## Fairness or bias in job testing?

We are in agreement with many of Alexandra K. Wigdor's comments in "Fairness in Employment Testing" (Issues, Spring 1990) on the use of the General Aptitude Test Battery (GATB) by the U.S. Employment Service. Hundreds of studies show that most employers will select better-performing workers by using the GATB than by using their current systems. However, there are several ways in which her article could be made more accurate.

Wigdor falsely attributes the failure of ability tests to perfectly predict job performance to "inadequate testing technology." Actually, job performance is affected by numerous factors-mental health, physical health, quality of home life—that can change quickly. Perfect prediction of job performance is thus not a realistic goal. Wigdor also argues that since ability tests are an imperfect predictor and blacks on average achieve lower test scores, the percentage of blacks hired should be adjusted to match that of a hypothetical perfect predictor.

Thus Wigdor tends to overstate

the need for minority score adjustments because she underestimates the extent to which ability tests predict performance. The only criterion she uses to measure test accuracy is correlation with supervisor ratings, which are not optimal as job-performance measures. More objective measures—success in training, job knowledge, ability to perform specific job tasks—are available, and they indicate that ability tests are much better at predicting performance than Wigdor allows. Thus ability tests deserve considerable weight in hiring workers for demanding jobs.

We recommend that for jobs where performance is critical—for example, in the manufacture of commercial aircraft, military radar, or supercomputers—that workers be hired strictly on the basis of measured ability even if that results in racial imbalance in those job categories. But for the many jobs where performance is not so critical, it is justifiable to adjust test scores in the way that Wigdor recommends and to accept a somewhat less qualified work force in order to obtain a more equitable racial balance.

Racial equity is an important social goal, but not the only goal. Racial balance in every job category and every industry is not essential, especially when pursuing this goal results in compromises in other worthwhile goals such as public safety, national security, or economic competitiveness in critical industries.

JOHN E. HUNTER
Department of Psychology
Michigan State University
FRANK L. SCHMIDT
College of Business Administration
University of Iowa

Not only does Alexandra K. Wigdor cloak a recommendation for race-conscious job referral in the rhetoric of merit (labeling the new referral system "performance-fair" or "performance-based"), but she also purports to provide a "scientific" justification for what is essentially a racial quota system.

If individual merit (that is, possessing the skills and aptitudes that promote good job performance) is the criterion for assessing job candidates, proportionately fewer blacks and Hispanics than whites will usually be referred and hired. This adverse impact results. primarily not from any mismeasurement of merit, but from the well-documented average differences in skill levels across racial-ethnic lines that are revealed by tests such as the General Aptitude Test Battery cited by Wigdor. Unless minority skill deficiencies are remedied, minority hiring ratios can be substantially increased only by instituting double standards by race or by drastically lowering standards for all races. Not only is the merit principle violated in either case, but work force productivity also suffers.

The "performance-based" referral system reflects the double-standard strategy, for it adjusts upward the scores of all blacks and Hispanics to reduce or eliminate group differences in referral rates. Wigdor's justification for these race-conscious adjustments, though described as enhancing the role of merit ("[e]mployers should place equal value on all workers who do equally well on the job"), actually rests on trivializing important distinctions in merit. As Wigdor has acknowledged elsewhere,

"good" black workers selected by the "performance-based" system can be expected to perform less well on the job than "good" white workers.

The referral system is not even likely to benefit the minority "false negatives" (able workers with low scores) in whose name the adjustments are made. (White "false negatives" are ignored altogether.) After the scores of all blacks and Hispanics are adjusted upward, referrals and hiring would be done from among the higher-scoring minority applicants; yet false negatives tend to be found among the lower scorers on a test.

The "performance-based" system also inverts the incentives normally associated with merit and thus may undermine efforts to improve minority skill levels. Score adjustments are successively larger the lower a minority group scores on a test. In effect, the lower the job-relevant skills in a minority applicant pool, the greater the racial preference accorded its members.

When recognized for what it is, such pseudo-scientific leger-demain will further erode the public's trust in science itself.

LINDA S. GOTTFREDSON Assistant Professor College of Education University of Delaware The author responds:

Linda S. Gottfredson paints with a very broad brush and with correspondingly little accuracy. The performance-fair scoring system that I proposed, although it is certainly race-conscious, is in no sense a racial quota system. One attraction of performance-fair scores is that they reflect the predictive accuracy of the test; substantial improvements in the power of the GATB to predict job performance would mean a commensurate decrease in the size of the score adjustment needed.

The more important point, however, has to do with merit Given the GATB in its current state. we know in advance that black and Hispanic workers who would be rated by an employer as the equal of their white colleagues will not in fact be referred to employers unless score adjustments are made. Gottfredson is willing to live with that outcome in return for a very modest increase in expected job performance. Those of us who spent two years studying the GATB did not need to rely on pseudoscience or legerdemain to conclude that the possible economic gains simply do not justify a policy that permits the inadequacies of testing to fall more heavily on blacks and Hispanics

than on whites. We did not recommend a quota. We did recommend that score adjustments be used so that all three groups will be equally at risk of false rejections.

ALEXANDRA K. WIGDOR
Director. Division on Education,
Training, and Employment
Commission on Behavioral and Social
Sciences and Education
National Research Council
Washington, D.C.

## Correction:

In the Summer 1990 Issues, p. 16, an editorial error produced an inaccurate and misleading sentence in the letter of Morton M. Winston. Chairman of the Board of the NoRad Corporation (written in response to C. Andrew L. Bassett's "Premature Alarm Over Electromagnetic Fields"). Mr. Winston's original sentence actually read as follows: "NoRad Corporation offers an inexpensive E-field blocking shield for existing monitors that virtually eliminates E-field radiation at the user's position, and is engaged in the development of related products." (As published by Issues, the word "E-field" was omitted.)