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# The Devil Is in the Details (and the Context): A Call for Care in Discussing the *Uniform Guidelines*

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McDaniel, Kepes, and Banks (2011) discuss revising or rescinding the *Uniform Guidelines on Employee Selection Procedures* (Equal Employment Opportunity Commission, Civil Service Commission, Department of Labor, & Department of Justice, 1978). In this commentary, we analyze two problematic overgeneralizations in their article. First, we discuss their alternative hypothesis that “the employment test is an accurate assessment of subgroup differences in job-related attributes.” Second, we address their conclusion that the probability of closing the achievement gap is low. We are primarily concerned by inferences readers may draw from McDaniel et al.’s article, and we provide theory and evidence to suggest that these issues are more complicated than they initially appear.

## Implicit Assumptions and Alternative Hypotheses

In their article, McDaniel et al. suggested that “an implicit assumption of the *Uniform*

*Guidelines* is that adverse impact is an indication of a flawed test.” They offer the alternative hypothesis that “the employment test is an accurate assessment of subgroup differences in job-related attributes.”

First, to address the focal article authors’ suggested interpretation that the *Uniform Guidelines* implicitly assume that adverse impact indicates a flawed test, it is important to review what was actually written in the *Uniform Guidelines* with regard to adverse impact, validity, and discrimination:

The use of any selection procedure which has an adverse impact on the hiring, promotion, or other employment or membership opportunities of members of any race, sex, or ethnic group will be considered to be discriminatory and inconsistent with these guidelines, unless the procedure has been validated in accordance with these guidelines, or the provisions of section 6 of this part are satisfied. (Section 3A)

So, there does appear to be some support for their interpretation; the *Guidelines* state that a procedure with adverse impact will be considered discriminatory. However, the troublesome second half of quoted sentence—“unless the procedure

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has been validated”—makes their interpretation problematic. That is, the *Uniform Guidelines* established an “if–then” proposition with regard to adverse impact. If a procedure has a negative effect on society (i.e., adverse impact), then organizations need to demonstrate that valid inferences can be drawn from that procedure. What is wrong with that? Indeed, McDaniel et al. describe themselves as “strong advocates that all selection procedures should be job related.” If so, then shouldn’t they agree that organizations show validity evidence when negative consequences arise from their procedures?

Second, what do McDaniel et al. mean by *the* employment test in their alternative hypothesis? According to both the *Uniform Guidelines* and the *SIOP Principles for the Use and Validation of Personnel Selection Procedures* (2003), selection procedures refer to anything used to make employment decisions; such tools as interviews, performance tests, paper-and-pencil tests, and even polygraphs. Which of these are they referring to as *the* employment test? Further, if *the* employment test is an accurate reflection of subgroup differences, how does one make sense of multiple patterns of differences produced by each tool?

Third, McDaniel et al.’s alternative hypothesis as it is stated is true only if one assumes validity is a function of a test itself. In contrast, current theory about validity, as stated in the *Principles*, holds that validity is a function of the inferences drawn from tests, not the tests themselves. Even if we artificially restrict *the employment test* to cognitive ability tests, we maintain that it is questionable whether such tests provide valid inferences with regard to all job-related attributes (e.g., the vocal quality of opera singers), much less an “accurate assessment of subgroup differences” on all attributes. At best, the claim that an employment test reflects subgroup differences on job-relevant attributes may be reasonable only if we assume that the test has been carefully constructed and implemented.

If one reviews the historical record regarding business practices used when

*the Uniform Guidelines* were written, one would have to be naïve to believe that it was common for business practices to be “carefully constructed and implemented.” For example, in *Rowe v. General Motors Corporation* (1972), the standards provided to raters regarding promotion criteria were vague and not behaviorally specified. It is therefore not surprising that a General Motors rater admitted in court that he did not know what competencies management wanted in their promoted candidates. How can one expect a subjective promotion system to provide valid inferences when raters are not trained or even given information about the desired competencies for the new job?

Another classic example comes from *Griggs v. Duke Power* (1971). In this case, the Duke Power Company historically required a high school diploma for applicants to be hired or for transfer within the plant. Before the 1964 Civil Rights Act was passed, Duke Power replaced the diploma requirement with two cognitive ability tests. The company then set the cut off for the tests at the national median for high school graduates, effectively raising the difficulty of the requirement. Previously, any high school graduate was acceptable, now, only 50% were qualified. The Duke Power hiring practices resulted in adverse impact. At the very least, Duke Power needed to provide evidence that the cut score successfully differentiated competent from incompetent employees.

Thus, given the context of the times when *the Uniform Guidelines* were written and adopted, it was not reasonable to adopt McDaniel et al.’s alternative hypothesis. Further, given that business practices had not changed in the United States despite presidential executive orders that were in place for at least 30 years prior to the *Uniform Guidelines*, it is not surprising that the authors of the *Uniform Guidelines* needed to take a strong position (i.e., stating that a test with adverse impact is discriminatory unless validity information is provided) to actually have an effect on business practices.

## Can the Achievement Gap Be Closed?

McDaniel et al. also argue that racial subgroup differences are intractable and cite Ceci and Papierno's (2005) intervention literature review to support this conclusion. In their article, Ceci and Papierno explored the value of nontargeted interventions (e.g., AP courses, Sesame Street) because when such interventions are made universally available, the achievement gap between advantaged and disadvantaged groups often widens. They called this widening gap the Matthew effect.

The reader should note several issues with regard to this particular literature review. First, Ceci and Papierno (2005) explicitly state that the terms "advantaged" and "disadvantaged" are a function of "cognitive, economic, or social disadvantage in terms of measured performance, which is unfortunately often correlated with membership in groups of a particular age, socioeconomic status (SES), or racial group" (p. 151). Thus, there is no perfect inferential relationship between Ceci and Papierno's discussion of the Matthew effect and McDaniel et al.'s discussion of racial adverse impact. Indeed, as the representation of racial subgroups across different SES levels or social-disadvantaged levels changes, the inferential connection between the Ceci and Papierno (2005) argument and the McDaniel et al. argument will further decrease.

Second, previous research has shown that environmental factors like SES and a suite of related variables exhibit complex interactions with cognitive ability when accounting for individual differences in test scores and educational attainment (Asbury, Wachs, & Plomin, 2005; Ganzach, 2000; Johnson, Deary, & Iacono, 2009; Teachman, 1987). For example, Turkheimer and colleagues (Harden, Turkheimer, & Loehlin, 2006; Turkheimer, Haley, Waldron, D'Onofrio, & Gottesman, 2003) have found that genetic influences are stronger for children and adolescents with higher SES, whereas shared environment played a

more important role than genes for children from lower SES families. Given that findings in this area remain inconsistent (e.g., Grant et al., 2010; van den Oord & Rowe, 1998), we stress the need to await further research on the factors underlying group differences in job-related attributes. The constructs we test, especially cognitive ability, are complex and our knowledge is not complete.

Third, although the goal of the Ceci and Papierno (2005) article was to generate a debate regarding universalized interventions, they noted that an intervention offered only to disadvantaged groups can actually decrease and even close the achievement gap. Further, these authors note that interventions that provide training for skills already mastered by the advantaged group benefit the disadvantaged group more than the advantaged group. Thus, a universally offered intervention will not always exacerbate the achievement gap. For example, Magnuson, Ruhm, and Waldfogel (2004) found that, when covarying out relevant variables, prekindergarten programs have long-lasting effects only for disadvantaged children. Thus, McDaniel et al.'s conclusion that "the more able will have a higher capacity to benefit more from the intervention" and that they "will be more likely to participate" is not appropriate.

In summary, the gap between advantaged–disadvantaged groups is not intractable and can diminish with universal interventions when they are designed to meet the needs of disadvantaged groups. The training literature also discusses the utility of designing targeted interventions. However, targeted interventions require conducting task/KSAO, organizational, and person analysis to understand the context and struggles of the disadvantaged. Such analyses are counter to McDaniel et al.'s minimization of the importance of job analysis.

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