CHAPTER 5
Gender Comparisons in Cognitive Abilities and Attitudes About Success

Background on Gender Comparisons

Cautions About Research on Gender Comparisons
1. People’s expectations can influence results.
2. Biased samples can influence results.
3. The scores of males and females typically produce overlapping distributions.
4. Researchers seldom find gender differences in all situations.
5. The cognitive gender differences are not large enough to be relevant for your career choice.

The Meta-Analysis Approach to Summarizing Multiple Studies
Box-score approach (counting approach)
Meta-analysis

Cognitive Abilities

Cognitive Abilities That Show No Consistent Gender Differences
- General Intelligence
- Complex Cognitive Tasks

Memory Ability
- Lists of Words
- Memory for Events
- Nonverbal Material
Verbal Ability
  General Verbal Ability
    vocabulary
    verbal fluency
    writing ability
    meta-analysis
    SAT
  Reading Disabilities
    objective vs. subjective classification
Mathematics Ability
  General Mathematics Ability
  Grades in Mathematics Courses
  The SAT
    validity
Spatial Ability
  Spatial Visualization
    embedded-figure test
    learning map information
  Spatial Perception
    water-level test
    rod-and-frame test
  Mental Rotation
    instructions
    individual differences
Explaining the Gender Comparisons

Biological Explanations
1. Genetic explanations
2. Hormonal explanations
3. Brain organization explanations
   - lateralization

Social Explanations

Experience
1. Lack of positive images & role models
2. Parents and teachers may provide different experiences for males and females
3. Different experiences with mathematics and spatial activities outside school

Attitudes
1. Parents' and teachers’ attitudes and children's self-confidence
2. Boys perceive themselves as more competent in math than girls do, even though boys may actually receive lower grades
3. Students believe that math, computers, and science are associated with males
4. Stereotype threat

Achievement Motivation and Attitudes About Success

Biases in the Research on Achievement Motivation
- The tasks on which success is measured are usually stereotypically masculine.
- Nearly all research on achievement motivation is conducted with college students.

Achievement Motivation
Stories about drawings
Intrinsic Motivation

Fear of Success
Matina Horner
Confidence in Your Own Achievement and Ability

Level of Self-Confidence
- Public vs. private estimates
- Masculine vs. feminine tasks

Self-Confidence and Evaluation Provided by Others
- Women's self-confidence is influenced by comments from other people
- Women are more likely than men to use the information from other people’s evaluations in assessing their own performance, even when the evaluations are not accurate

Attributions for Your Own Success

Gender Similarities Most Common
Age Comparisons
Public vs. Private
Masculine vs. Feminine Tasks