

More Problems With Gap Closing Philosophy and Research

John Raven
Edinburgh, Scotland

Reprinted from *American Psychologist*, 2005, 60, 1041-1042

Although Ceci and Papierno's "The Rhetoric and Reality of Gap Closing: When the 'Have-Nots' Gain but the 'Haves' Gain Even More" (February-March 2005) was more than welcome, the discussion was nevertheless still couched within a seriously culturally biased conceptual framework. Even though most psychologists accept this framework, it actually renders many ways of dealing with the problem of disadvantage invisible and undiscussable.

Some years ago, in the course of evaluating an adult education program designed to, in the words of the program provider, "enhance mothers' unique and irreplaceable" role in promoting the development of their 2-3-year-old children, my colleagues and I (Raven, 1980) inquired into mothers' priorities in child rearing. The middle-class mothers listed objectives of the kind typically discussed by psychologists, such as encouraging prereading skills and developing concepts. But the top priorities for the working-class mothers were that their children should "really need" and develop a respect for them.

Now, supposing one were to offer a cross-section of mothers an intervention program designed to help them ensure that their children really needed them, what would one expect the relative take up among middle- and working-class mothers to be?

I do not want to pursue this question here. My point is that virtually all the interventions discussed by Ceci and Papierno (2005) are construed within - and designed to reward - what one might call a Western, middle-class mind-set and to reinforce its personal and social structural consequences through a self-fulfilling process. Yet there is ample evidence that people, even living in Westernized societies, espouse a wide variety of alternative values. Many of the mothers involved in our study failed to take up the programs that were proffered because the whole way of thinking embedded within them conflicted, somewhat inarticulately, with their own. They sensed that the programs were somehow destructive of their values (although they could see that the programs had economic advantages). In reality, many of the programs mentioned by Ceci and Papierno (2005) are not only destructive of nonmainstream values, they also contribute to societal processes that are rapidly heading our species toward extinction, carrying the planet as we know it with it (see the special section on psychologists and sustainability in the May 2000 issue of the *American Psychologist*).

Ceci and Papierno (2005) very usefully discuss the efficacy of a number of educational interventions that have often been promoted as panaceas. Unfortunately, virtually all of these suffer from the previously mentioned problem. The Western - and particularly the American - mind-set (which is heavily embedded in psychological theory) has (actually for sociological reasons) increasingly embraced a single-factor model of ability. Yet ample evidence shows that children have the capacity to develop a huge variety of different talents and abilities and that society needs this wide variety. (See Raven & Stephenson, 2001, for a summary of the evidence supporting these claims, but see Raven, 2002, for a more pointed discussion of the issues involved.) Here it is sufficient to refer to but one example of a type of potentially universalized educational intervention that is very different than those discussed by Ceci and Papierno. When, in the course of multiple-talent-oriented, inquiry-

oriented, project-based education conducted mainly in the environment around the school, teachers create developmental environments in which the talents of each child can emerge and be nurtured (see Raven, Johnstone, & Varley, 1985), it turns out that Spearman, the father of *g*, was right to assert that "Every normal man, woman and child is a genius at something. . . . It remains to discover at what. . . . [Unfortunately, this] cannot be [done with] any of the testing procedures at present in current usage" (Spearman, 1926).

Thus, what the quotation that Ceci and Papierno (2005) gave from Stanovich on page 149 of their article really shows is that what actually happens in the course of many programs that claim to set out to remedy disadvantage is that target children are forced to spend time doing things they are not good at and deprived of opportunities to practice doing things they are good at. This is bad enough by itself. But the seriousness of the problem is exacerbated by the fact that most of the talents they might have developed cannot, as Spearman noted, show up on most of the tests developed by psychologists and are thus unable to register in most of the evaluation studies conducted by psychologists. Worse, these evaluations are largely framed and conducted within a reductionist, single-outcome focus rather than a comprehensive or ecological evaluation framework. In the end, this whole network of interlocking activities contributes to the autopoietic process that is heading our species toward extinction.

I conclude by drawing attention to one more, rather more specific problem that has been overlooked in most studies that purport to compare the relative impact of universalized intervention programs on the "more" versus "less" able by means of test scores.

It has long been known that many of the early claims relating to the differential effects of a variety of educational practices on "high" and "low" ability students were invalid because the tests used had ceilings that did not allow the "more able" to demonstrate their prowess. It is only more recently, however, that it has emerged that there are even more basic problems involved in making these comparisons (although it is true that these problems have been known to a few measurement theorists for a much longer time). Even in studies in which tests developed using item response theory (IRT) have been used, the apparent relative gains of the more and the

less able vary markedly with the absolute difficulty of the test used and the sector of the test-characteristic curve that is operational. Simply using a different IRT-based test cannot merely change the relative magnitude of these gains but completely reverse the apparent conclusions. Naturally, the problem is a great deal worse when tests developed according to classical test theory are used. (See Raven, Raven, & Court, 2004, for a discussion of the problem and a possible solution using programs developed by Fischer.)

REFERENCES

- Ceci, S. J., & Papierno, P. B. (2005). The rhetoric and reality of gap closing: When the "have-nots" gain but the "haves" gain even more. *American Psychologist*, 60, 149 -160.
- Raven, J. (1980). Parents, teachers and children: An evaluation of an educational home visiting programme. Edinburgh, Scotland: Scottish Council for Research in Education.
- Raven, J. (2002). *Intelligence, engineered invisibility, and the destruction of life on Earth*. Posted July 7, 2002, on WebPsychEmpiricist: <http://www.wpe.info/papers-table.html>
- Raven, J., Johnstone, J., & Varley, T. (1985). *Opening the primary classroom*. Edinburgh, Scotland: Scottish Council for Research in Education.

Raven, J., Raven, J. C., & Court, J. H. (2004). *Manual for Raven's Progressive Matrices and Vocabulary Scales, Section 3: The Standard Progressive Matrices*. San Antonio, TX: Harcourt Assessment.

Raven, J., & Stephenson, J. (Eds.). (2001). *Competence in the learning society*. New York: Peter Lang Publishing.

Spearman, C. (1926). *Some issues in the theory of g (including the law of diminishing returns)* [Address to the British Association Section J - Psychology, Southampton, England, 1925]. London: Psychological Laboratory, University College, Collected Papers.

Correspondence concerning this comment should be addressed to
John Raven,
30 Great King Street,
Edinburgh EH3 6QH,
Scotland.
E-mail: jraven@ednet.co.uk