

Evaluation Measures

The following instruments were included in the *Girls in Science* questionnaire:

Career Goals

Each applicant was asked in her application to describe her future career goals. These goals were coded on a five-point science/non-science continuum (Goldman & Hewitt, 1976) and scored for occupational sexual stereotyping using Shinar's (1975) rankings. Three coders interpolated any occupation not listed in the rankings. Changes in the scientific and sexual stereotyping of girls' occupational aspirations were measured to show the effects of the *Girls in Science* program.

Self-Esteem (Rosenberg, 1965)

This is a 10-item, four point Likert-like scale used to assess global self-esteem. Self-esteem is a concept that includes an estimate of self-worth or self-pride. This measure is short, highly reliable across a variety of student samples, and previously administered in a survey setting. A high self-esteem is critical in ensuring the likelihood of entering scientific careers.

Science Learning Self-Efficacy Scale (adapted from Lent et al., 1984)

This is a 9-item scale to assess science learning self-efficacy, or the extent to which participants believe they can successfully complete (a yes/no response) each of nine courses in science/math (algebra, astronomy, biology, calculus, chemistry, computer technology, geology, geometry, and physics) and the extent of their confidence (1=not at all sure to 9 completely sure).

Attitudes Toward Science (modified Fennema and Sherman (1976) scale by Doepken, Lawsky & Padwa (www.woodrow.org/teachers/math/gender/08scale.html))

This is a 47 item Likert-like scale used to assess the extent to which students have confidence in their abilities, believe science is useful, perceive that science is a male domain and that teachers' attitudes are beneficial. Because two of the sub-scales also measure self-efficacy and sex role stereotyping of science, analysis of the convergent validity of this scale will provide important information.

Sex Roles (Personal Attributes Questionnaire by Spence et al., 1975):

This is a 24-item scale designed to measure girls' endorsements of personal characteristics associated with masculine, feminine and androgynous sex roles.

Occupational Stereotypes (adapted from White, 1989)

This is an eight-item seven-point scale used to assess the masculine/feminine stereotyping of occupations. Occupations to be rated (1= feminine to 7=masculine) include engineer, chemist, physician, systems analyst, science teacher and medical technician (all masculine occupations) and librarian and dental hygienist (feminine occupations).

Science Knowledge

This scale was tailored to the content of the Summer Camp. A different form of the scale was developed to assess knowledge obtained from unique and overlapping content for each Summer Camp. At post-program follow-up, a condensed science knowledge scale and applied concepts that extend the concepts will be administered.