent from Table 3b. Moreover, in the study of Menzies et al., we found the 'dangerousness to others' judgment to be significantly affected by the 'unfortunate childhood experiences', previous psychiatric hospitalization, primary diagnosis, previous incarcerations, family and social situation, examining psychiatrist, and attitude and behaviour while in the brief assessment unit.[1]

In our view the most promising approach to refining our ability to predict dangerous behaviour lies in separating easy-to-gain background information (e.g., charge, previous history) from hard-to-collect data obtained during patient-psychiatrist interviews (e.g. subtle interchanges particularly of a non-verbal kind). We take seriously the fact that clinicians will frequently admit to forming an opinion about dangerousness on the basis of a "gut feeling".

Our question is from where do these feelings arise? Or, better, under what kinds of conditions with what kinds of persons, do they emerge? And, is a given patient likely to create similar reactions in a different interviewer?

In the most general terms we might say that our effort is now to be one of moving away from our examination of "static factors" (e.g., previous criminal history, present charge, etc.) into a consideration of what might be termed more "fluid variables" (e.g., the processes occurring between individuals) recognizing

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1. Variables not yielding a significant effect for either or both dangerous to other in the present or future were age, sex, suicide attempts, number of times involved with the law ($p = 0.07$), level of education, estimated IQ, occupational status, alcohol use (absence of effect almost certainly due to pecularity of recording system), drug use, marital status, and number of para-psychiatric staff present during assessment interview.

TABLE 3A

Estimated Future Dangerousness as a Function of Seriousness[1] of Charge[2]

Dangerousness	Seriousness of Charge		
	Least	Medium	Most
Nil	15	10	13
Low	21	31	23
Medium	18	42	24
High	5	18	20

1 Coded by determining the maximum prison term allowable for the various offences (Least, 2 yrs; Medium, 2-10 yrs; Most 10 yrs).

2 $p < 04$, chi square.

TABLE 3B

Estimated Future Dangerousness as a Function of Type of Charge[1]

Dangerousness	Type of Charge		
	Person-Violence	Property	Public Order (Morality)
Nil	5	20	13
Low	22	24	29
Medium	50	16	18
High	25	11	7

1 $p < .001$

that both sorts of information will be required for any prediction equation worthy of the name. It is merely a matter of emphasis. To date, in all the voluminous literature on the assessment and prediction of dangerousness, there has been no effort made to discover what occurs as clinicians assess patients (and vice versa). And, these data being lacking there can have been no attempt to relate them to all-important outcome data at follow-up.

One reason for this absence of thorough study of what occurs in the dangerousness assessment is that recording technology has not been brought to bear on the problem. It is our thought that close analysis of videotaped patient-psychiatrist interviews might provide a partial solution. Such analysis both by colleague clinician and naive raters would enable us to take fuller advantage of gains made in terms of the definition of different types of dangerous behaviour and the introduction of suitable scales of measurement. The key assumptions underlying the approach we offer are that: (1) 'dangerousness' is best viewed as something occurring between people (not as something which inheres within an individual); (2) the psychiatric interview, properly conducted and recorded can provide for the perceptive clinician (or observer) hitherto unrecognized possibilities for isolating cues relating to future violent behaviour.

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