This pamphlet describes ways in which parents and others interested in education can effectively evaluate the usefulness of educational research. Almost everything that happens in the schools is related to educational research. Parents and concerned others should appreciate its benefits, but should be aware that: not all research is done well or accurately; most media reports do not give enough information to evaluate an educational research study; and societal attitudes about women and people of color influence how researchers study people and what they find. Research has been used to perpetuate inequality. Although bias may be more subtle today than in the past, it still exists. Bias still has an impact on children, discouraging girls from taking mathematics courses and justifying a lack of emphasis on educational programs for children of color. Myths about research and counseling include: if it is published, it must be accurate; research and researchers are always objective; standardized tests are accurate and objective; and parents and concerned others cannot understand research. In evaluating research, one must consider whether: (1) the researchers' opinions or biases are obvious; (2) different terms are used depending on who is being studied; (3) the study completely describes who is being studied; (4) the tests are fair; (5) results are overgeneralized; (6) similarities and differences are reported; and (7) conclusions have more to do with the researchers' expectations than with research results. Ways of reducing bias in research are summarized. (SLD)
What's It to Me?
Educational Research, Bias, and Me

A Guide for Parents and Others Interested in Education
Educational Research: What's It to Me?

Almost everything that happens to our children in their schools is related to educational research. It is the basis of:

- what schools teach
- when children are taught different concepts
- how children are taught
- the content and format of textbooks and other materials

Research has made education more effective in many ways. It has:

- made us aware of the academic benefits of smaller class sizes
- shown us the importance of a good preschool experience
- indicated the important role that self-confidence plays in students' math achievement and in students' decisions to take math courses
**Research Warnings**

We should appreciate the benefits of research, but at the same time we should be aware that

- not all research is done well or even accurately
- most media reports on educational research don’t give enough information to enable us to determine the quality of the study or even whether it makes sense
- societal attitudes about women and people of color influence how researchers study people and what they find

**Bias and Past Research**

Research can be a powerful tool for finding truths and improving education, or it can be used to perpetuate inequality, “to keep people in their place.” The influence of racism and sexism on the research of the past can be seen in the following “research” conclusions.

[Blacks] in spite of being bereft of a moral sense do have a great compensating gift. . . .

[T]hey all sing.

—A. B. Evarts, 1914

The woman who uses her brain loses her mammary function first and has little hope to be other than a moral and medical freak.

—G. Stanley Hall, 1905
Bias and Today's Research

Today bias and its impact on research may be more subtle than in the past, but a look at current research conclusions finds that biases about people of color and women of all races still exist and influence researchers. For example, an analysis of studies of African Americans found that most researchers (82 percent) “blamed the victim,” concluding that any differences experienced by African Americans were due to the shortcomings of the individuals rather than other possible explanations, such as racism or other societal factors. Programs based on such biased conclusions will be inherently flawed.

Sex differences in achievement and in attitudes toward mathematics result from superior male mathematical ability.

This conclusion, from a well-publicized 1980 study by Camilla Benbow and Julian Stanley, was not based on the results of tests for genetic differences, including those related to sex. The conclusion owed more to the authors’ opinions about boys’ “natural” math abilities than it did to the research.

Today’s biased studies have a serious impact on our children, discouraging our daughters from taking more advanced math courses and justifying a lack of emphasis on educational programs for children of color.
Research and Counseling: Myths and Reality

I. If it’s published, it must be accurate.

The publishing process weeds out some, but not all, bad research. In addition, studies finding differences between groups are more apt to be published than those finding no differences are. “Let the buyer beware” applies to research as it does to many other areas.

II. Research and researchers are “objective,” uninfluenced by societal attitudes and their own view of the world.

It is not easy for any of us to keep our likes, aversions, hopes, and fears from affecting our conclusions. Researchers are not immune to racism or to societal views of “appropriate” roles and behaviors for women and men.

III. Standardized tests are accurate, objective measures providing information about students’ interests, aptitudes, and achievement.

Standardized tests, like research, can be valid or invalid, biased or fair. Both the tests and the groups on which they were normed need to be evaluated before a test should be used.

IV. I couldn’t understand research.

With a little knowledge of statistics, counselors can use their problem-solving and critical-thinking skills to understand and assess most research.
Evaluating Research:
Some Things to Consider

1. Are the authors' opinions or biases obvious as you read the study? For example, research designed to determine the negative influence of mothers' employment on children's achievement is clearly based on preconceived notions.

2. Do the authors use different terms, depending on the race or sex of those being studied? For example, if studies of father absence are termed "father absence" while studies of mother absence are termed "maternal deprivation," bias is present.

3. Does the study describe who is being studied, including their race and sex?

4. Are the tests used "fair"? Does the study indicate whether the tests were developed and tested with females and males from a variety of racial backgrounds?

5. Are the results of the study applied only to people like those studied or are they overgeneralized to include others? For instance, are people of color included in conclusions when only whites were studied?

6. Are similarities as well as differences reported about females and males and people from different races?

7. Do the conclusions have more to do with the authors' expectations than with the research results?
Reducing Bias in Research: What You Can Do

1. Don't make decisions about your child's education or about education in general that are based on what others tell you or what "research says," until you check the research yourself for bias and accuracy.

2. If you are reading research, read the whole study. The conclusions and the abstract tell us only what the authors believe their work showed. The rest of the study tells what actually happened.

3. Remember it isn't a good study just because you intuitively agree with the results. Similarly, a study whose results you feel "just can't be right" just might be correct.

4. Don't let others intimidate you by quoting the "scientific facts" until you have checked the studies in question. Don't be afraid to challenge "experts." "To what studies are you referring?" and "On what types of students was this work done?" are important questions to ask. Statements beginning "Everyone knows" or "Researchers agree" are not adequate answers to your questions.

5. Recognize your own biases and think about ways your biases influence you.

6. Make others aware of bias in research.

7. If you find research to be biased, let people, including the publishers and the authors of the study, know.
For More Information


This brochure is one of a series written to acquaint people with bias in research. The brochures and The Hidden Discriminator: Sex and Race Bias in Educational Research, a nontechnical monograph on bias in research, are available from the Women's Educational Equity Act Publishing Center, Education Development Center, 55 Chapel Street, Newton, Mass. 02160, 800-225-3088 (in Mass. call 617-969-7100).


This brochure was developed under a grant from the U.S. Department of Education under the auspices of the Women's Educational Equity Act. Opinions expressed herein do not necessarily reflect the position or policy of the Department and no official endorsement should be inferred.

Discrimination Prohibited: No person in the United States shall, on the grounds of race, color or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance, or be so treated on the basis of sex under most education programs or activities receiving Federal assistance.