

## Academic Psychology

Appendix: Continued

It is your second year as an assistant professor in a prestigious psychology department. This past year you published two unrelated empirical articles in established journals. You don't, however, believe there is yet a research area that can be identified as your own. You believe yourself to be about as productive as others. The feedback about your first year of teaching has been generally good. You have yet to serve on a university committee. There is one graduate student who has chosen to work with you. You have no external source of funding, nor have you applied for any.

Your goals are to become one of the top people in your field and to get tenure in your department. The following is a list of things you are considering doing in the next two months. You obviously cannot do them all. Rate the importance of each by its priority as a means of reaching your goals.

- Improve the quality of your teaching.
- Write a grant proposal.
- Begin a long-term research project that may lead to a major theoretical article.
- Concentrate on recruiting more students.
- Begin several related short-term research projects, each of which may lead to an empirical article.
- Participate in a series of panel discussions to be shown on the local public television station.

## College Student Life

You are enrolled in a large introductory lecture course. Requirements consist of 3 exams and a final. Please indicate how characteristic it would be of your behavior to spend time doing each of the following if your goal were to receive an A in the course.

- Attend class regularly.
- Attend optional weekly review sections with the teaching fellow.
- Read assigned text chapters thoroughly.
- Take comprehensive class notes.
- Speak with the professor after class and during office hours.

# Intelligence Is Not the Best Predictor of Job Performance

David C. McClelland

Ree and Earles<sup>1</sup> are wrong in implying that cognitive ability as measured by typical intelligence tests is the best predictor of job incumbency, which they consider "a measure of level of job performance."

By job incumbency, they mean occupational status, and they repeat unthinkingly the classic assertion commonly made by testers<sup>2</sup> that superior intelligence is responsible for the fact that some people turn out to

be engineers and doctors rather than police officers and meat cutters. But cognitive intelligence is by no means the best predictor of occupational status. Family advantage is, as Jencks<sup>3</sup> has conclusively demonstrated in a review of a number of

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large studies that included controls for measured intelligence. Intelligence was not even unequivocally the second best predictor: Noncognitive adolescent traits "explained at least as much of the variance in men's status and earnings as test scores did" (p. 230).

The evidence Ree and Earles introduce in their article to show that cognitive ability best predicts performance within a job classification is flawed on two counts. Cognitive ability test scores are the best predictor of academic performance—except probably in schools for the performing arts. The first flaw is that the validity coefficients reported by Ree and Earles all involve academic performance—even those that measure other aspects of "hands-on" performance. Knowing how to do something and doing it well on the job are different and not even highly correlated. Ree and Earles do not cite the correlations of test scores to purer measures of on-the-job performance like supervisory ratings, but other investigators<sup>4</sup> have reported

that the correlations are about .20 for similar jobs.

The second flaw lies in the fact that to be certain cognitive abilities are responsible for better on-the-job performance, one must report correlations with job performance of other variables, such as sex, race, education, social class, and noncognitive traits. Being white, male, better educated, and from an advantaged background often correlate with better job performance, particularly as measured by a supervisor's ratings. Any of these correlations, all of which are unreported by Ree and Earles, may predict job performance better than intelligence. And correlation does not equal causation: Both intelligence and job performance may be a function of a third variable, like education, such that when this third variable's influence is partialled out, intelligence no longer predicts job performance.

Nonintellectual traits like motivation may also be much better predictors of job performance than cognitive abilities are. For example, it

seems likely that the achievement motive is a much better predictor of entrepreneurial success than is intelligence.<sup>5</sup> Ree and Earles may have been primarily interested in showing that general ability tests predict school performance better than special aptitude tests do, but the title they, the editor, and reviewers accepted for their article has much broader and largely incorrect implications. Like so many testers, they ignore the social factors that contribute to job performance and to the relationship between intelligence and job performance.

### Notes

1. M.J. Ree and J.A. Earles, Intelligence is the best predictor of job performance, *Current Directions in Psychological Science*, 1, 86–89 (1992).

2. See E.E. Ghiselli, *The Validity of Occupational Aptitude Tests* (Wiley, New York, 1966).

3. C. Jencks, *Who Gets Ahead? The Determinants of Economic Success in America* (Basic Books, New York, 1979).

4. See F.L. Schmidt, J.E. Hunter, and J.R. Caplan, Validity generalization results for two job groups in the petroleum industry, *Journal of Applied Psychology*, 66, 261–273 (1981).

5. D.C. McClelland, Characteristics of successful entrepreneurs, *The Journal of Creative Behavior*, 21, 219–233 (1987).

## Controversies

# Paper, Pencil, Potential, and Performance

Robert Calfee

In a Sidney Harris cartoon, an elegantly attired African chieftain rebukes a visiting scholar, "You can't build a hut, you don't know how to find edible roots, you know nothing about predicting weather—you do *terribly* on our IQ test." The chief's assessment points up the importance of context in intelligence. I was surprised earlier this year when I read articles by Ree and Earles<sup>1</sup> and Schmidt and Hunter.<sup>2</sup> Like Sternberg and Wagner (this issue), I think the

chief is right in identifying intelligence with multiple facets of human potential, contrary to the "gocentric" view.

My research<sup>3</sup> takes me into schools—into the trenches, into the arena where intelligence testing got its start when Binet developed methods for selecting students who would prosper in the Paris schools of the 19th century. The policy then was to select the cream of the crop, without any premium on educating

the children of the poor. Current U.S. policy aims to ensure success for all students, especially the children of the poor. This policy reflects both idealism and pragmatism; our nation values equity, but the large proportion of poor children means that we also have a practical need.

Educators view intelligence as a unidimensional factor that can and should be used to shape curriculum

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