attention to alternative explanations. In no area of science are these principles more important than in the study of human behavior, where a variety of social factors may have large and far-reaching effects. When research has bearing on social issues and public policy, the scientist must examine the competing explanations for his findings and must exercise the greatest care in his interpretation. Only in this way can he minimize the possibility that others will overgeneralize or misunderstand the social implications of his work.

This statement was signed unanimously by the members of the Council for the Society for the Psychological Study of Social Issues whose names and professional affiliations are listed below.

## REFERENCE

JENSEN, A. R. How much can we boost IQ and scholastic achievement? Harvard Educational Review, 1969, 39, 1-123.

GEORGE W. ALBEE Case Western Reserve University KURT W. BACK Duke University LAUNOR F. CARTER System Development Corporation ROBERT CITIN Boston University KENNETH B. CLARK Metropolitan Applied Research Center MARTIN DEUTSCH New York University William A. Gamson University of Michigan HAROLD B. GERARD University of California at Los Angeles KENNETH R. HAMMOND University of Colorado

University of Michigan

EDWIN P. HOLLANDER

State University of New York at Buffalo

ROBERT L. KAHN

University of Michigan

NATHAN MACCOBY

Stanford University

THOMAS F. PETTIGREW

Harvard University

HAROLD L. PROSIIANSKY

City University of New York

M. Brewster Smith

University of Chicago
RALPH K. WHITE
George Washington University

ROBERT HEFNER

PHILIP G. Zimbardo
Stanford University

## Criticism or Propaganda?

I wish to report an interesting social-psychological phenomenon. The facts of the matter require little interpretation on my part. They might provide some student of the sociology of science with material for a case study of the relationship between criticism, propaganda, and scientific responsibility.

On May 2, 1969, the Society for the Psychological Study of Social Issues (SPSSI), a division of the American Psychological Association, put out a news release under the heading "Psychologists Comment on Current IQ Controversy: Heredity versus Environment." The statement was in response to my 123-page article "How Much Can We Boost IQ and Scholastic Achievement?" in the Harvard Educational Review (Jensen, 1969). The five-page news release, signed by the 18 members of the SPSSI Council, was sent to the major news services and to all members of SPSSI, along with a cover letter by SPSSI's President Martin Deutsch urging all members to arrange for publication of the SPSSI release in their local newspapers, either as an article or as "Letters to the Editor." Deutsch wrote: "Thank you very much for your cooperation in this important effort—I hope very sincerely that most of you will find or make the time to carry out this task." How many members of SPSSI, I wonder, did so without ever reading my article? One member of the SPSSI Council wrote on May 19, 1969: "I had previously read enough of Jensen's recent article in the Harvard Educational Review (Vol. 39, No. 1, Winter 1969) to help prepare the SPSSI press release concerning it. However, I did not read the whole thing until this week."

My article was solicited by the Board of Editors of HER with the understanding that it would be followed by detailed critiques from a number of highly qualified psychologists and geneticists. Eight such critiques have already been published in the spring 1969 HER and several more are scheduled by IIER for future issues. (If my article was actually trivial or erroneous, it seems it should take only one competent critic to put it down. Soliciting and publishing 10 or more criticisms of a single article is probably unprecedented.) I have also defended my article in a two-hour videotaped discussion of it by a panel of two geneticists, two sociologists, and a psychologist, following which I responded to 45 minutes of questions and comments from a studio audience composed mostly of professors in relevant fields on the Berkeley faculty. I welcome such criticisms and discussions. The SPSSI release, however, seems to me clearly not in keeping with this kind of intellectually worthy discourse. I would characterize it not as scientifically responsible criticism, but as sheer propaganda.

COMMENT 1041

In accord with HER's letter of solicitation, my article reviewed the evidence relevant to the relative contributions of heredity and environment to intelligence and scholastic performance and evaluations of efforts to raise the IQ and scholastic performance of disadvantaged children. I was also asked by HER to state my position regarding social class and racial differences in intelligence: "The preponderance of the evidence is, in my opinion, less consistent with a strictly environmental hypothesis than with a genetic hypothesis, which, of course, does not exclude the influence of environment or its interaction with genetic factors [p. 82]." The article concluded with a summary of my own research on the triple interaction among the variables intelligence, associative learning ability, and socioeconomic status.

The SPSSI release directly misrepresents my article and, I believe, also the current state of our knowledge concerning the importance of genetic factors in intellectual development. For example, we read in the SPSSI statement: "We believe that statements specifying the hereditary components of intelligence are unwarranted by the present state of scientific knowledge." Does this mean that a scholar should not publish a summary of the relevant research to date on this topic? Among the other interesting points in the SPSSI statement are the following:

- 1. "There is no direct evidence that supports the view that there is an innate difference between members of different racial groups." I have pointed out that (a) such evidence cannot be "direct" but must necessarily be inferential, as is most scientific evidence, (b) that definitive genetic research on this topic has not yet been done, and (c) that appropriate research should be vigorously pursued to answer these questions.
- 2. "A more accurate understanding of the contribution of heredity to intelligence will be possible only when social conditions for all races are equal and when this situation has existed for several generations." This strikes me as an anti-research attitude, since the meaning of "equal" social conditions is totally undefined in any operational terms, and if taken seriously would completely rule out the possibility of research on this important question, not just for several generations, but indefinitely. In fact, genetic methods are available for researching this question, methods that do not set up impossible or operationally undefinable criteria such as absolute environmental equality.
- 3. SPSSI points out that "a number of Jensen's key assumptions and conclusions are seriously questioned by many psychologists and geneticists." Examples follow:
- (a) "Recent research indicates that environmental factors play a role from the moment of a child's con-

ception." In fact, my article contains a section reviewing the effects of prenatal factors on mental development (pp. 65-74).

- (b) "To construct questions about complex behavior in terms of heredity versus environment is to oversimplify the essence and nature of human development and behavior." In fact, my article contains a section headed "Common Misconceptions About Heritability" (pp. 42–46) under which one of the subheadings is "Heredity versus Environment" in which I explicitly disabuse readers of this erroneous way of thinking about heredity and environment.
- 4. "We are concerned with establishing high standards of scientific inquiry and of scientific responsibility. Included in these standards must be careful interpretation of research findings, with rigorous attention to alternative explanations." I have maintained such standards in my article and in my response to critics. SPSSI, in its press release, has not. The SPSSI statement amounts to a censure of me for suggesting the reasonableness of an alternative hypothesis to their apparently 100% environmentalist position. I maintain SPSSI's censure of my article is not the way of science. I suggest instead that scientific knowledge is gained most efficiently through what John Platt has called "strong inference," which means pitting against one another alternative hypotheses that lead to different predictions, and then putting these predictions to empirical tests. My article proposes that a genetic hypothesis is a reasonable alternative to a strictly environmental hypothesis, and it is this point essentially that the SPSSI press release is in protest against.

Part of the SPSSI statement directed against my article is word for word the same as a 1961 resolution SPSSI adopted in opposition to an article by Henry E. Garrett (1962). This simple pigeon-holing operation on the part of the SPSSI Council might at least partially explain their ill-fitting and misleading "criticism" of my *HER* article.

## REFERENCES

GARRETT, H. E. The SPSSI and racial differences. American Psychologist, 1962, 17, 260-263.

JENSEN, A. R. How much can we boost IQ and scholastic achievement? Harvard Educational Review, 1969, 39, 1-123.

ARTHUR R. JENSEN
Institute of Human Learning
University of California,
Berkeley