This brochure highlights the role of the school counselor in using educational research, and emphasizes the relationship between bias (racism and sexism) and past and present research. The tests counselors use, the ways test results are interpreted, and counseling techniques are all based on educational research. Counselors are cautioned to remember that: not all research is done well or accurately; societal attitudes about people of color and women influence research and research results; and news reports and research abstracts do not include enough information to enable one to evaluate the research. Presently, bias and its impact on research may be more subtle than in the past, but biases about people of color and women still exist and influence researchers. The following myths concerning research and counseling are examined: (1) if research is published it must be accurate; (2) research and researchers are objective; (3) standardized tests are accurate objective measures providing information about students' interests, aptitudes, and achievement; and (4) counselors cannot understand research. In evaluating research, one must ask if: the authors' opinions or bias are obvious; authors use different terms depending on the race or sex of the subjects; the study describes who is being studied; the tests are fair; the study results apply only to people who are similar to those studied or are overgeneralized to include others; similarities and differences are reported about females and males and people from different races; and conclusions have more to do with the authors' expectations than with the research results. Suggestions are provided for reducing bias in research. (RLC)
Using, Abusing, and Understanding Research

A Guide for Counselors
Educational Research:
Why Should Counselors Care?

Research is the backbone of guidance and counseling theory and practice. It is the basis of:

- the tests we use
- the ways test results are interpreted
- our counseling techniques

Research has made counseling more effective in many ways, including:

- providing the basis for effective diagnosis of learning disorders
- developing modification techniques to help individuals change their behaviors
- indicating the important role self-confidence plays in student math achievement
- showing the strong positive influence of a good preschool experience on the long-term development of children at risk
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?
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).


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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.
Research Caveats

Research is a useful tool, but counselors should remember that

- not all research is done well or even accurately
- societal attitudes about people of color and about women of all races influence research and research results
- news reports and research abstracts don’t include enough information to enable one to evaluate the research

Bias and Past Research

While research can be a powerful tool for improving education, it can be, and has been, used to perpetuate inequality. The influence of racism and sexism on the research of the past can be seen in the “research” conclusions of well-known psychologists Arnold Gesell and G. Stanley Hall.

[It is] well known that among the colored race there are many women who are supremely endowed with almost unique emotional equipment which makes their services ideal for infants and young children.

Arnold Gesell, 1943

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. Such conclusions can have a major impact, affecting, for example, educators’ willingness to encourage girls to take advanced math courses.

And while it is not noted in most studies, sex and race differences can be increased or decreased through the selection of items to be included in a test. Most researchers know this but don’t control for it.
Reducing Bias in Research: What You Can Do

1. Don't make decisions about counseling (or any other area) based on what "research says" until you check the research for general accuracy and bias.

2. Read the entire study, not just the abstract or the conclusions.

3. Use the same criteria to assess studies with "good results" (those with which you agree) as you use to assess studies with "bad" results (those with which you disagree).

4. Make your colleagues more aware of the many ways bias can influence research.

5. If you find research that is biased, write to the authors and the publishers of the study and let them know.

6. Encourage your professional organizations to develop and use guidelines to evaluate and reduce bias in research.

7. Recognize your own biases and begin to evaluate how they may be influencing you and your work.